UNIVERSITY OF STRATHCLYDE

Department of Marketing

PURCHASING DEVELOPMENT

DAVID MEIRION JONES

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ABSTRACT

The objective behind this research was to identify major criteria that could be used to measure the stage of purchasing development reached within an organisation. A literature review identified eighteen major dependent variables, measurements of which were indicative of purchasing development. These dependent variables were subsequently refined and developed using two pilot studies and a five point profiling matrix was developed for each of the measurement criteria concerned.

The research methodology was essentially qualitative and used a grounded approach. Being exploratory in nature the intention of the methodology was to identify major criteria affecting the purchasing development process rather than identifying cause and effect, amongst the measurement criteria.

The research sample involved two pilot studies and the main research sample, which consisted of six organisations, each with different sales turnovers, drawn from both the Public and Private sectors. These six organisational case studies were explored in depth, using a qualitative research approach. Again a grounded approach was used to analyse the data collected.

The results further helped to refine and develop a purchasing profile framework and suggested the relationships between these dependent variables. Considerable evidence was also collected in terms of major independent variables likely to affect purchasing development.

The research results will enable future practitioners and researchers to classify stages of purchasing development. Five stages have been identified: infant, awakening, development, mature and advanced. From the research results, interviewees believed that a more advanced proactive purchasing activity would lead to a more effective profitable organisation. These research findings offer a useful analytical tool for establishing the stage of purchasing development reached, and highlights deficiencies in a development profile. Finally, the research suggests alternative ways of developing the activity and likely time periods involved, in the development of the dependent criteria identified.

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CHAPTER 1 INTRODUCTION

1.1 Purchasing Development

The purpose of this thesis is to develop a conceptual framework or structure using various measurement criteria, that would indicate the stage of development reached by a purchasing activity within an organisation. A literature survey and preliminary field work more clearly identified major measurement criteria in the area.

The purchasing function within many organisations has been relatively slow in developing. However, over the last few decades, academics and practitioners in the area have witnessed dramatic changes in terms of its scope and general development. The development of the function across a wide range of organisations is patchy, in some it is still seen as a clerically reactive function, whilst in others it is a strategically proactive, integrated activity. What constitutes a developed or less developed purchasing activity is identified using a number of measurement criteria.

The importance of a well developed strategically proactive purchasing and supply activity in terms of the successful implementation of World Class concepts and the value chain Porter (1985), Nishisguchi (1994) is well documented and will be described in more detail in the next chapter. An organisation where the activity is not as well developed would not be able to contribute effectively in these areas.

A proactive, developed, purchasing activity could attempt to reduce long term strategic acquisition costs. This is often achieved through a more efficient supply chain, and the buyer working closely with the supplier, squeezing out unnecessary costs and maximising value added concepts.

With the development and extension of World Class Strategies such as Just in Time (JIT) and Total Quality Management (TQM), that are essentially concerned with strategically reducing unnecessary costs throughout the organisation, greater pressure has been brought to bear on purchasing to take a more active role in their implementation, particularly in the areas of supplier base management and partnership sourcing.

Whether or not the purchasing activity can effectively deal with these new issues and demands placed upon it is likely to be affected by its state of development and expertise. The more developed and integrated the activity, the more likely it is to be able to play a proactive role in these areas. An example to illustrate the contribution of purchasing at different stages of purchasing development is given in Fig 1.1. It can be seen that as the activity develops, so its organisational contribution is likely to increase.

Fig. 1.1   Relationships of contribution of Purchasing to the Development of the Function

EXTENT OF DEVELOPMENT	CHARACTERISTICS	TIME HORIZON	POSSIBLE ADDIT-IONAL CONTRIBUTION
Low	Clerical Reactive Fragmented	Now	Small
Medium	Buying Oriented Developing	1 year	10-15%
High	Proactive Integrated Strategic Focus	up to 5 years	Additional cost savings and strategic contribution 25-30%

Source: Purchasing Principles and Management, 7th Edition, Bailey, Farmer, Jessop and Jones 1994.

Managers need to know as objectively as possible how well developed their purchasing activities are and where further developments may be required to achieve demands made on them. The stage of purchasing development reached is also likely to have an effect on whether the activity is outsourced

or not and what stage in its development certain "internal outsourcing" of the activity might be essential.

1.2 Developing a Conceptual Purchasing Framework

Information obtained from pilot studies and the main research case studies allowed the design of an operational purchasing development framework.

Major criteria affecting development initially examined in the literature survey were further refined in subsequent fieldwork. Relationships between the measurement criteria were also examined. The research more clearly identifies purchasing development sequences and highlights the importance of both internal and external factors in the total development process.

Using a small number of case studies, factors affecting the development of the purchasing activity have been more clearly identified. At this time, no such operationalised purchasing development criteria are available, and therefore it is difficult to identify how and in which areas the activity should be moving if it is to develop effectively. Organisations may well have accepted the need to develop their purchasing functions, but they need to identify more clearly where their purchasing function is now, in terms of development, and which areas need radical development immediately. It is envisaged that this research thesis will help identify problem areas with certain of the development criteria, and suggest possible development paths, for purchasing activities studied.

Profiles are constructed for each of the measurement criteria in the organisational case studies and, from the survey, major independent factors affecting development highlighted. Having identified their profiles, organisations could decide the most effective way ahead for developing their purchasing activities, this could involve bench marking against more advanced purchasing organisations.

1.3 Research Methodology and Limitations

The research is essentially exploratory and concerned with identifying development criteria and their relationship to each other. Results are obtained from an in depth case study approach using a grounded research methodology. The approach is not the traditional quantitative cause effect methodology and does not seek to develop theory but rather to identify development criteria and explain relationships between them and external factors likely to effect the total development process. Qualitative methodology is more focused on meanings and attempts to understand what is happening.

1.4 Research Overview

In Chapter 2, a literature survey helps to identify purchasing development measurement criteria and those internal and external variables likely to affect the development process. Chapter 3 identifies more clearly operationalised measurement criteria developed from the research. Chapters 4 and 5 describe the research methodology chosen and why, and justifies an essentially qualitative research approach using the case study method of investigation. In Chapter 6, the results from six organisations chosen are given and in Chapter 7, analysis of the results and their impact is discussed in detail. Finally, in Chapters 8 and 9 there is a general summary and conclusion with possible future research opportunities.

1.5 Summary

This chapter has examined some of the reasons for measuring the stage of purchasing development reached by an organisation. It has also introduced the concept of a purchasing framework to identify major dependent criteria likely to affect purchasing development and the inter-relationship between measurement criteria and variables likely to affect the purchasing development process.

CHAPTER 2   LITERATURE SURVEY

2.1   Introduction

This Chapter reviews the literature related to the development of purchasing activity, and identifies measurement criteria.

2.2   Literature Survey - Objectives

- Identify the role and scope of the Purchasing and supply activity
- review the literature to identify criteria indicative of purchasing development
- having identified major dependent criteria, construct a development framework
- indicate major interdependent variables likely to affect purchasing development
- indicate likely connections between dependent variables that can be researched fully in the field surveys.

2.3   Purchasing

The Purchasing and Supply function has historically been regarded as a relatively unimportant activity in many organisations. Its status and influence have been relatively low, Kellogg (1970), Williams (1987) and Cannon (1995), particularly when compared with other functional areas such as Finance and Production.   The Purchasing activity has however, seen considerable changes in its status over the last twenty years as a result of both internal and external factors affecting its development. Reasons for the growth, and the changing status of the function are contained in the literature, Bailey, Farmer, Jessop and Jones (1994), Reck and Long (1988). Essentially, the reasons for its development revolve around such factors as a recognition of the strategic importance of the activity and its importance in reducing organisational costs, particularly through supply chain integration. The ability of purchasing to fulfil a strategic proactive role within the organisation is affected by its existing stage of development.   It is highly unlikely that a reactive clerical purchasing activity could take on board concepts such as Supply Chain Management, [MacBeth and Fergusson (1990)], Lean Supply [Lamming (1993)], or understand concern over strategies, acquisition cost and total cost of acquisition, [Schilleweart (1996)].

Whilst the literature records the low status of purchasing [Kellogg (1970)] many references exist to it being non strategic [Ansoff (1967)]. Williams (1987) reflects "in the aggregate, doctorial research in any discipline should reflect state-of-the-art developments that have implications for both theory and practice". He continues "at the present time, with highly documented and publicised accounts of purchasing's potential for contributions to the profitability of the firm, practising managers and academics alike are reassessing their perceptions concerning the role of purchasing and materials in the organisation". He observes little doctorial research in the purchasing area.

2.4 Purchasing Defined

Before one can attempt to measure purchasing development, it is important to define the function, the scope of the activity concerned, and where it appears in the organisational structure. Purchasing can be defined simply as the function concerned with obtaining the right quality of material at the right time, in the right quantity, from the right source, at the right price. (Chartered Institute of Purchasing and Supply definitions), Bailey, Farmer, Jessop and Jones (1994) all give similar definitions.

The purchasing function as Shealy (1985) reminds us, is found in all types of business. He remarks however, that there is a distinction between "the function and the purchasing department", and that many of the functions of purchasing may well be fragmented within an organisation. Kellogg (1970) however, observes the buyer "may be aided, guided, advised, consulted, directed, overseen, governed, but throughout he is involved." Lister (1967), shows that the purchasing executive has a significant say in all purchasing decisions. It will be demonstrated later in this survey that the degree of involvement by purchasing in decision making is an important indicator as to the stage of purchasing evolution reached within an organisation.

The definitions of purchasing given however, are general, and require elaboration. Further definition may be found in Ammer (1980), Aljian (1990), Saunders (1995). Earlier definitions of the activity however are now being questioned. The more developed the activity the greater its role tends to be. Thus a buyer in an Organisation involved in such areas as:-
- World Class Concepts

- Lean Supply
- Strategic Acquisition Costs
- Cost of Ownership
- Managing the Supply Chain

would need totally different skills to his counterpart of twenty years ago or a buyer still involved in typical clerical and transactional duties.

Purchasing development is likely to be irregular with different demands placed on it from different Organisations. A major problem faced by purchasing occurs when the Organisation demands a proactive strategic function but in reality has a transactional clerical activity. Purchasing effectiveness can be defined as the "ability of the purchasing activity to achieve those organisational objectives expected of it".

2.4.1 Purchasing Activity

The purchasing activity need not necessarily be contained within the purchasing department. It is likely that as the activity develops and is trusted within an organisation a separate purchasing function will develop. It is likely that the purchasing department itself, in order to evolve will at some stage in its development, devolve more routine purchasing back to user departments, [Lamming and Cox (1995)]. This research thesis is concerned primarily with measuring the purchasing activity within an organisation, in most cases within the purchasing department.

2.4.2 Functions of Purchasing

The functions of the purchasing department are likely to vary considerably from organisation to organisation, depending on their stage of development. Baily et al (1994) cites the following functions of purchasing:

- To supply the organisation with a steady flow of materials and sources to meet its needs.
- Ensure continuity of supply.
- Develop alternative source of supply.
- Buy wisely, and efficiently.
- Develop suppliers.
- Manage inventory and stock.
- Develop sound relationships with other departments.

- Develop staff, policies, procedures, and organisation to ensure the achievement of the forgoing objectives and functions.

Aljian (1986) gives a far more detailed list of purchasing functions as shown in Appendix 1.

More recently the Purchasing and Supply Lead Body see the activity as being involved in purchasing and supply chain management that is,
"Helping to provide the interface between customer and supplier in order to plan, obtain, store and distribute as necessary, supplies of materials, goods and services to enable the Organisation to satisfy its external and internal customers".

One might expect, for example, that purchasing in its early stages of evolution may become involved in a wide range of activities. As corporate awareness develops regarding the purchasing activity, more detailed and specific functions may be identified. For example, price negotiations and cost reduction are seen as being a particularly important part of the purchasing function. Savings achieved in this area could be considerable, [Farrington (1978)], [Farrington and Woodmansey (1980)]. If purchasing's efforts are directed into too many areas, then its ability to make such savings and offer positive contributions is reduced, that is the opportunity cost argument.

Whilst one would expect to find purchasing involved in a wide range of activities in small organisations, specialisation of the activity and greater role definition is likely as organisations grow and develop.

The Chartered Institute of Purchasing and Supply define "PURCHASING AND SUPPLY" as being concerned with such activities as:
- Design and specification of requirements
- Source selection (the search for alternative sources of supply)
- Negotiation of contracts and the management of projects
- Evaluation of potential suppliers and the analysis of their costs
- Acquisition of materials and services
- Inspection and quality assurance
- Inventory control, decisions on stock and re-order levels

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- Handling, storage and distribution of raw materials, components, and finished goods, (to the point of transfer to the sales function)
- Disposal of waste and redundant materials.

At a strategic and tactical level the term Purchasing and Supply in many ways equates with the commonly used American term - "Procurement".

Aljian (1986) writes "over a period of time, purchasing has evolved from being little more than a clerical function, to its present structure in management. Likewise the term "purchasing" has evolved to encompass much more than "buying". He continues, "with the new responsibilities that this evolution added to purchasing, it became desirable to use a term which more accurately describes these wider areas. Hence the term procurement rather than purchasing is used by many, particularly in governmental agencies, to describe the combined functions of purchasing, inventory control, traffic, receiving, incoming Inspection and salvage operations". Dobler, Lee and Burt (1986) concur with this definition, observing the term "procurement" originated in governmental organisations. For many years, however, it has been used in segments of American Industry. Hill, writing in 1974 remarks, mistakenly, that the "buying unit" is referred to as the procurement function in the United States, and the purchasing function in the United Kingdom. In many ways the terms procurement, and purchasing and supply are now more clearly identified as the Materials Management Concept.

2.4.3 Materials Management Concept

Materials Management can be defined as "a confederacy of traditional materials activities bound by a common idea - the idea of an integrated management approach to planning, acquisition, conversion, flow and distribution of materials from the raw material state to the finished product state", Ammer (1968). No general consensus exists however as to the precise functional areas involved in the concept. Ammer (1968), "there is no agreement as to precisely what activities sold be undertaken by the Materials Manager". French (1983) developed a broadly based definition:

" Materials Management can be broadly defined as purchasing plus all other major procurement or supply responsibilities including stores and stock control, inventory management, traffic, receiving, warehousing, and salvage,

and often production planning control". Some organisations also include materials handling and shipping. In attempting to study purchasing development therefore, it is important to define its scope. However, it may well be that purchasing is integrated with other activities and functions that are not seen as being part of the research project, but have a bearing on the development of the function.

Purchasing development may only be possible within an integrated procurement or materials management function. As these new forms of the organisation appear, so the status of purchasing is likely to change. Table 2.1 attempts to show how the responsibilities grow depending on which definition is chosen. In some small organisations, the role of purchasing encompasses a complete materials management function. Almost certainly, as the organisation grows, attention will be focused on these "input" areas to increase efficiency and effectiveness. In such instances, a structure would be developed that allowed specialisation of activity and yet allows a highly co-ordinated approach to the management of materials. Farmer (1991) calls for far greater attention from senior management to be directed at the "input" end of the business. He argues that neglecting such areas leads to imbalances in the manufacturing system, and goes on to cite the attention and resources drafted into this area by the Japanese.

The argument for a more proactive purchasing activity is further developed by Lamming (1993) MacBeth and Ferguson (1991), Joag (1994) and others.

TABLE 2.1   <u>GENERAL EVOLUTION OF PURCHASING AND SUPPLY</u> <u>FUNCTION</u>

<u>FUNCTION</u>

BUYING	HANDLING REQUISITIONS
	SELECTING SUPPLIERS
	PLACING ORDERS
	NEGOTIATING PRICES
	MAINTAINING RECORDS
	SUPPLIER FILES
	EXPEDITING
	PASSING INVOICES
	SCHEDULES
	MATERIAL CONTROL
PURCHASING	ABOVE +
	PURCHASING RESEARCH
	DETERMINING NEGOTIATING STRATEGY
	POLICY ADVICE MAKE OR BUY
	RECIPROCITY
	REGULAR VISITS TO SUPPLIERS
	LIAISE WITH OTHER INTERNAL DEPARTMENTS
	MONITOR SUPPLIER PERFORMANCE
	COST REDUCTION EXERCISES
PURCHASING & SUPPLY PROCUREMENT	ABOVE +
	STORES AND STOCK CONTROL
	INSPECTION & QUALITY ASSURANCE
	HANDLING STORAGE AND DISTRIBUTION
	WASTE DISPOSAL
MATERIALS MANAGEMENT	ABOVE +
	PRODUCTION PLANNING
	CUSTOMER SERVICE
	PRODUCTION CONTROL

2.4.4 New Corporate Developments

New developments in recent years such as Just In Time, (JIT) Manufacturing Resource Planning (MRP II), Total Quality Control, BS5750, have necessitated far closer relationships and control of functions within the organisation. The growth of such developments do not affect functions in

isolation, they tend to affect the total "corporate entity". Such concepts also reveal any weaknesses in the organisation. Perhaps the greatest areas for concern lie within the purchasing and supply functions.

It is therefore not surprising to see new concepts and computer systems necessitating reorganisation within the "input" areas of a business. One of the more recent concepts to emerge is "Logistical Management". Logistical Management is a combination of materials management and physical distribution management. In its broadest interpretation Logistical Management views an organisation as a single operating system, it seeks to minimise total costs associated with the acquisition and handling of materials from the inception of materials requirements to the final delivery of finished products to the user.

In the 1990's there has been considerable emphasis placed on managing the Supply chain and adding value, [Cannon (1995)], Lamming, Hines (1996). Indeed as Evans (1994) argues, one of the hallmarks of a developed purchasing function is the extent of its involvement throughout the Supply chain both up and down stream.

2.4.5 Organisation Charts

Examination of organisation charts is useful in identifying functional roles and responsibilities. In a typical Materials Management or procurement function, it is possible, investigating the organisation chart, to clearly identify a purchasing function, Fig 2.1, the dotted line indicating the area of interest. In other organisations however, purchasing may well be fragmented. In such instances, the main scope of the study is to examine the department responsible for the major part of this activity and highlight other contributions. Gracia (1993) identifies some of the likely developments within the purchasing activity as its responsibilities change within the organisation, from clerical to strategically proactive throughout the supply chain.

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Fig. 2.1 MATERIALS MANAGEMENT/PURCHASING ORGANISATION CHART

| Financial Director | Marketing Director | Production Director | Director of Materials Management | Engineering Director | Personnel Director |

Production Control Manager
- Production Planning and Scheduling
- Production Control
- Material Control

Inventory Control Manager
- Receiving
- Inventory Control
- Internal Transport
- Materials Handling

Purchasing Manager
- Purchasing
- Expediting
- Purchase Research

Fig 2.2 illustrates functional specialisms with a supplies manager probably having responsibility for purchasing.

Fig 2.2 FUNCTIONAL SPECIALISMS

Board of Directors

| Financial Manager | Personnel Manager | Production Manager | Marketing Manager | Supplies Manager | Engineering Manager |

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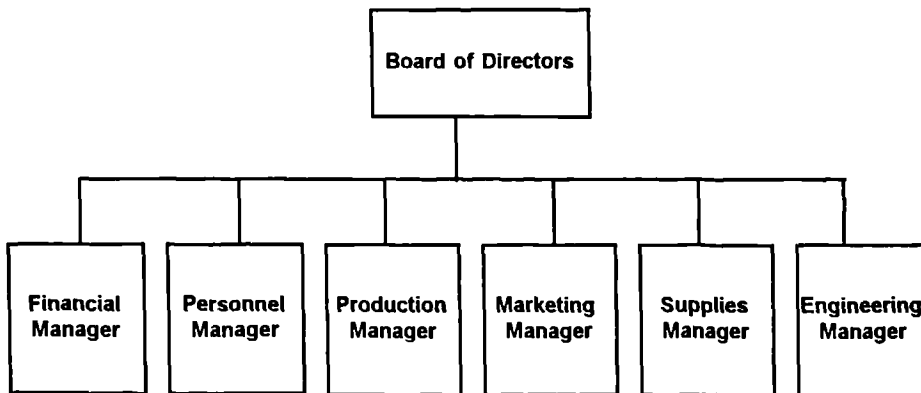
Organisations can be found where purchasing could equally well report to a marketing manager, for example retailing activities, or where the purchasing function could be split, for example, the older type of Public Sector purchasing organisation. As organisations grow and develop, tendencies occur of going through phases of centralisation and decentralisation. Thus one could find the purchasing function divided between a centralised purchasing function and decentralised production units. Fig. 2.3.

Fig 2.3   CENTRALISED/DECENTRALISED FUNCTION

Group or Central
Purchasing Department

Company	Company	Company	Company
A	B	C	D
Buying	Buying	Buying	Buying
Department	Department	Department	Department
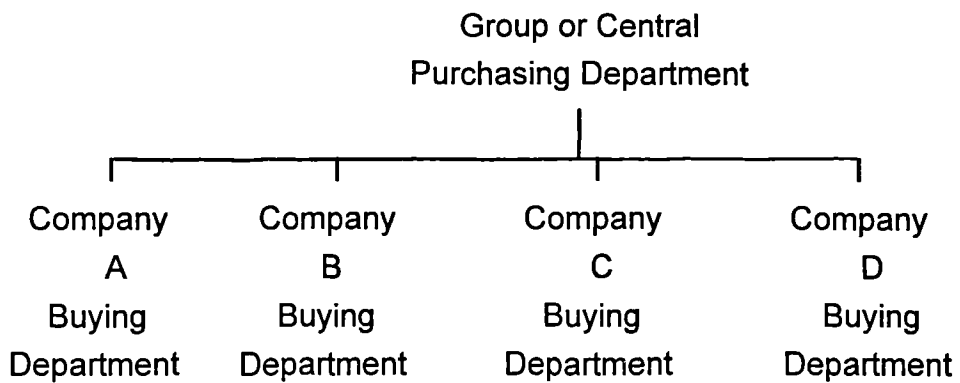
In such cases it will be necessary to investigate purchasing at both levels, i.e. the composite function. This however can become increasingly difficult as organisations grow. Farmer (1985) illustrates how a typical organisation's purchasing activity may change over time. Fig 2.4.

Fig 2.4 THE DEVELOPMENT OF PURCHASING OVER TIME
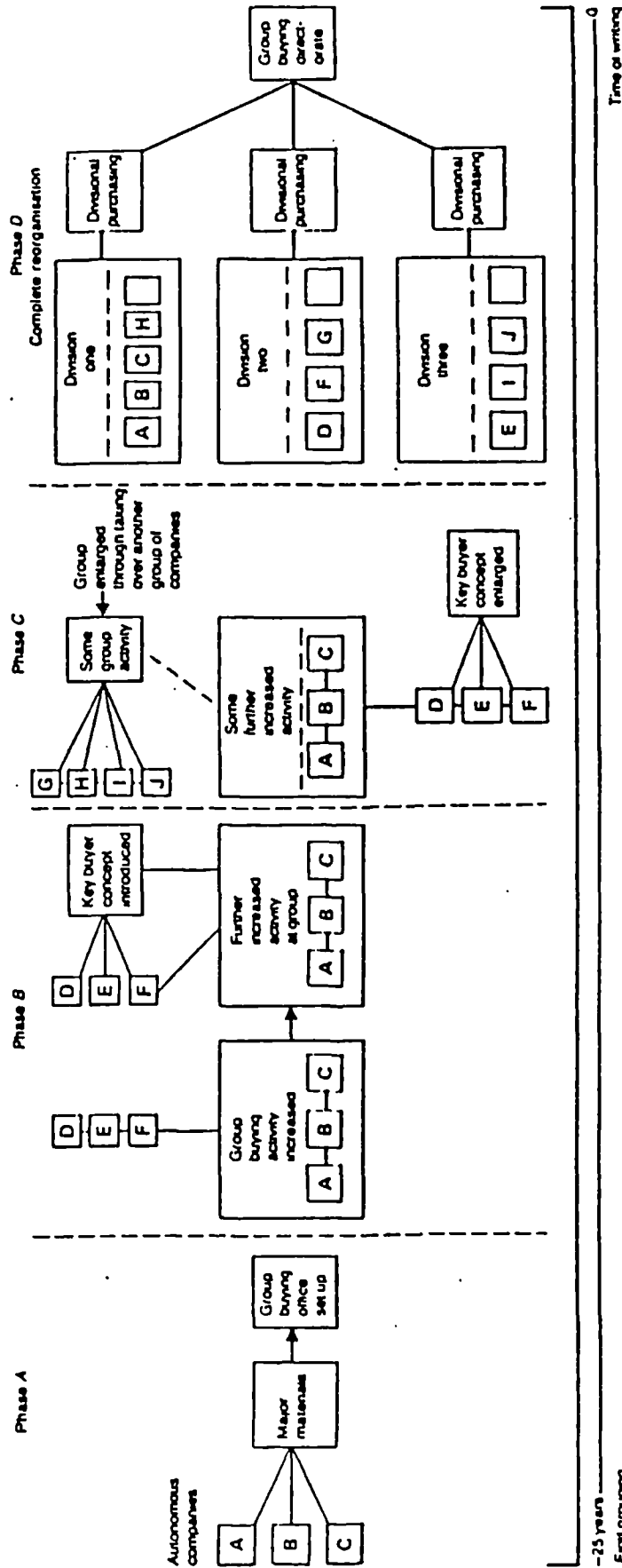
SOURCE: PURCHASING MANAGEMENT HANDBOOK. EDT. DAVID FARMER.

Notes: (1) The boxes A, B, C etc. do not necessarily represent single companies. The actual number is not included so as to simplify the diagram and help preserve anonymity.
(2) The grouping in phase A was of companies which operated largely in the same industries both as buyers and sellers.
(3) In phase C the group of companies which was taken over was disparate. Group procurement effort was relatively small but there was some attempt to co-ordinate.
(4) In phase D the two former groups were merged through a divisional structure. This meant that it was possible to work on a more rational basis. The group staff was established as a director and two assistants.
(5) The 'Key buyer concept was retained within the three divisions.
(6) The phases are not to time scale in the diagram.

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Farmer (1985) remarks, "most purchasing organisations comprise two or three people, and in these circumstances the staff are obliged to fulfil many roles. Usually the chief buyer or whatever title the senior person holds, takes the responsibility for the most important purchases. His assistants then undertake all other purchases and perform the progressing role. Administrative and clerical work is then shared under the direction of the senior person. Policy, systems development, and long term issues tend to be the responsibility of the chief buyer himself, although wise managers will also seek to delegate some of the work."

Shealy (1985), observes "the purchasing function is found in all types of businesses, however, the "purchasing department" responsible for conducting and administering the commonly recognised purchasing activities may not assume the same set of responsibilities or perform the same tasks in all types of businesses". He continues, "the purchasing department is an organisational unit whose duties include some part or all of the purchasing function".

This latter point is well recognised in Organisational Buyer Behaviour (OBB) literature, with such concepts as the "buying centre and decision making unit". Organisational changes affecting purchasing and materials management generally are fairly indicative of a corporate recognition that the activity is of importance to strategic objectives.

Having recognised the activity and its contribution to corporate goals, structural developments tend to follow. This may take the form of greater specialisation within purchasing i.e. buying and negotiating, contracting, expediting, stores and stock control activities, under separate functional needs encompassed by a materials management structure. There way be further specialisation within buying, that is, specialist negotiating and buying responsibilities. Ford, General Motors, ICI, Marks and Spencer, and many other organisations operate such concepts.

Larger organisations would almost certainly have a separate purchasing function to allow buyers to concentrate efforts on negotiating and cost reduction specialisms. Indeed one of the characteristics of purchasing

development is structural changes that allow purchasing staff to concentrate on the more "essential features" of the job. In other words, to allow buyers to spend more time on "pure" purchasing activities as already defined. Further developments might lead to buyers spending an increasing proportion of time on more strategic aspects of purchasing. If we examine Fig. 2.5 one can see certain aspects of purchasing having strategic implications, whilst others are essentially operational in nature.

Fig. 2.5   STRATEGIC AND OPERATIONAL PURCHASING ACTIVITIES

Strategic Negotiations   Strategic
Purchase Research
Sourcing Policy
Policies Development
Intra functional Developments
                                Operational

Systems Design
Sourcing
Expediting
Contracting
Systems Operations
Invoice Clearance
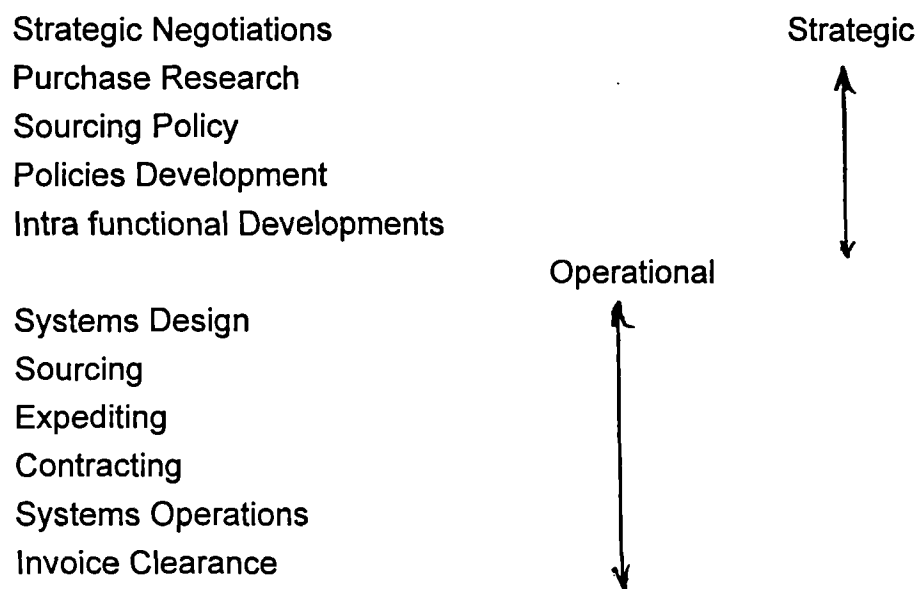
The literature reveals that as purchasing develops, a more significant proportion of a buyer's time is spent on more 'strategic aspects' of purchasing and less on the operational activities, Gracia (1993), Freeman and Cavanito (1990), and Fletcher (1993). This is particularly true as purchasing becomes more involved in strategic management of the supply chain, Stannack and Batchelor (1994), Sysons (1992) and (1993), Cox, Hughes and Ralf (1995). Having identified the likely range of purchasing activities, further examination of those factors affecting its scope can be examined.

2.5 Purchasing Development - Evolution

2.5.1 Introduction

A considerable volume of literature has been written concerning professionalism in purchasing and the need for it to increase its corporate status. Perhaps the greatest volume of literature has come from the academics mainly in the marketing areas in their studies of organisational buyer behaviour, although more recently contributiors have tended to be purchasing specialists.

One has also seen a steady growth in status of the Chartered Institute of Purchasing and Supply into a professional body representing Purchasing and Supply personnel. Barath and Hugstead (1982) write, " the role of the purchasing agent and his fight for legitimacy within the organisation holds many parallels with the general emergence of marketing as an increasingly important functional activity in both the profit and non profit sectors. Traditionally, the purchasing agent has suffered from an inability to affect organisational buying decisions ... ." He goes on to note that when involved in conflicts with other internal departments "it is the purchasing agents who often lose the battle". They go on to suggest that "until the mid 1960's, the industrial buyer had largely been overlooked as a focal point in buyer behaviour research".

Barath and Hugstead (1979) in another article, that focused on the effects of purchasing in a profession, noted - "an increase in role behaviour with development of the function". Strauss (1962) Kaha (1966), and Lawrence and Lorsch (1967) identified similar increases in role behaviour in other functions as development occurs. Barath and Hugstead (1979) conclude, "In the historical evolution of professions, the definition of the professional's role is initially restructured in order to fully develop those responsibilities central to the role. Over time, the scope of a profession tends to enlarge and become more flexibly defined" ... "As the purchasing profession continues to evolve, a larger and more flexible definition of the role of purchasing may lead to greater involvement in a wider range of activities within the industrial buying decision making process, and changes in the modes of conflict resolution used by purchasing managers."

It would therefore appear to be the case that as purchasing becomes more developed, its role and involvement with other functional areas extends and deepens. This observation will be useful when developing concepts. Lister (1972) and Kellogg (1970) noted greater role involvement by those involved in purchasing, Grammer (1962), writing in the early 60's, observed "purchasing was regarded as a job that the boss "did himself". As the business grew, the worker owner overwhelmed with other activities delegated the function, but he did so often in an unsatisfactory way".

Often the function "drifted into the hands of other people". In many instances, offices emerged "to concentrate on the paperwork". Hill (1972) notes, "we appear to have not only in the UK, but also world-wide, and particularly in the US, a significant discrepancy between what is being preached and practised in the procurement field". Despite what was claimed by top management, purchasing was the poor relation in comparison to other corporate functions. Ammer(1969) (1974) Finnegan (1971), Harding (1966), all make similar observations. The various surveys into Industrial buying practices in the late 1960's and early 1970's, Buckner (1967) Brand (1972) and the Financial Times, all echoed these sentiments.

2.5.2 Strategic Developments

In the 1970's and 1980's, we see renewed interest in Purchasing and Supply, probably due to rising levels of inflation and shortages during this period, and numerous articles calling for further development whilst others draw attention to the rapid developments taking place in the function. Williams (1987) writes, "the area encompassing the domain of purchasing and materials management has heightened in visibility and respectability in the last decade. This increased attention reflects the realisation of the potential contributions of purchasing to overall corporate performance". He continues, "much of the transformation in perception of purchasing and related activities has occurred in large corporations. Many medium and small sized firms have failed to take advantage of opportunities in this area".

Upah and Bird (1980) record, "purchasing is becoming less and less a lower level function, and more a top level function". They continue, "an examination of the industrial buying function as it has developed in recent

years, shows that very significant changes have occurred, and continue to occur".

Consistent with Webster and Winds (1972) model of organisational buyer behaviour, these changes fall into four categories: environmental, organisational, individual, and interpersonal. Their model, is a useful starting point for beginning to explain in general terms, why the purchasing function has been growing in importance in the last two decades and helps to explain why the development has been somewhat slower in medium and smaller organisations.

2.5.3 Environmental Factors

The 1970's, as Bonfield and Speh (1982) record, were of a "turbulent nature". Upah and Bird (1980) observe "among the major developments that began in the 1970's were shortages in raw materials, great inflation, and slow growth".

Fears of shortages in raw materials and problems from the input side lead to far greater strategic interest, particularly from the major "blue chip" organisations with considerable upgrading of purchasing departments and their managers. The 1980's and 1990's saw the growth of Europeanisation and greater price stability, together with greater concern over environmental factors, Whyte (1994) Hazel (1995), all requiring a more professional approach from the purchasing activity.

2.5.4 Organisational Factors

The general consensus is that there has been considerable improvement in the status of the function. Williams writing in 1987 records, "the area encompassing the domain of purchasing and materials management has heightened in visibility and respectability in the last decade". He continues, "much of the transformation in perception of purchasing and related activities has occurred in large corporations. Many medium and small sized firms have failed to take advantage of opportunities in this area, they are still "myopic" in their approach to purchasing". He then cites causes for this purchasing myopia:

(1)   failure to understand the real purpose of purchasing, which is a management function.

(2)   failure to integrate purchasing with other top level corporate functions. It is more often seen as a second level service function, as opposed to a top level function, equal in importance and status with production, marketing and finance.

In Organisations where purchasing and supply is not particularly developed, a fragmented approach to the function is often found. Thus one may find purchasing reporting to a Financial Director, materials and production control reporting to a Production Director, whilst stores and inventory control personnel may report to an Engineering or Production Director.

Crawford (1984) Burt (1985), Parsons (1982), and Lancaster (1984) amongst others, argue that the status of purchasing may increase considerably as part of a Materials Management Concept. Thus one would bring together the above functions under one Materials Manager or Director, reporting directly to the Managing Director or Chief Executive. In larger organisations, the purchasing function may be big, enough to warrant a Corporate Director.

Many writers are of the opinion that for purchasing to evolve, it must report directly to the top person in the organisation, otherwise a strong possibility arises of its contributions to corporate and strategic plans being "watered down" or even ignored.

(3)   failure of purchasing personnel fully to utilise analytical techniques such   as value analysis, cost and price analysis.

Whilst Williams is correct in calling for the use by purchasing of "analytical and cost reduction techniques", a real problem exists here. If purchasing is seen as a clerical activity, then the majority of the "buyer's" time will be spent on routine clerical activities. The buyer may have little time or the skills required to handle the analytical techniques described.

Improvements in the status and effectiveness of purchasing are also reported by Shealy (1985). "Awareness concerning top level managers, regarding the importance of the purchasing function to their respective firms,

continues to grow. In most progressive companies of any size, purchasing is viewed as a significant contributor to the accomplishment of business goals and the improvement of profitability".

"Higher expectations that call for purchasing to contribute more to the firm, require better trained and more highly skilled professional buyers than has been the case in the past. The demand to expand and improve educational opportunities for training purchasing professionals at the University level as well as through company sponsored programmes has never been more evident". Similar observations to the above are made by Pinkerton (1985) writing about the existence of "procurement" courses in the United States, he notes that few purchasing or materials management programmes exist in the entire United States. Also, Burt (1985) calls for far more extensive and intensive training in the area of marketing programmes. Almost certainly, the development of the function must be linked to University and College respectability. In the UK relatively few Chairs in Purchasing/Materials Management have been created, and few Universities teach the subject, even as part of Masters Business Programmes.

2.6. Strategic Evolution of Purchasing

Purchasing historically has been seen as a clerical function, with little or no strategic importance, Ansoff (1965) (1967) (1972), regarded it at best as "administrative". It was not until the pioneering work of Farmer (1972) that purchasing's potential role in corporate strategy was realised. Farmer, in a study of several "blue chip" companies, showed clearly how little the importance of the function was viewed at a corporate level. Drucker (1973) also drew attention to the problem.

Strategic change itself is more likely to be incremental Mintzberg (1979) Quinn (1980) than "global" in nature. However, in the 1970's high inflation and shortages, quickly focused attentions on the supply side. Many organisations responded in a "global" way towards the purchasing function, its strategic status was quickly reviewed, and changes made. Other organisations adopted a more incremental approach nonetheless, during the 1970's and 1980's many organisations re-evaluated the importance of the purchasing function from a clerical to a more strategic role. This was

generally evidenced by the head of the function reporting directly to the Managing Director, not indirectly reporting via another functional head.

Who the head of the purchasing function reports to is a useful indicator in terms of evolution. One would thus expect in organisations where purchasing is not well evolved, to find the head of the function reporting to another functional head e.g. Finance or Production. In those organisations where purchasing is well developed, one would expect to see direct access to the Chief Executive. The importance of purchasing's strategic role can be clearly seen in a whole range of areas:

- general supply/demand, price movements.
- environmental changes and their effects on supplies.
- organisational developments, JIT, Total Quality Control, MRP etc.
- make or buy decisions

Miles and Snow (1978) Lyles (1981) and Godiwalla, Meinhart and Warde (1979) demonstrate how functional awareness of strategic issues can increase long term organisational success. In many ways, the inclusion of purchasing and supply into the corporate planning process has been long overdue.

During the 1990's, with the accelerated growth of 'World Class' concepts, there has been a heightened awareness of "input activities" within an organisation. Andersen Consulting (1993), Bolnijn and Kumpte (1990), Farmer and Ploos (1991) draw attention to the need for a more developed purchasing and supply activity to assist in the development of such strategies. More recently Hamer and Champy (1993), Hines (1993) and Lamming (1993) identified possible requirements of the purchasing function into the next century and the need for accelerating development in a number of areas.

The recognition that a strategically developed purchasing activity can add value in the Supply chain is particularly well documented, [Lamming and Cox (1995), Stevens (1994), Sysons (1995)].

Whilst historically many developments within organisations have not necessarily required major commitments from purchasing, the newer

developments, many vital to corporate survival, can only be developed with "total corporate involvement". One can select, for example, JIT, one of several World Class strategies, to illustrate why it is essential to develop the purchasing function both operationally and strategically:

(i)   Just In Time concepts. The basic objective of JIT is to produce the required item at the required time, in the right quantity. The introduction of such a concept is said to lead to:

- significant reductions in inventory work in progress, and finished stock
- decreased lead times
- improvements in quality and productivity
- increased adaptability and flexibility to change
- lower costs of production
- elimination of the production of unnecessary items

In order for the philosophy to work effectively, a high degree of co-operation is required from functions within the organisation, and outside suppliers. Considerable effort is required from the purchasing department to really make the philosophy work. If purchasing is seen as a clerical activity, then there is little chance of the philosophy ever working. JIT requires a high degree of sophistication and skill from those in the purchasing department or function, Anderson Consulting (1993). Bertodo (1991).

Successful application of JIT depends to a very great extent, on the buying firm's suppliers. As Manoochehri (1984) observes, "suppliers must be able to provide the buyer with frequent deliveries of small lots of high quality parts with delivery geared precisely to the buying firm's production schedule" he continues, "to achieve such harmony it is essential for the buyer to work closely with suppliers".

Hahn, Pinto and Bragg (1983) stress the need for purchasing to provide the organisation with quality materials in a reliable manner, at the lowest practical long term cost. "In the past, to achieve this objective, purchasing managers have emphasised things such as negotiation skills, competitive buying, cost reduction techniques, multiple sourcing, and policy and procedure development. Consequently, evaluation of suppliers generally is based on the quality, delivery and pricing aspects of their performances. An

overriding principle has been that through free competition in the market place, major purchasing objectives can be achieved most effectively".

He continues " Utilisation of a JIT purchasing system does not alter the fundamental objective of the purchasing function. However, the basic approach used in achieving the objective is different. The JIT purchasing concept assumes that most long term material cost reductions are possible only through a significant reduction in a supplier's cost. Therefore purchasing staff must work with suppliers in achieving this long term cost reduction". Bevin (1988), Hoppenbrouners (1994).

The above has important repercussions for both the organisations and purchasing departments concerned. It means:

- longer term contracts
- fewer suppliers - too many suppliers, as Manoochehri (1984) observes, "leads to problems of co-ordination, supplier development costs, and higher long term costs".
- sharing information with suppliers concerning costs, future business
- helping suppliers, giving assistance where necessary.
- generally moving away from the old adversarial relationship.
- strategic relationships identified, more in terms of win/win" deals.

It has been generally accepted that effective implementation of the JIT concept has been a major factor contributing to Japanese industrial success in recent years. American and European organisations have also recorded considerable success with the introduction of JIT, [Barratt (1984)], [Olsbero (1985)], [Hill and Vollman (1986)].

The concept however, is heavily dependent on a well developed purchasing function and certainly pressure to introduce this concept or philosophy organisationally will reveal any purchasing deficiencies. As Rajan and Treville (1986) remark, "getting from Just in Case to Just in Time is highly dependent on a developed corporate and purchasing culture". This in turn will require the development of good relationships with key suppliers, [Madombi and Schrunder (1995), Hosford (1994)]. The improvement in

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relationships and the quality of the bondings are also likely to be indicators of development.

Systems are generally becoming more corporate in nature requiring rapid accurate responses from all functional areas. Such systems are strategic in their impact on the organisation. All functions must contribute effectively to such systems. Again, developments in MRP and MRP II have had and are having important repercussions on purchasing development.

"The implementation of an MRP and MRP II system will hasten the expansion of purchasing's role within the total corporate structure", Bragg and Hohn (1982). They continue, "the net effect of this expanded role is that purchasing personnel must emphasise the managerial aspects of the function, rather than the clerical ones". Because such systems are corporate in nature, development problems within the purchasing areas are often quickly identified, and action taken to remedy faults. Again, such advanced systems require corresponding advances in the development of the purchasing function. Similar observations are made by Graves and Kostreva (1986) and Konet (1986).

The developments of MRPII, Logistical Management, and JIT, are strategic in nature, and all rely heavily on good functional development. In order for such concepts to work effectively, purchasing must be represented at a corporate level. Such new developments also require the function to be reasonably well developed. One could see major problems arising within organisations where purchasing is essentially undeveloped and clerical in its operations. Indeed it is extremely difficult to visualise any of the above concepts working effectively in organisations where purchasing is not well developed. However, cases are reported from time to time, in organisations where MRP II or JIT is proving impossible to develop effectively. Whilst many reasons are given for such failures, it is interesting to note that in nearly every case, the purchasing function was found to be essentially clerically reactive.

2.7   Price Effectiveness
In the 1970's increasing emphasis was placed on making price negotiating effectiveness a high priority. A number of organisations had realised that

60%+ of income was being spent on bought materials and supplies, and this was a potential area for savings. The more efficient the purchasing function was in establishing and negotiating prices with suppliers, the greater its contributions to company efficiency and profitability.

Price negotiations are handled, for the most part by the purchasing department, particularly in the case of re negotiations of the "straight re-buy type", Robinson and Faris (1972). This type of purchase is in nearly all cases handled by the purchasing department, with minimal or no interference from other members of the "buying centre", because price negotiation is seen essentially as a commercial rather than a technical decision. It is of vital importance that purchasing price negotiations are conducted as efficiently as possible, if an organisation is to price and market its goods competitively. Suppliers finding their costs are rising need an increase in price. In most instances, this is achieved without the buyer having to deal with suppliers through the process of price re-negotiations. The way price re-negotiations are handled is likely to have major repercussions on an organisation's profitability, and long term survival; and on the economy in terms of price inflation.

With further growth of outsourcing in the 1990's, more bought out material expenditure came under the control of the purchasing department, [Tully (1995)].

As the purchasing activity develops, greater concern is often shown in such factors as strategic acquisition cost, value added concepts and life cycle costing. In turn, such concepts often need to be related to many other factors than simply price and require strategic direction throughout the Supply chain.

2.7.1   Negotiation and Purchasing
One of the hallmarks of a well established purchasing function, is the amount of time buyers spend negotiating with suppliers for both long term and short term purchasing objectives, [Farrington (1978)], [Polastri (1985)]. Indeed, a useful indicator is to look at the amount of time a buyer spends on clerical activities, as opposed to "real buying" - cost reduction, negotiations, source selection, purchasing research, supplier development, and developing the

supply chain. In these more "advanced" organisations, a high proportion of the buyer's time is spent on "real buying" or supply management activities, of which negotiations takes up a major proportion of his time. Various writers have noted this development, Chisnall (1972) (1974), Holmes (1982), Van Eck and Van Weele (1982), lay great stress on the ability of the buyer in this area. Here again, however, one finds differences between negotiators who think in the short term. The new developments of JIT, Logistical Management, Supplier Management require greater emphasis on long term measurement criteria, Freeman and Cavinato (1990).

2.8   Quantitative Measurement

As purchasing is recognised as being of strategic importance, so the desire to measure its performance becomes ever more pressing. Ammer (1974) stated that "purchasing performance is rarely measured by the objective, occasionally harsh standards that are applied to other activities, such as sales or research" and that "such performance measurements that exist are typically creations of the purchasing managers themselves".

One of the problems faced in this area is what to measure and how it can be measured effectively. For example, late delivery may not be due to bad purchasing. High prices may be due to others in the DMU insisting on the business being given to suppliers they prefer, rather than the best all round supplier.

Eck, Weele, and Weerd (1982) suggest that as a greater proportion of sales revenues is spent on materials and services, then ultimate corporate performance is influenced substantially by the efficiency of the purchasing function in this area. They argue, "with increasing interest focused on the purchasing function by top management, more attention will likely be given to price performance evaluation", "to achieve these objectives, the buyer must be able to develop standards against which actual prices may be composed and evaluated".

Dale and Powley (1985) in a study that investigated current purchasing practices in the United Kingdom, looked at, amongst other things, the measurement of purchasing performance. They found none of the companies used the profit centre approach advocated by Ammer (1972).

Dale and Powley in their research, found three of the companies used basic measures of purchasing performance, for example, price compared with that requested, but they also observe that "poor quality or delivery ratings need to be offset against purchasing's performance accordingly". They continue "until quality and delivery aspects of purchasing performance can be quantified financially, in addition to those of prices and inventory performance, it is unlikely that satisfactory transfer pricing arrangements can be developed to facilitate a successful profit centre accounting system".

Budgeting systems, and variations against budget were also popular, as were audits. Although it was observed in the audit area, these were concerned with procedural affairs. There was little evidence to suggest, in all the organisations investigated, that audits are used as dynamic systems to assist in the formulation of purchasing policy as advocated in current purchasing literature, [Barry 1982]. Interestingly, they concluded the least comprehensive or effective methods of measuring performance were found in the Public Sector area.

Polastri (1985) draws attention to the buyer's role in controlling the effects of inflation on prices and measuring purchasing effectiveness. The general consensus now, is that a requirement appears, as purchasing develops, to measure far more all embracing aspects of performance [Cannon (1994), Hines (1994)]. As Evans and McKenzie (1988) observe "this means working far closer with suppliers and measuring additional buyer performance variables other than price". Thus one might find that if only price and cost variables are being monitored, buyers will strive to achieve goals in those areas, whilst neglecting other variables that may well lead to the more important goal of "lowest cost of supply" or acquisition costs. More advanced purchasing organisations attempt to measure purchasing performance using a much wider range of measurement criteria, and attempt to be more objective in the process. Stevens (1989) observed that "the higher purchasing reports in the organisation, the more heavily it uses a range of evaluation criteria where the percentage material cost to total cost ratio lies between forty and sixty per cent the more likely purchasing is to use a spread of evaluations and at a fairly high incidence rate".

Van Weele (1985) in a presentation to the International Federation of Purchasing and Materials Management, observed, "what management expects from purchasing affects its performance evaluation methods". He continues, "when we try to categorise our impressions on what the scope of purchasing in Dutch industry is, three alternative views emerge:

• purchasing as considered by management, is a clerical function.
• purchasing is considered as a commercial activity.
• purchasing as considered as a strategic business function".

He goes on to develop a model suggesting the types of purchasing performance likely to be measured at different stages, and the likely focus of measurement interest. "When purchasing is a strategic function," he continues, "performance measures seem to be more qualitative and judgemental". In terms of what should be measured, he sees two elements in purchasing performance, "purchasing effectiveness and purchasing efficiency", [Anthony and Dearden (1976)], [Child (1977)].

Fig. 2.6   PURCHASING PERFORMANCE MODEL

Scope of Purchasing	Position of Purchasing	Purchasing Performance Measures	Focus on
Purchasing is a clerical function	Low in organisation	Numbers of orders, back-log, purchasing admin lead-time, authorisation, procedures,....	efficiency
Purchasing is a commercial activity	Reporting to management	Savings, cost-reduction, negotiation, contracting, single/sole sources....	efficiency
Purchasing is a strategic business function	Purchasing integrated in strategic planning process	Supplier development, make V's buy studies integration with R & D, value analysis, purchasing engineering......	effectiveness

Source: Van Weele (1985)

It would appear from appraising the literature in this area, a number of points emerge from the surveys undertaken:

(i)   The purchasing function is being more extensively measured as its role becomes more strategic, Evans and McKenzie (1988), Polastri (1985), Brady and Willets (1985), Bilborough and Dale (1985), Leonard (1986), and Van Weele (1985).

(ii)   different variables become the focus of attention depending on whether the activity is seen as being clerical or strategic, Van Weele (1985), Kraljic (1983), Lancaster (1984), Ramsey (1986) and Hoppenbrouners (1994).

(iii)   the types of variables used to measure purchasing performance and the scope and depth of such control systems are indicative of the stage of development reached within the function, Richards (1975), Reck and Long (1987), Hill (1972), Oliver (1987).

(iv)   newer developments such as JIT, Logistical Management, Total Quality Control, are requiring far more breadth and depth in measurement criteria, Farmer and Ploos (1991), Adams and Niebuhr (1985), Leonard (1986), Gracia (1993) Wagner (1987).

One might find smaller organisations, Public Sector types and batch and extractive type industries (non oil) to be treated near the bottom to middle in terms of development and measurement criteria, whilst one might find the mass production industries, larger expenditure organisations like Ford, ICI Marks and Spencer, to be operating from the middle to the top section of the model (Pirons 1982).

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Fig 2.7.   Purchasing Performance Model
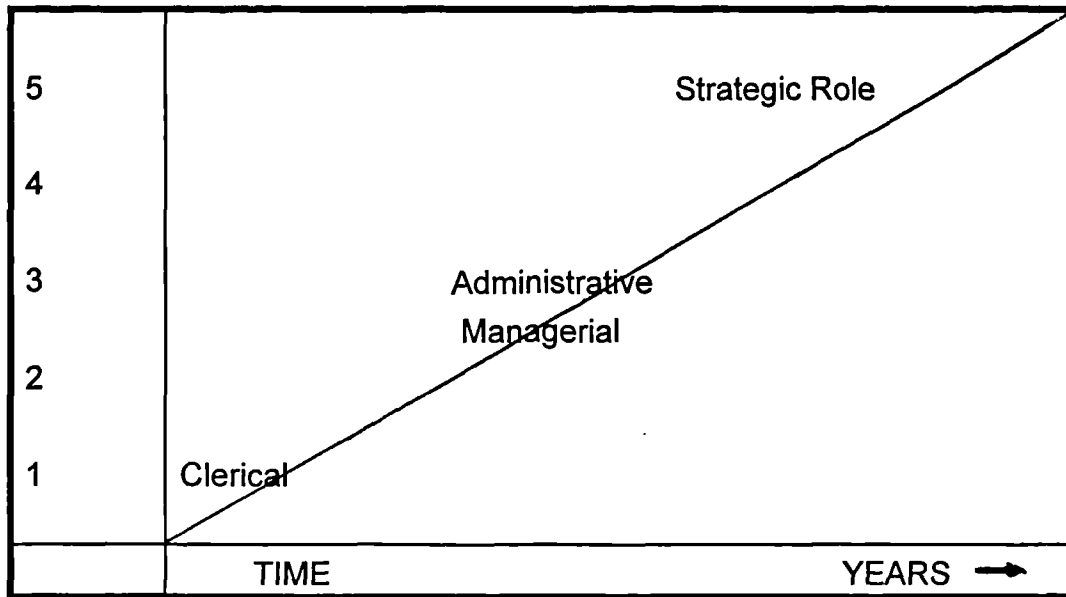
The development of measurement criteria is therefore almost certainly linked to the development of the purchasing function within the organisation.

2.9   Comparative Evolution

It would appear from the literature that in certain organisations purchasing is more developed than in others. Surveys in the 1960's carried out by Buckner (1976) and Brand (1972), revealed big discrepancies in terms of purchasing performance and evaluation.

Dale and Powley (1985) investigating purchasing practices in five British firms, all small to medium size in the batch and jobbing industries, noted:

• all five operated in the short term
• long term planning was not practiced
• they failed to build up lasting relationships with suppliers
• they were more concerned in measuring performance in terms of following clerical and administrative systems, than in real cost reduction exercises.
• interfaces with other departments were limited and superficial.

In general they were least impressed with the Government departments investigated.

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Examples of good purchasing practices were cited in a Government publication, "Purchasing Practices in the Public Sector" 1986 and 1992. Those responsible for producing the report had been particularly impressed by purchasing in the Private Sector as compared with the Public Sector. They investigated in particular, purchasing in the Motor industry, Ford, General Motors, and also the Chemical industry ICI; retailing, Marks and Spencers, Sainsbury's; and computer organisations like IBM and ICL. According to their findings, those companies which had highly developed purchasing functions were evidenced by such factors as:

- good organisational structures with specialist purchasing functions
- buyers spending a high proportion of their time on "real buying" activities, i.e. supplier development, purchasing research, negotiation and cost reduction exercises.
- developed effective control mechanisms to measure purchasing performance.
- purchasing within such organisations was seen as being strategic.
- the purchasing function reported directly to the MD.
- most of the high value expenditure was on blanket orders.
- the existence of well established systems covering major aspects of real buying.
- high ethical standards
- regular training of all those involved in the buying activity to increase effectiveness
- well developed paper or computer systems that concentrated on key elements in the buyer's jobs.
- good interfaces with other functional areas - regular meetings and consultation.
- well established relationships with suppliers giving regular assistance.
- evidence of the use of such skills as:
    value analysis
    product cost analysis
    learning curve analysis
    balance sheet analysis
    consolidation of requirements.
- concern over philosophies that lead to the lowest cost of supply.

- such organisations would tend to be leaders in developing JIT, MRP I & II, Logistical Management.
- widespread use of quality criteria, for example BS5750, SQA schemes and so on.

The Government called upon all those organisations in the Public Sector to copy these examples of good purchasing practice, and set in motion a number of measures to assist in this development. Hill (1974) and Oliver (1987) identified many of the above factors as hallmarks of purchasing development. Purchasing development would appear to be patchy, some organisations in particular areas, are renowned for good purchasing and in terms of the criteria already cited, they would appear to be well developed.

The Public Sector was, until comparatively recently, consistently attacked for not developing expertise in the area. Dunmore and Lund (1983) were extremely critical of the standards of purchasing in the Public Sector. As Dunn observed, "the waste of public money because of ineffective undeveloped purchasing was a national scandal". In 1985, an IPS conference entitled "Developments in Central Government Purchasing Practice" reported improvements tended to be slow in time implementation.

In 1994 a Government White Paper on Public sector procurement called for major changes that would allow Government purchasing to obtain better value for money. This has lead to benchmarking against good practices in the Private sector and considerable outsourcing of traditional Civil Service activities this in turn is leading in some areas to the outsourcing of purchasing. It is likely that this process will continue in such cases it is likely that the purchasing activity would therefore not be affected by the same Civil Service rules and regulations, that impeded good purchasing practice.

Shealy (1985), in a survey of the purchasing job in different types of business, found that "the industrial buying job was quite similar in the different types of business studied". He also found, from the survey, that there was greater attention by certain organisations of what is regarded as more "up market" elements or strategic parts of the function. Interestingly, in business group A of his survey, "Manufacturing for the Goverment", he notes, "there was less interest in cost reduction techniques compared with

the other groups". If purchasing in the Government sector had been more advanced, one would have expected far more interest to be shown in such criteria.

2.9.1 Comparative Evolution By Major Organisations And Sectors

Such factors as type of industry, i.e. batch, continuous or extractive; purchase expenditure sales revenue; type of product bought; buying supply markets, etc., are likely to vary enormously from one organisation to another. If we examine various chapters of the Purchasing Management Handbook, Editor David Farmer (1985), one finds factors affecting the development of purchasing vary tremendously from sector to sector, with some of the most developed purchasing activities in the automotive and retailing sectors.

2.9.2 General Factors Likely to Affect Purchasing Development

(i) Type of Organisation

In general terms, larger organisations would appear to have more developed purchasing functions than the smaller ones. The IMP Group (1982), Campbell (1985), Jones (1983), Balan (1993), Joag (1994), draw similar conclusions.

(ii) Purchasing Expenditure to Sale Expenditure or Income.

High levels of purchasing expenditure to sales revenue or income, would appear to be associated with more interest being shown in the purchasing function from the rest of the organisation and its role being seen as strategic rather than operational and clerical, Jones (1983) Farrington (1978).

(iii) Organisational Type

One can in general terms arrange organisation type in terms of likely development, for example, Fig. 2.8.

Fig. 2.8   RELATIVE PURCHASING EVOLUTION BY ORGANISATION

```
                                          ┌─ HIGH
PROCESS/CONTINUOUS PRODUCTION             │
OIL INDUSTRY                              │
RETAILING                                 │
                                          │
SERVICE                                   │
                                          ├─ MEDIUM
EXTRACTIVE (NON OIL)                      │
PUBLIC SECTOR                             │
                                          └─ LOW
```
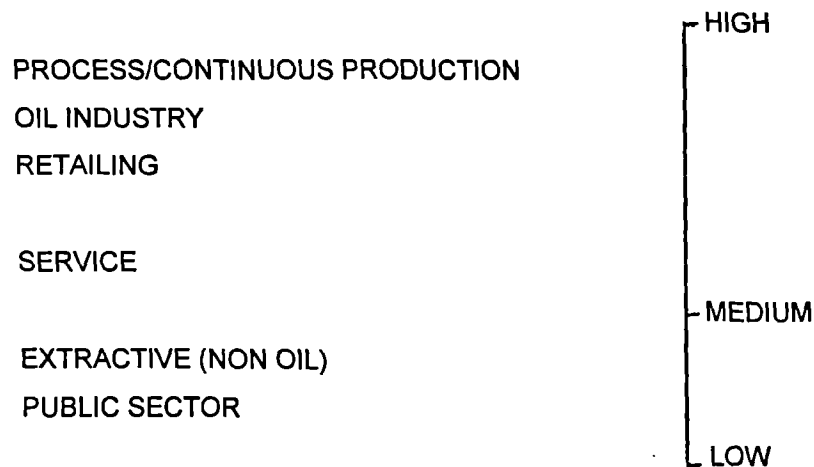
It is often difficult to place entire sections of the economy in these development bands. Broad generalisations have been made. Examples can always be found that disprove the rule, for example, Kent County Council would be placed in the medium to high development section.

(iv)   Competition in the Market for the Finished Product of the Organisation.

Those organisations that are selling their products or services and are faced with competition are more likely to put pressure into developing the purchasing function than those who are not. If their products are price sensitive, corporate emphasis will be placed on keeping costs under control, Farrington (1978/8), Power (1993), Sysons (1992).

When we put these four components together, helps to explain why purchasing is developed in some organisations in a general economic sectors and not in others. In Fig. 2.9 an attempt is made to bring together these four major variables likely to affect the development of the function within an organisation.

If, for example, we carefully examine Kent County Council, because it is in the Public Sector, the literature would tend to suggest low development of the purchasing function, examination however reveals its expenditure is considerable, and coordinated at a central purchasing department. This would tend to put it in the high development category. Other local authorities

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have a very much more fragmented "spend". Other factors likely to be at work and not shown in the above model, are needed to explain the development at Kent County Council.

Fig. 2.9   FACTORS AFFECTING DEVELOPMENT OF PURCHASING
            FUNCTION WITHIN AN ORGANISATION

ORGANISATIONAL PURCHASING EXPENDITURE   MARKET FOR
                ORGANISATIONAL
SIZE   SALES REVENUE OR   FINAL PRODUCT
                TYPE
                INCOME

HIGH

↑

PURCHASING
DEVELOPMENT

↓

LOW
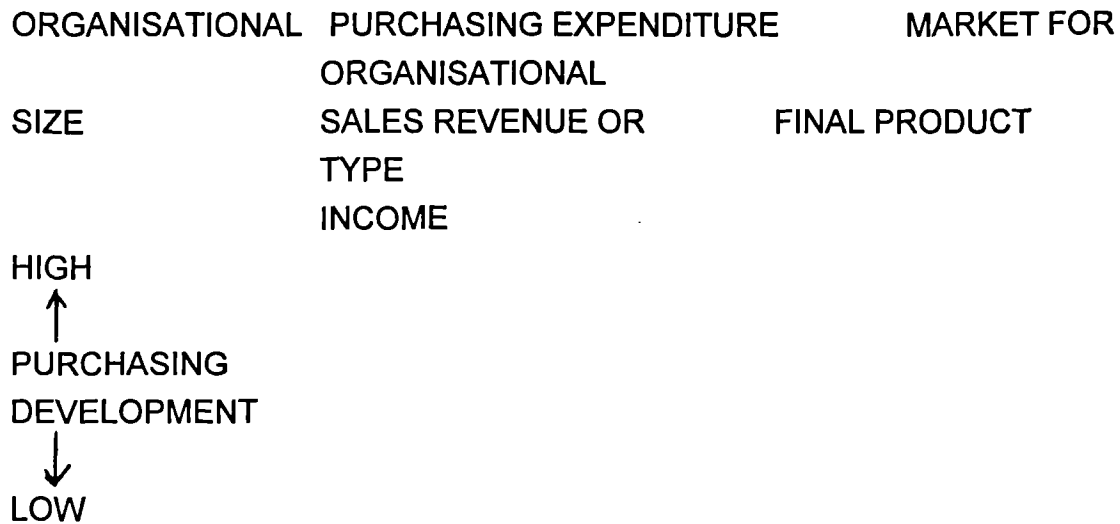
Where the model is useful is when we look at organisations like the Ford Motor Company. Its purchasing to sales ratio is high 70% - 75%. It is a large organisation, with a $50 Billion turnover, and a continuous production environment, it also sells in very competetive markets. The simplistic model in Fig 2.17 would tend to indicate pressures on purchasing development.

It is interesting to note that Government reports on increasing purchasing effectiveness call for the Public sector purchasing to copy good purchasing practices in the private sector, especially those as practiced by Ford, ICI, Shell, and Marks and Spencer. One often hears the comment that purchasing is basically different in various organisations, and this is used to explain why purchasing varies from organisation to organisation. Others however, Bailey, Farmer, Jessop and Jones (1994), Aljian (1983), see far more commonality than differences in the purchasing activity.

Shealy (1985), when examining purchasing in a number of different organisations, concluded, "this study reveals that the industrial buying job is quite similar in the different types of business studied". He continues, "of a

total of 185 purchasing job tasks, only 17 tasks (12.5%) were identified as being significantly different among the firms in terms of importance to the purchasing job". The IMP group (1982), Banting, Ford, Gress and Holmes (1985), also note similarities in industrial procurement across Countries.

Where the differences are greatest between purchasing functions, it is often in terms of detailed procedure and organisation of the function. However, as purchasing departments develop and spend less time on routine clerical activities, they are likely to copy "good" purchasing practices in other organisations, or benchmark. This process is not unique to functional development, many examples exist of organisations in different environments copying good management structures and techniques. As purchasing functions get more involved in negotiations, cost reduction, measurement of performance, and training of staff, purchasing differences at different stages of development are likely to fall.

How the function is organised will differ from organisation to organisation, but it is likely in the future that new strategic developments like JIT, MRP II, and Materials Management, are more likely to determine the structure of the function, [Anderson Consulting (1993)], [Lamming (1993)].

2.10   Technology
Technology needs to be investigated in terms of external or environmental effects and internal or intra-organisational aspects. Externally, rapidly changing technology and innovation is likely to put pressure on the purchasing function to become more professional. The rate of diffusion of innovations and new technology generally may be indicative of purchasing development or otherwise. However, it must be borne in mind that the buying centre or DMU is composed of those from functions other than purchasing, Manoocherri (1984).

2.11.3   Computer Developments
The introduction and developments of computer and information technology has had profound effects on both organisational and functional developments. All the new strategic developments within organisations are heavily dependent on effective computer technology, [De Heij, Van Steckelenberg (1994)].

Whilst it was possible in the early stages of computer and strategic systems development to minimise purchasing's involvement, all the new systems "require high levels of functional interface development", Gunther (1986). It therefore is likely that increasing development in computer technology and information technology are likely to be a positive factor in encouraging purchasing development.

Bernard, Londe and Emmelhinz (1985) observe, "An approach that appears to aid purchasing in attaining its objectives (reducing overall costs and viewing the supplier as an extension of the buying firm) is computerised purchasing". Their survey covers 4,800 purchasing executives from clerical, consumer products, textile electronics and metal industries. Computer activity was noted in 11 purchasing areas, and the results are shown in Table 2.2. The purchasing areas involved became more comprehensive, the further down the table you go, and also became more interactive both with functions within the organisation, and outside suppliers.

It is noted that "the volume of computerised purchasing activity both within and between firms is expected to increase significantly in the near future". In the research they develop a "stage of computer activity" model, from I to IV. With IV being the computer activity at its most advanced. Interestingly those organisations that were particularly advanced in computer technology, for the most part had developed purchasing functions.

The research also found "a significant difference in computerised activity levels based on firm size. The study indicates that large firms are significantly more involved in computerised purchasing than are small and medium sized firms". As the researchers indicate, however, "for the major benefits of electronic purchase order interchange to be realised, electronic purchasing systems must be broadly based among firms of all sizes, buyers and suppliers alike, not just the innovative few".

Table 2.2

LEVEL OF COMPUTERIZATION BY PURCHASING ACTIVITY
Percentage of Respondents Reporting

Activity	No Action Planning	In Planning	In Implementation	Currently On-Line	Extent of On-Line Systems	
Requirements Generation	29%	23%	3%	45%	Within purchasing only Firmwide	22% 78%
Buyer Workload Scheduling	75	14	2	9	Within purchasing only Firmwide	54 46
Solicitation Generation (RFP)	68	16	4	12	Within purchasing only Firmwide With vendors	49 49 2
Expediting	43	22	4	31	Within purchasing only Firmwide With vendors	46 53 1
Purchase Order Generation	25	29	5	41	Within purchasing only Firmwide With vendors	54 44 2
Receiving Reporting	24	25	4	47	Within purchasing only Firmwide With vendors	30 69 1
Cash Commitment Reporting	44	15	3	38	Within purchasing only Firmwide	17 83
Buyer Workload Evaluation	72	15	1	12	Within purchasing only Firmwide	63 37
Buyer Performance Evaluation	71	16	1	12	Within purchasing only Firmwide	65 35
Vendor History Recording	29	28	4	39	Within purchasing only Firmwide	48 52
Vendor Performance Evaluation	38	35	5	22	Within purchasing only Firmwide With vendors	52 43 5

They warn, "if the projections of this study are correct, a significant portion of the communications between buyers and suppliers will occur in an electronic mode, rather than in current traditional modes". This observation is also highlighted by Balmforth (1985) and Lysons (1979). Low and Waters (1987) go further and stress the need for such developments to form part of the strategic plan. McTavish and Guillery (1987) also note more of a reluctance from smaller organisations to purchase computer technology.

Bernard, La Londe and Emmelhinz conclude, "on balance, it appears that most purchasing departments in the 1990's will look far different from the typical purchasing department of 1985 ... In order to accommodate this change, most purchasing managers will have to put in place an entirely new system. The enormity of this metamorphosis will require not only the best efforts of the purchasing executive and appropriate corporate support personnel, but also a significant change in management style and management attitudes within the purchasing function".

These views are in line with many others who look at purchasing's involvement in new computer systems and technology. If purchasing is to effectively handle these new computer developments, it needs to be more professional, strategic and developed. Interestingly, the more developed the computer systems are, the greater the expertise required from purchasing. If purchasing cannot provide such expertise, then there is a danger that computer experts will take over the function to make systems work, and may not be too concerned about "real" purchasing goals.

As computerisation is applied to purchasing, it does allow for more positive performance measurement of the function. This in turn may lead to more management awareness in terms of its strategic role, in terms of savings and in support of other organisational goals. If we return to the model developed by Bernard, La Londe, and Emmelhinz - Stage of Computer Activity, Fig 2.10, this model, with suitable adjustments could be of use in measuring computer developments within the purchasing function.

Fig. 2.10   STAGE OF COMPUTER ACTIVITY
<u>Stage of Activity</u>
I   No action on any function

II   In planning or implementation stage
      (No function on line)
III   On-line with at least one but not more than
      four functions
IV   On-line with five or more functions.

Computer and information technology and its development within purchasing, are seen as important indicators of purchasing development. An undeveloped purchasing function, where purchasing is seen as largely clerical in operations, would have extreme difficulty in handling demands from an organisation that required rapid developments in computer areas. Again purchasing organisations at the "lower" level of development would have great difficulty dealing with MRP II and Logistical or Material Management computer packages. It is likely that computer literacy and functional development are highly correlated, [Kassiceh and Rogers (1986)]. The development of computer systems to help the buyer in reducing clerical parts of the job also release time to spend on more strategical aspects of the job and allow more internal outsourcing of routine purchasing activities. An example to illustrate this is the ELVOS system (1995) developed for Shell and other organisations.

Many of the new developments affecting purchasing are also heavily reliant on strong supplier buyer bondings. JIT, Logistical Management, Total Quality Control, MRP II, all call for closer collaboration between buyer and supplier, with a strategic objective of much smaller, more manageable supplier base.

Computer links between buyers and suppliers also require closer bondings between the two, if electronic purchase order interchange is to be successful. Retail buying is particularly dependent for its future on developments such as EPOS - bar code scanning. These developments in themselves require considerable expenditure on the appropriate hardware and software, and the ability of the purchasing function to effectively negotiate "deals" for their purchase that meet future strategic requirements.

2.12 Corporate Culture

Corporate Culture, is the understood value and relationships, rituals, beliefs, shared by members of an organisation, that operate unconciously and define in a basic "taken for granted" fashion an organisation's view of itself and the environment. As Schein (1985) observes "it is the ways members of the organisation behave towards each other, the rituals and routines of organisational life". Status symbols and policies, rewards, in short, "the way we do things around here", Deal and Kennedy (1982).

Johnson and Scholes (1992) observe "there is now a growing understanding that the strategy of an enterprise, its structure the sorts of people who hold power, its control systems, and the way it operates, tend to reflect the culture of the organisation. Miles and Snow (1978) also refer to prevailing beliefs held by organisations within the same business sector which are conservative, whilst others are dynamic. It is now increasingly recognised that cultural influences can and have profound effects on functional developments. The set of beliefs and assumptions which form part of the culture of an organisation have been called interperative schemes, Bartunek (1984), paradigms Pfeffer (1981), and recipes, Spender (1980).

Corporate culture and the thinking that goes with it will vary from organisation to organisation. Corporate culture almost certainly has not helped the development of purchasing in many organisations. The general beliefs and assumptions concerning purchasing have been negative, for example:
"anyone can buy" - Arnold Weinstock (1978)
"purchasing is an administrative function" - Ansoff (1972)
"purchasing is a non strategic function" - Drucker (1963)

Purchasing has been seen as non strategic, clerical, and relatively low key. It is only comparatively recently, with environmental, and new strategic developments, that its whole position within organisations has been reappraised. Larger organisation have tended to be more aware of its importance, but have still been slow to develop the function, with noteable exceptions in the Motor,Oil, Chemical, and retail environments. If organisation culture regards purchasing as a low status activity, it may require considerable efforts to change this perspective.

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The cultural view of purchasing is likely to impede progress in all areas, of interface development:

- design - it is not purchasing's role to question specifications
- accounts - purchasing are not allowed to question settlement terms or stock taking policy
- new product development - no role
- supplier development - arms length approach, and so on.

Changing cultural perceptions is often extremely difficult, and unrewarding. Organisations, because of cultural beliefs, may still restrict development of the function, when all the signs call for its rapid development, for example:

- enviromental factors - high levels of inflation and shortages
- high levels of purchasing expenditure to sales revenue, i.e. 60-70% +
- stagnant markets making purchasing one of the few areas where cost saving can increase profitability
- new strategic developments that rely heavily on purchasing if they are to work effectively, for example, World Class concepts, Lean Supply and ideas based on Supply Chain Management.

In Organisations where corporate culture values purchasing, it tends to be highly developed as an activity for example, Ford, ICI, Shell, Marks and Spencer, the activity is held in high esteem by other functions within the organisation. One observes that in such organisations, interface development with other functional areas is correspondingly high and developed, making further evolution of the function that much easier.

References to corporate cultural perceptions of purchasing's role are likely to be indicative of its existing and future stage of development. One of the methods that could be used to measure cultural perceptions, might be to ask other functional executives to rank functions in terms of their perceptions of importance to the organisation.

2.12.1 Role Conflict

Purchasing development in organisations where corporate culture holds it to be relatively unimportant is likely to lead to problems of role conflict and stress. Bonfield and Speh (1977), Allen (1977), Bonoma and Johnston (1978), Hazel (1995), and Sysons (1995). Role conflict and stress are likely to be considerably higher where purchasing is at low stages of purchasing evolution, and trying to "break out" from traditional corporate cultural concepts.

This "breakout" may be evidenced by new structural developments between purchasing and other associated areas, for example, Materials Management concepts. It may arise out of the appointment of a new purchasing manager with different views on its scope and objectives, or a new strategic directive from above.

2.13   Organisational Buyer Behaviour Research (OBB)

2.13.1   OBB Overview

Considerable research has been conducted, mainly from a marketing perspective, into an understanding of industrial buyer behaviour. As Webster and Wind observed in (1975), "the literature ranges from academic to professional, from basic to applied, and covers almost the entire spectrum of human endeavour. Many of the research areas, which include Buying classifications, composition of the buying unit or centre, Decision Making Unit (DMU), personal factors, organisational variables, general models, buyer seller dyads or relationships, interaction analysis, are all relevent when investigating purchasing evolution. Smith and Taylor (1986) classify organisational buying effort by organisation and scope in a model adapted from work undertaken by Wind and Thomas, Fig 2.11. One can examine the OBB literature and establish the relevance or otherwise of purchasing evolution in many of the areas researched.

Fig. 2.11   ORGANISATIONAL DECISION MAKING
             INDUSTRIAL MARKETING

ORGANISATIONAL
BUYING RESEARCH

Academic

Focus on description and understanding of organisational buying behaviour

Implicit as part of a broader industrial marketing modelling effort

Industry based

Positioning and segmentation studies including organisational buyer's preference for new product features

Implicit as part of market response studies (for example, pricing, distribution, personal selling and advertising research).

Descriptive studies of how industry buys

adapted from Wind and Thomas (2)

2.13.2 Buying Centre/DMU Concept

The concept of the Buying Centre refers to all those members of an organisation who become involved in the buying process for a particular product or service, Robinson and Faris (1967). Wind (1978) noted the purchase of industrial components was carried out by a buying centre who's composition changed depending on the organisation, this was confirmed by many other studies that followed. Thomas (1980), Calder(1977), Bonoma and Johnston (1987), and Weigand (1968), showed the industrial buying process as complex. Other research, "How British Industry Buys" (1969) Spekman and Stein (1979), Buckner (1972) added to our knowledge of the Buying Centre.

Various roles in the Buying Centre were revealed, Gorman (1971), it is multidimensional, Calder (1977). The work of Wind (1978), Pingry (1978), adds additional dimensions. A number of influences were discerned in the Buying Centre, Strauss (1962), lateral power struggles. Wind (1971) showed the Buying Centre responded to the informal and social rewards of other Buying Centre members. Non purchasing personnel had more influence on supplier selection than buyers, [Cooley, Jackson and Ostram (1977)]. These were differences in relative power, engineering vs purchasing, Spekman (1979), greater environmental stress enhances the power of the purchasing function. Thomas (1980) found a decisions evaluation of a product is affected by the authority, stature or expertise of others, but depends on the decision maker's position, the degree of conflict, and specific product features.

A number of interesting observations can be made from the findings in this area.

(i)   Whilst the importance of the purchasing function does indeed vary, its role is likely to increase in importance as the purchasing function evolves. Wind (1978) found the Buying Centre composition varied. There may be less variation in composition as the purchasing function increases in status. Indeed it could be argued that one of the reasons why others are involved in purchasing decisions is the lack of expertise within the function.

Wind (1979) finds the size and composition of the Buying Centre varies by organisation size, and buying situation. One might expect that purchasing would be more advanced in larger organisations, and likely to have a greater influence in the purchasing decisions. In smaller organisations, it is likely that purchasing is more fragmented, with functional areas involved with their own purchasing. This state of affairs is often typical with those organisations where purchasing is at a low stage of evolution.

The work of Thomas (1980), demonstrates that stature and expertise are important determinants of influence in the Buying Centre. One would expect therefore, as purchasing develops, so it will increase its relative power within the buying centre or DMU.

In a summary of the literature surrounding the Buying Centre concept or DMU, Smith and Taylor (1985) observe "the most that can be said about the composition of a buying centre, is that it is typically made up from between three and ten [Kellogg (1970)] functional areas with also 40 per cent of purchasing decisions being influenced by at least three persons".

Smith and Taylor continue, "given the uncertainty, perhaps a more successful method of determining the make up of a DMU is to consider the roles that members fill. Roles have to be classified in various ways:

- users, influencers, deciders, and gatekeeper Webster and Wind (1971)
- Contributors, participants, responsibles, and directors, Klass (1961)
- those who make major buying decisions, make recommendations, approve purchases, affect the conditions of use, and conduct the buying negotiations, [Weigand (1971)].

They, like Wind and Thomas (1980), express concern over the general findings. Wind and Thomas (1980), observe, "little is known about the composition of the Buying Centre, the determinants of the specific buying composition and changes in it".

Spekman and Gronhaug (1986) note:
"Early work by Robinson, Faris and Wind (1968), and Webster and Wind (1972), was instrumental in developing the notion of the buying centre as the proper unit of analysis for business or organisational buying behaviour. Indeed, Zaltman, le Masters, and Heffering (1982) point to the Buying Centre as a core concept in the study of organisational buying. Sixteen years have passed and, despite a growing tradition of research, marketing scholars (Bonoma, Zaltman and Johnson (1978) and Thomas and Wind (1980)) have been critical of progress to date, and have questioned the overall contribution to this burgeoning field of enquiry. Much of the frustration and inability to move our knowledge of the Buying Centre forward can be attributed both to a difficulty in conceptualisation, and to methodological problems inherent in capturing the multi person nature of the buying centre".

It would appear that whilst considerable frustration is seen over the development of the Buying Centre concept, not all the variables in its make up have been exposed. None of the writings in the area make any reference

to the maturity of the purchasing function, or its lack of it, and the likely affects of this variable on the Buying Centre. One would expect, if organisations were investigated at similar stages of purchasing evolution, to find that their influence and role in the Buying Centre rises considerably with most, but not all types of purchase, as development occurs. Development of the purchasing function needs to be considered more extensively in such research undertakings.

2.13.3 Buying Centre Boundaries

If we accept the adoption of a systems perspective in Buying Centre research [Johnston and Bonoma (1981)], it is important that the Buying Centre is distinguished from its environment. Research suggests that the Buying Centre boundaries are often arbitrarily at the edge of the organisation. More recent research of the buyer and seller relationship reveals considerable overlaps between the buyer and seller. Research has noted both in dyadic and inter organisational areas, [Bagozzi, Bonoma and Zaltman (1978)], and [Johnston and McQuistan (1984)], that a boundary could in fact transcend the organisation. This is in line with current purchasing practice with more advanced organisations, who see the supplier as an integral part of the supply chain. JIT concepts, Total Quality Control etc, can only be achieved if the buyer and seller relationship is working in a much closer manner than before.

Thus one would find supplier's staff becoming more important in the Buying Centre concept because of the benefits this can bring, both to the buying and the selling organisations. In order to facilitate these developments, renewed pressure on the purchasing function is likely to develop to meet these requirements.

2.13.4 Buying Centre Domain

As Spekman and Gronhaug (1986) observe, "Domain embodies the specific goals of an organisation and the functions required to achieve these goals. ... Although we benefit from an improved understanding of buying centre purpose, we do not gain an appreciation of buying centre fit - i.e. the nature of the relationships and the linkages with other departments or units, and extra-organisational units". They continue, "researchers have focused mainly on information needs and choice criteria, and have not examined

information-flows between and among other organisational units, and the Buying Centre".

New developments in purchasing require the activity to be far more involved with all functional areas than before, and in many ways to coordinate information flows between functions and suppliers. The "arms length" approach to suppliers is unlikely to be accepted from the purchasing function of the 1990's. Purchasing must develop in order to interface correctly with others in the buying centre, Bertodo (1991), Joag & Schewing (1993). The work of Barath and Hugstead (1979) tends to reinforce much of the above. They examined the evolution of purchasing into a profession, and the role behaviour of its members. They found that as the purchasing profession continued to evolve within organisations, a larger and more flexible definition of the role of purchasing often lead to greater involvement in a wider range of activities within the industrial buying decision process and buying centre.

Thus we have a number of interesting variables that could be used in the construction of a purchasing development model:
(i)   the involvement of the purchasing function within the buying centre is likely to be indicative of its development.
(ii)   interface development with other functional areas and outside suppliers is likely to be higher with those purchasing organisations at higher stages of development.

2.13.5 The Buying Process/Buying Phases
General
Purchasing's involvement in the buying process or phases varies from product to product, organisation to organisation. As Wind and Thoms (1980) observe, "from the time at which a need arises for a product or service, to the purchase decision and its subsequent evaluation,' a complex myriad of activities can take place".

A number of models have been developed to explain the buying process. The process is seen as sequential. Ozanne and Churchill (1971) propose five stages, Wind in (1978) increases the stages to twelve. Perhaps the most widely used classification is that of Robinson, with eight stages:

- Anticipation or recognition of a problem (need) and a general solution.
- Determination of characteristics and quantity of needed item.
- Description of characteristics of needed item.
- Search for and qualification of potential source.
- Acquisition and analysis of proposals.
- Evaluation of proposals and selection of supplier(s).
- Selection of an order routine.
- Performance feed back and evaluation.

The various models are illustrated in Wind and Thomas' (1980) article on "Conceptual and Methodological Issues in Organisational Buying Behaviour."

As Wind and Thomas record, variation in model complexity arises out of purchasing studies, which in turn suggests the buying process is complex, "it may vary by product and industry and buying situation (straight rebuy, modified rebuy or new task) it is difficult to model and most critical, it is difficult to validate empirically, since the order in which these steps are typically presented to the respondent can effect his or her response".

It may well be found that as the purchasing function develops, certain stages, in Wind's (1978) model may be unnecessary, for example "searching for alternative suppliers" may not make much sense if you are tied into very complex buying contracts, or attempting to develop long term relationships with suppliers where stability in relationships is essential.

Wind and Thomas continue, "in addition to buying process studies, recent years have witnessed an increasing number of unpublished studies or criteria used by industrial firms to make purchasing decisions. Many of these studies have utilised a conjoint analysis design coupled with a number of computer simulation, Green and Wind (1975)... "conjoint analysis studies have been conducted for over 300 industrial products and services including copying machines, printing equipment, data,transmission". Some of these studies have found the more developed the purchasing function is, the greater purchasing's involvement tends to be over the whole buying process, however, Barath and Hugstead (1977) see increased professional status limiting its role.

2.13.6 Variables Affecting the Buying Process

There would appear to be various factors at work affecting the buying process, and composition of the buying centre. As Wind and Thomas record, "the organisational buying process and the composition of the buying centre vary depending on two sets of factors, the buying situation (whether the purchase is a new task, a modified re-buy, or straight re-buy) and the idiosyncratic personal interpersonal, organisational and environmental conditions".

The work of Robinson and Faris (1967), La Londe (1972), Wind (1968), Kelley (1974), Ozanne and Churchill (1971), and various other writers in the area, identifies the buying process as being complex, difficult to model, and varying by buying situation, product and industry. There would appear to be no recorded information on these variables and purchasing evolution.

Numerous references exist in relation to the research process, Friedman (1977), Webster (1970), Beardon (1978), amongst many. Actual purchase alternative buying actions reveal:

(i)   of many attributes, reliability, costs and service were the most important, Kaiser and Rao (1977), Lehmann and O'Shaughnessy (1974), Evans (1980), and Dickson (1966).

(ii) As goods become more objectively alike, so the buyer's decision is based on subjective features. Lazo (1960).

(iii) At the evaluation, purchase and post purchase stage, contribution from Lambart Dornoff and Kernan (1977), extended understanding of these stages.

The various buying stages have been classified by Robinson and Faris (1967), into new buy, modified rebuy and straight rebuy.

New task or buy - a requirement to buy a product not purchased before. Such a purchase is likely to involve many different departments within a company, for example purchasing, designers, accounts and production.

Modified re-buy - in this case a product which has been sourced previously has experienced a change that will necessitate changes to normal supply procedures. Such changes will necessitate various "influencers" in the DMU approving changes.

<u>Straight re-buy</u> - here a supplier has been selected and a continuing relationship exists based on agreed and understood procedures. Purchasing tends to be the major influencer in the straight re-buy situation and will remain so provided other variables, for example quality, delivery, do not change. Probably most purchases in terms of value fall into this category. Brand (1972) used the same analysis extensively when investigating the "Industrial buying decision".

The Robinson and Faris buy class model may have certain limitations, for example "when usage and purchase are not the same" - Hill and Hillier (1977). This is why, for example Lehmann and O'Shaughnessy (1974) developed a different classification model in terms of purchasing complexity. However, most of the models developed have allowed for the straight re-buy situation. Probably the only variable to change in the straight re-buy situation is price.

It is possible that more developed purchasing functions are likely to be involved in more depth with 'new buys' and 'modified re-buys' than less developed ones. Study of typical 'new buys' and 'modified re-buys' and the involvement of the purchasing function may well be indicative of its stage of development. Weitz (1981) considers task complexity and argues that both the relative power of the buyer and seller, and the quality of the relationship must be considered.

Barnes and McTavish (1983) "Segmenting Industrial Markets by Buyer Sophistication" were amongst the first to attempt to develop a buyer sophistication model using various stages in the buying process developed by Robinson and and Wind and others. They in turn develop three levels of buyer sophistication, from 1-3. The model is an attempt to develop a system for segmenting industrial markets on the basis of the level of sophistication demonstrated by members of the Buying Centre. The development of such a model was to help in directing the right level of marketing effort at various organisations, based on development. This model, together with others, will be examined in greater detail later in the research.

2.13.7 Buying Characteristics and Buyer Development

A significant level of research has been conducted in the area of individual differences among organisational buyers. The reason for this research is to indicate whether or not certain characteristics of the individual decision maker can explain differences in the total buying process.

Investigations by Ozanne and Churchill (1968) indicate many different kinds of behaviour are shown by the buyer. Wilson (1966) found the buyers' composite personality was complex and the need of an individual for certainty was a useful indicator as to the buyer's decision making style. Many such studies have revealed different aspects of the buyer's personality and the perception of his suppliers, Kennedy (1970), Parket (1972), Cardozo and Cagley (1971), Hakansson and Wootz (1975).

The behavioural nature of industrial buying was recognised by Kotler (1965). As Smith and Taylor (1980) observe,

"The behavioural and organisational variables commonly noted include the power of the buying group members, Wind (1971) Bonoma (1982); the seller's social power base, Busch and Wilson (1976); the perceived status and responsibility of the buyer, Weigand (1968), Allen (1977), Holden (1982); the perceived level of risk incurrred by the purchase, Cardozo and Cagley (1971); and the buyer's need for certainty, Wilson (1971). The role of friendships is noted by Bonoma and Zaltman (1977) as it is perceived similarly between buyer and seller, Evans (1963) and Mathews, Wilson and Monoky (1972)".

One of the commonly reported features in the early stages of purchasing evolution, is that buyers tend to behave as order clerks, and are more concerned with order placing, maintaining routine systems, i.e. operational activities and less concerned with tactical and strategic operations, for example negotiations, developing supplier relationships and purchasing research.

Feldman and Cardozo (1989) echo these sentiments. Allen (1987) comments, the attitude of top management to the purchasing function can influence the perceived responsibility of the buyer. An article by Browning and Zabriskie (1980), who examine literature covering nearly two decades

provides valuable evidence of the growing interest in professionalising the purchasing function. In 1975, Business Week reported the purchasing executive had been receiving increased recognition, status and compensation. His duties had become less clerical in nature and more tactical and strategic. Bird and Mozze (1976) further reinforce this point.

Barath and Hugstead (1977) reported "increased professional status restricted rather than extended the role of purchasing agents, and led to their use of rule evading tactics in resolving conflicts with engineering and production". This could be due to concentration of their time on more essential roles within purchasing, or a general recognition they cannot be a "Jack of all Trades" as they begin to specialise. One would however still expect the purchasing function to be more involved with strategic interfaces when requested. The conflict they observe is recorded by Lambert Broughton and Banville (1986), and role conflict is likely to increase as purchasing evolves. Bonfield and Speh (1977) and others, record the dimensions of the purchasing role rising and their influence in decision making becoming more persuasive.

A useful indicator of purchasing development might be to compare what proportion of the buyer's time is spent on routine clerical activities, to that spent on more managerial and strategic purchasing. One would expect the ratio to move towards the latter functions as purchasing develops. Jones (1983) in an investigation into price negotiation investigated this relationship. Thus at early stages of evolution, 90% - 100% of the buyer's time was spent on clerical activities, as purchasing evolves the amount spent on the clerical activity falls sharply, whilst, the "real buying" element (negotiations, supplier development, cost reduction, strategic purchasing) rises.

Adams and Niebuhr (1985) record more involvement of purchasing in strategic elements of the function. They cite a study undertaken between 1979 and 1987 by Purchasing Magazine, that found 31 per cent of the buyers surveyed have now become involved in the strategic planning process.

As purchasing evolves, it is likely that more time and effort would go into training buyers in general, and to increasing their effectiveness, i.e. more

clerical assistance, better computer facilities. The volume of literature devoted to advice on how the function should develop is growing, Barath and Hugstead (1983), Lancaster (1984), Pilford (1980), Philips (1985), Prince (1984), Ramsay (1985 and 1993), Reck (1977) and Upah and Bird (1980), are a number of writers who spell out the importance of the function, and the need for more effective training in the area.

The degree of buyer training through CIPS Qualifications, short courses, and 'on the job training' are also useful indications in terms of development of the function. Little involvement in training at early stages of purchasing development is likely, whilst at the more advanced stages, much more extensive buyer training is likely to be undertaken.

2.13.8 Organisational Variables

General organisational development and growth of other functional areas is likely to exert pressure on purchasing to develop in similar directions. O'Neal, Thorelli and Utterbock (1973) found the adoption of innovation was related to technical change in industry, positive information, and the advantage and compatibility of innovation. Organisations operating in environments prone to rapid technical change is likely to require a purchasing function able to react quickly to such changes. This responsiveness to change is more likely to cause development rather than retard it, Gronhaug (1976) found that both the rate and importance of the purchasing function grew with increases in organisational size. Kennedy (1981) noted:

"The role of the purchasing function within an organisation is generally viewed as being inherently significant to the firm's financial viability. However, disparity (across functional boundaries of the organisation) can occur in perceptions of the buying role. The corporate management problem, in such cases is to optimise the overall position and achieve a balance of co-ordination and autonomy. The responsibility of purchasing will perhaps be affected by the size of the purchasing function and its importance relative to the firm as a unified entity".

Generally, larger organisations are more likely to have a separate purchasing function Gronhaug (1976) with varying status levels.

Webster (1965) showed the relative importance of purchasing was a function of such factors as market variables, to product variables, size of organisation and responsibilities assigned to purchasing. As the "bought out" material expenditure rises both in percentage and absolute terms, so it becomes likely that the status of purchasing will rise. Bonfield and Speh (1977), Feldman and Cardozo (1969) all see the status of purchasing rising. Thus for example in organisations where the status of purchasing is low, then the purchasing infrastructure is likely to be relatively undeveloped, Barry (1992). The more developed the purchasing department is, the greater the training is likely to be given to buyers and the more "back up services" purchasing is likely to have at its disposal.

The importance of organisational size in purchasing development cannot be overstressed. Blois in 1972 revealed that 70% of 216 industries were more concentrated than in 1958. Increased concentration is likely to affect both the purchasing and selling activities' effectiveness in negotiating situations.

2.13.9   Purchasing Status

The status and level of purchasing within the organisation is likely to influence how the buyer perceives his role and involvement in the buying decision, leading to problems of role conflict Mist and Hawes (1986), Barath and Hugstead (1977), Ryan and Holbrook (1982), Krapel (1985), Morris Sienton and Calantone (1985).

The growth and development of organisations and purchasing's role in this development would normally be expected to enhance the function. As organisations grow, tendancies to centralise occur. Functional activities like purchasing are eventually recognised as being strategically important, Galbraith and Natharson (1978) Bevin and Evans (1989), Freeman and Cavinato (1990). However, some organisations operate in very dynamic environments where clearly defined functional structure may take considerably longer to develop, if at all, Peters (1994).

2.14   Standard Operating Procedures

With increasing specialists within an organisation, and larger organisation size, systems tend to become more advanced with the trend towards standard operating procedures. Organisations will, during their

development, go through stages of centralisation and decentralisation. Controls over functional activities in the form of standard operating procedure contained in various functional manuals, are likely to be found.

Purchasing operating procedures manuals are likely to cover:
- general systems documentation
- policy statements - ETHICS
- methods of measuring purchasing performance
- methods of assessing supplier efficiency

Aljian (1989), Dobler Lee and Bert (1990) give various examples. The existence scope, and the depth of such standard operating procedures is in itself indicative of purchasing evolution.

2.15 Specialisms Within Purchasing

A characteristic of organisations where purchasing is particularly advanced is the size of the activity and the specialists that increasingly appear within it. The purchasing department found in Ford UK is larger, and more structured than say a small manufacturing organisation's. Whilst size will affect its development, almost certainly its importance to the organisation and its relative development can be judged by the organisation structure.

One would expect for example in larger organisations, buyers specialising in a much smaller range of items and activities. Their ability to negotiate may be restricted to a certain level of expenditure. Re-negotiation over a certain value may be left to higher levels of purchasing management, Jones (1983), Farrington (1978).

In order to maximise the effectiveness of buyers in terms of negotiating time, and supplier development, it is likely that clerical activities would be delegated to more junior staff. As the function develops, other clerical buying specialisms such as expediting and invoice clearing would be delegated to other individuals in the organisation. An increase in more specialist services made available to the buyer are likely as the status of the activity increases:-
- Value analysis and value engineering
- Financial Analysis services
- Product cost analyst

- Specialist engineering skills
- Specialist quality control teams to vet suppliers
- Legal services

Jones (1983), in his study into factors affecting price negotiations, noted these specialist services and specialisms within purchasing increased with purchasing development. In his sample of seven buying organisations buyers in the larger, more developed organisations were encouraged to use such services.

Standard operating procedures tend to be found within the more developed purchasing organisations. Such operating procedures force buyer's thinking along what are considered to be effective decision making routes, and automatically would lead them to refer problems in many purchasing areas to experts within purchasing, or other departments, Spekman (1979), Weele (1985). The idea behind such specialism and procedures, is to avoid costly mistakes in the procurement process. As the function develops and grows, so specialists within the activity are likely to increase. The development of purchasing research to identify strategic problems facing the function internally and externally, would be expected, Bony (1980), Humphreys (1981), Weerd Henk (1983), Bedford (1996) and Cannon (1995).

2.16   Buying "Aggregates"
This is a variable on which little has been directly written. Buying aggregates cover such things as total buying company expenditure, specific expenditure on a particular product, and relates such aggregates to a purchasing organisation's total sales and revenue and supplier's sales revenue. The "buying aggregates" are seen as being variables likely to affect purchasing development. Jones (1983), in developing measurement criteria for research into price negotiations, developed a number of interesting aggregates, some of which correlated well with a basic purchasing development model.

Typical buying aggregates include:
(i)   Spend ratio - this is the ratio of total purchasing expenditure
        (or spend) to total sales revenue in the purchasing
        organisation concerned: <u>Total spend</u>   X 100 = spend ratio
                                                        Total sales

The research showed that those purchasing organisations where the spend ratio and sales revenue are high, one also found high stages of purchasing evolution. Such organisations may realise that both in percentage and absolute terms, purchasing is an important cost and profit centre. It follows with high corporate expenditure involved, there is a need for a well developed, efficient purchasing organisation to keep costs under control in this area. Gronhaug (1976) also identified a link between organisational expenditure and purchasing development.

(ii) Buyer and seller market competition
This measurement involves looking at how many organisations accounted for 80% ofthe market sales concerned, and then categorising these into low, medium and high markets of competition. A similar analysis was conducted for supplier's markets into which the buying organisation sells.

Thus we have:

Number of Firms Accounting for 80% of the Market	Degree of Competition
Less than 5	LOW
Between 5 - 10	MEDIUM
11 +	HIGH

It was postulated that high competition into which the buying organisation sells will put pressures on the purchasing function to develop. Similarly if most of the markets in which the buying organisation buys (in terms of value) are competetive, there is likely to be pressure on purchasing to go for "good deals", particularly in terms of price. This again, is likely to affect purchasing development in a positive direction.

These aggregates cannot be viewed independently of each other, and other variables. Thus whilst an organisation may have a high purchasing to sales ratio, if it's relatively small and total sales revenue is low, then it may have little impact on development. If however, its spend ratio is high, and its total sales revenue is high, then it is likely to be associated with higher stages of development.

2.17 Buyer/Supplier Relationships

The buyer-seller dyad has been the subject of considerable research activities over the years. If those organisations where purchasing is particularly well developed is examined; Ford, Marks and Spencer, and ICI; an impression about the amount of time and effort spent in building up and developing the buyer and supplier interface with "strategic suppliers".

Traditional research into industrial buyer behaviour has tended to study buying behaviour separately from selling behaviour, but the way the buyer acts or reacts is not dependent upon any one specific variable, but many, and to meaningfully understand his behaviour, we really need to look at the total process of any activity. Other ways of studying industrial buyer behaviour are available; for example the "dyadic" model and the systems model - Bonoma, Bagozzi and Zaltman (1978). The dyadic approach argues that buying is an interactive process, which cannot be studied in isolation from selling and that the buyer and seller dyad should be the basic unit of analysis. The system view goes further and takes the dyad as a sub element, and asserts that buying behaviour can only be understood as a total process affected by all inputs and outputs affecting the total organisation. The traditional view of buyer behaviour has tended to view the process in terms of stimulus - response models - Webster and Wind (1972). A more interactive assumption would see buying behaviour in terms of interactive constructs; for example in terms of interdependence. One of the major criticisms of traditional literature is that it tends to take a short term view of any relationships. A buyer is assumed in nearly all models to act rationally. What is rational in the short term, may not be so when looked at in terms of historical perspective.

Using the dyadic approach one can examine the relationship between buyer and seller on both an individual and interorganisational basis. Research in this area is prolific, Matthews, Wilson, Monoky (1972), Martilla (1971), Strachan (1974), Huppertz Arenson and Evans (1978), Bonoma and Johnston (1978), amongst others have all made various contributions to develop a deeper understanding of the relationships. The dyadic approach is useful in this research study; it highlights the importance of shared relationships, interdependence between buyer and seller organisations.

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Professor Guillet de Monthoux (1975) lays great stress upon the relationship developed between buyer and seller. He comments, "the industrial marketing manager often operates within a stable system or matrimony between his own firm and the buying organisation; he has a much more concentrated market than his consumer goods colleague, and must maintain a good relationship with buying organisations". He continues, "to operate within matrimony is far from operating on an open market". Obviously barriers of entry are in evidence, but such barriers can be threatened by competition. He considers the knowledge of each other's systems and day to day regulations between partners should be fully understood. Regulations, he argues "could depend on either competition in a sense indicated by economic theory or on negotiations based on diplomatic ability". In his research, de Monthoux suggests that industrial marketeers face fewer buyers and relations are more stable over time. He cites the work of Scherer (1971) and has his own findings as evidence. The input-output analysis of Scherer, which is of a cross sectional nature, indicated the longditudanal relationships between buyers and sellers are very stable. Various reasons were given for this stability in terms of; "time consuming mutual adaption of supplying organisation to the buying organisation, the training and education involved each time suppliers change, and so on". Any change of suppliers would be extremely time consuming. Before changing suppliers, all efforts would be made to try and correct the problems. The presence of competition is important here, greater competition makes the process of changing suppliers easier. However, over the years, competition in most products has fallen, again presenting difficulties to the buyer wishing to change suppliers.

Based on empirical data, de Monthoux went on to develop a 'mating model', consisting of five phases; Romance, Affair, Marriage, Divorce, New Affair. A great reluctance to lose established suppliers because of the huge amounts of investments involved is seen. Developments like JIT, Total Quality Control, Logistics, MRP II, and other computer developments are all likely to develop and extend the closeness of the relationship in the future.

Wilson and Mummalaneni (1986) remark, "Buyer-seller relationships of a long term nature are clearly gaining significance in business markets", Johnson and Wootz (1984) concur. Campbell (1984) reported that of 80

relationships studied, 46 percent are ten or more years old, and only 12 percent under five years old. Wilson (1985) reports examples of "giants like General Electric and General Motors starting to focus on long term relationships with vendors as a means of cost cutting and quality improvement in their products".

The significance of a relationship developed over a long time period, is that it involves numerous investments in time and effort or capital by the buyer and or seller, IMP Group (1982). The "Interaction approach" developed by the IMP group acknowledge buyer-seller interdependence and recognises the overall interaction between the buyer and the seller as they attempt to influence each other. Many of the studies concerning the industrial buying process have been separated from studies of industrial marketing activity. This interdependence is due to such factors as customised products and investment, different problems associated with industrial markets and the effects of actions of buyer or seller on each other. The interaction approach has been developed by Hakansson and Ostberg (1975), Ford (1980), Bonoma and Johnston (1978), Cunningham (1978 and 1980), Guillet de Monthoux (1975) and others concerned with various problems in the existing buyer behaviour literature.

The approach has been further refined and developed by the IMP Group (1980). At the very heart of this new approach is the nature of relationships between buyer and seller. The approach sees the relationship as being made up of individual episodes, which comprise the detailed pattern of contact between buyer and seller.

Traditionally, literature in the field of buyer behaviour has tended towards analysis of discreet purchasing decisions with little allowance for the dynamic and continuing complex relationships. Interaction is often taking place between companies at different stages of development within a changing environment. The interaction approach firmly challenges the view that the buyer is passive or can be treated in a general way. One must examine each individual buyer/seller to understand the nature of any relationships. This approach also challenges the view of an atomised structure in industrial markets; where it is often assumed buyers and sellers can be changed easily. The interaction approach instead lays great emphasis on stability in

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buyer/seller relationships. Not all relationships between buyer and seller are close. Much will depend on the products in question in relation to such factors as buyer/seller market structures, availability of alternatives, value of business involved. Thus the purchase of stationery, where competition between sellers is high, would not lead to the same type of relationship where for example one buyer was purchasing a product supplied by a monopolist, for example industrial gases.

A number of groups of variables are seen as affecting the relationship; in this case a two party relationship, although it could just as well consist of several parties. The first group of variables relates to the process of interaction between the parties involved. It is argued that a number of elements are involved in the exchange; product or services, information, social values and finance. The product or service being bought or sold is the main element of the interaction process. Its complexity and use by the customer, however, affects risks involved in the process. One would expect more developed purchasing functions to negotiate deals based more on the lowest cost of supply, than lowest price. Thus one might see the evidence of:

- on going projects to reduce costs to both sides, for example development of new products, savings shared, or both sides trying to identify common areas to reduce distribution costs.
- evidence of a number of functional interfaces between the buying and selling organisations, not just purchasing and sales, or sales and engineering. Moreover, any intercompany functional interfaces in developed organisations are likely to be of a regular nature, not sporadic. One would expect regular visits to each other's organisations, with specific goals in mind.

The second set of variables in the model are concerned with the characteristics of the parties involved, either individuals or organisations involved. Characteristics of the buyer and supplier organisations are seen as being important here. Typical characteristics that need to be identified are:

(i) Technology: this comprises manufacturing processes of both organisations, the product complexity , Fletcher (1993).

The more complicated the technology, the stronger bondings are likely to be. New developments in technology, both on the buying and selling side, for example Bar Coding, Flexible Manufacturing System (FMS),

interorganisational complex links, are likely to put further pressure on purchasing to develop.

(ii)   Organisational variables: these variables include the size and power of parties involved, the structures of the organisations and stategies used. These variables are discussed elsewhere in the literature survey (envirornental factors and organisational aggregates).   A large organisation in terms of sales revenue and purchasing expenditure could well fail to maximise this advantage with its suppliers, if purchasing is not sufficiently developed.

(iii)   Individuals: one is investigating the hierarchy and roles often of several individuals in both buying and selling organisations, and such factors as personality, education, that influence business relationships.   The experience of a buyer gained through various episodes affects the overall relationship and attitude with which he views the supplier. In less developed purchasing functions, other individuals outside purchasing may control most of the decision making in the purchasing area. As purchasing evolves, there is likely to be a shift towards purchasing in the decision making process and greater empowerment for the buyer, Joag and Scheuing (1994). This was identified earlier in the research when investigating the likey composition of the buying centre in organisations at different stages of evolution.

(iv)   Interaction environment: the interaction between the buyer and seller's organisation must be analysed in relation to the wider environment. Typical factors of relevance here would cover such factors as market structures in both buying and selling organisations, i.e. monopoly or competition, sourcing policies, internationalism, the position of various parties in the manufacturing chain, and the social systems that are peculiar to each industry. All of these variables interact and are dynamic. Variables of particular interest in this research, are such factors as competition, government controls, and general and specific capacity changes in the industries concerned. These variables and their effect on purchasing development are investigated in greater detail in the next section of the research.

(v)   Atmosphere: this is seen as a product of the relationship between the organisations concerned. It is described in the literature in terms of power or dependence existing between the companies.   It is a measure of the closeness of the relationship. It is made up of many of the variables already discussed.   The atmosphere may be characterised by co-operation or conflict, and the ability to control this relationship is related to "perceived

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power". Another measure of development of the purchasing function is its ability to effectively handle problems and maintain and improve relationships with its suppliers, Freeman and Cavinato (1990).

One would expect emphasis on measuring suppliers performance and detailed studies on supplier selection for items of major expenditure, Hakansson and Wootz (1975), Wind (1970), Grunhaug (1975), Anderson (1985).

Cunningham and White (1973), Farmer and MacMillan (1976)(1978), Hardwick and Ford (1986), all lay great stress on the quality of the relationship between buyer and supplier, and that is indicative of development within each organisation. The traditional view of the seller was that he should be kept at arms length, negotiations were seen as essentially short term in nature. Great emphasis was laid on the price variable.

The approach to negotiations was essentially adversarial, rather than co-operative, Matthews, Wilson and Monoky (1972). The new developments already discussed call for fewer suppliers, longer term contracts, more negotiation based on a win/win premise. More concern generally at looking at the effects of the total "deal". Evidence of such moves are given by Williams (1984) at Fords. Beart (1987), Valla (1984) and Carlisle and Parker (1989) give similar evidence. Another dimension to the buyer supplier bonding is in the area of ethics, one would find that as purchasing evolves, it is likely to establish or follow a code of ethics. One finds large organisations are very concerned about such issues as:

- giving and acceptance of gifts
- how purchasing treats suppliers
- business lunches
- supplier visits
  and other similar issues.

Thus in early stages of development, it is unlikely to see much activity in this area. As purchasing grows, so one would expect greater corporate involvement in such areas, Hackett (1986), Dwyer and Schurr (1987), Hosmer (1988).

One could thus select some useful measurement criteria from the research in this area. The bonding strength between buyer and supplier on major items of expenditure could be measured on a five point scale, measuring various aspects of the bond, for example:

- number of long term and short term contracts with major supplier
- length of typical contracts
- time spent between buyers and sellers in each other's organisations, essentially dealing with strategic issues between them.
- investment in joint sytems
- evidence of information to supplier
- initially vet suppliers - evolution, ongoing evaluation - vendor rating
- evidence of long term projects to reduce cost of supply
- nature and extent of the integration of both buyer and supplier in each other's activities in an attempt to increase efficiency and effectiveness
- openness in the exchange of information
- negotiations - win/win rather than win lose
- development of quality control systems, BS5750

It is envisaged that a combination of such variables could be usefully employed to measure various aspects of bonding strength.

2.18   Bondings/Adaptions

Whilst the research project is concerned with purchasing development, it is interesting to identify how buyer and supplier organisations adapt to each other. William and Mummalaneni (1986) observe:

"These bonds might be economic or social in nature. Both parties have to make in relationships in order to develop them, and relationships develop through the incremental investment of resources. Investments in general are of course, made into those relationships that are considered satisfactory. Those investments might take the form of several adaptions (IMP Group) (1982) in product and process areas. In addition to the which might lead to technical and knowledge bonds, (Hammarkvist et al 1984), social bonds develop within the buyer seller dyad."

What is of particular interest here, is the term "adaptions", how for example would a highly advanced marketing organisation affect a clerical type

purchasing function at low stages of evolution? If a buying organisation is essentially dealing with suppliers at a similar level of evolution, little may be expected. If, however, the markets into which the purchasing organisation enters are highly developed, this may in itself lead to purchasing development. There is a need to develop this idea further in the research.

In general this is an extremely well researched area, a number of interesting points can be distilled in relation to the purchasing function.

(i)   the more developed the purchasing organisation, the greater the care taken to identify and develop major suppliers,

(ii)   the relationship between buyer/supplier is regarded as a long term investment, Fletcher (1993), Wagstaff (1994) and Butterworth (1995),

(iii)   the more developed the purchasing organisation, the greater assistance that tends to be forthcoming from the buyer's organisation to facilitate long term improvements in quality and delivery, Hines (1993), Joag (1994), Lamming and Cox (1995),

(iv)   the amount and quality of information exchanges and respective visits to   each other's organisations are all indicators of the strength of the relationship. Those organisations where purchasing is less developed may well have long term supplier contracts, but tend to avoid any real investment in the relationship.

Again those developed purchasing organisations tend to work at buyer supplier deals more in terms of the overall "deal" i.e. price, quality, delivery and service, rather than just price.   Almost certainly they will devote considerable time and resources into effective strategic sourcing, Pearson and Gritzmacher (1990), Stekelenberg and Van Weele (1993).

2.19   Environmental Factors

All organisations and their functions are affected by a range of environmental variables, constantly changing, i.e. legal, political, economic, social and technological.   The Organisational Buyer Behaviour models developed by Webster and Wind (1972) and Nielsen (1973) allow for environmental factors, as does the interaction model IMP Group (1982). Gronhaug (1976) however, observes, "review of the literature reveals with few exceptions, little empirical

support for the assumed importance of such variables in organisational buying".

Various writers have drawn attention to a wide variety of environmental factors affecting the development of the purchasing activity. Spekman and Stern, (1979) from a sample of twenty firms, from eleven different industries conclude: "Multivariate regression analysis indicates a statistically significant relationship between environmental uncertainty and the influence of purchasing agents. This finding is consistent with research by organisational theorists (e.g. Adams (1976)), who have hypothesised that as a firm's external envirornent becomes more turbulent and unstable, the information processing of the boundary role person (here the purchasing agent) becomes central to a firm's ability to effectively gather, analyse and act on relevent environmental information".

Spekman (1979) also observed that with such uncertainty, buyers have an excellent opportunity to enhance their position of influence, a point also observed by Barath and Hugstead (1979). Guillet de Monthoux (1973) noted that "in times of recession, the degree of formalisation within the firm seems to increase. A decision, which in a boom time might have been taken in a more informal atmosphere, now is taken in a formalised way", Zaltman and Bonoma (1982) concur with this view.

Many writers, Adams and Neibuhr (1985), Zaltman and Bonoma (1982), Bonfield and Speh (1977), drew attention to the turbulent economic conditions of the 1970's. This was a period of high inflation, shortages, and high material costs, Bonfield and Speh (1977), commenting on this period observe these factors have had a profound effect on the strategic importance of purchasing.

La Londe and Emmelhainz (1985) noted "during the past five years, environmental factors such as material shortages, high interest rates, rising prices and global competition have lead to an increased top management interest in the purchasing function".

Pressure is likely to be placed on purchasing to deal with the problems just discussed. If however, little has been invested in the "input" end of the

organisations, then it is difficult to see how poorly developed purchasing functions can deal effectively with much of this. More advanced purchasing organisations are likely to have far more experienced staff, who could, with the help of purchasing research, forge more advanced supplier relationships. For example, if one investigates the 1970's, a period of rapid inflation, a Price Commission (1979), unstable exchange rates, depression and technological change. It was a time when many organisations began to see the need to involve purchasing in corporate strategy, Williams (1987), Jones (1983), Donohue (1980), Hussey (1976) , Morgan (1991), Worneike (1980). It is likely that the problems of the 1970's in these areas, considerably improved the status and development of the purchasing activity.

Co-operation, or the lack of it, and its effects on purchasing is well documented, Glen and Wells (1979), Childs (1972), Duncan (1972), Mansfield (1963), Oxenfeldt (1975), Pestle (1977). Operating in hostile competetive markets is likely to put considerable pressure on the purchasing department to develop. Whilst rates of technological change are also likely to affect purchasing's development, Weston (1988), Wheatly (1992). The new demands of purchasing in the 1990's towards concepts like JIT, Logistical management, are all factors likely to push its development, Schonberger (1986).

The IPS Journal, January 1989 reporting on a Conference, "Strategies for the Next Decade" drew attention to a wide range of new developments, but warned "1992 will see wide ranging environmental changes that can only be effectively handled with an advanced purchasing function working within an efficient Logistical Management System".

There is a need to consider the effect of many of these external and environmental factors to identify if there are links between major environmental changes, and increases in the status of the purchasing function.

2.20 Models/Paradigms

2.21 Introduction

One of the objectives of the literature survey is to identify major variables likely to influence purchasing development and attempt to produce a conceptual operational model or framework. Reviewing the literature leads to the identification of a number of interesting areas where growth models have been developed that might be adapted for purchasing development purposes.

2.22 Organisational Buyer Behaviour Models

Various areas of Organisational Buyer Behaviour and processes involved have been investigated, Aaker (1970), Anderson (1987), Baker, Woodside and Archibald (1982), Bonoma, Bagozzi and Zaltman (1978), Campbell (1985), Doery and Valla (1984), Farley and Ring (1974), Farrington (1978), Feldman and Cardozo (1969), Jain and Lane (1979), Jayasonkor and Romani (1982), Kau, Paul Lowell (1972) Kotler (1965), Leblanc (1987), de Monthoux (1975), Newall (1976). This list is not exhaustive, but does cover a wide range of models covering such areas as vendor selection, buying centres, DMU'S, negotiations, buyer seller dyads, interaction analysis and so on. Various attempts have been made to model the whole OBB areas with work by Robinson and Faris (1968), Webster and Wind (1972), and Sheth (1973). The Interaction Analysis of the IMP Group (1982) has also played an important integrative role, but from a more specific viewpoint in terms of the buyer seller relationship. Whilst it would appear that such models were comprehensive, covering most of the variables likely to affect the buying decision, none of them make any allowance for the stage of purchasing evolution reached. All take cogniscence of the environment climate, individual roles and participants. A serious flaw can occur, that is the buying decision can be fundamentally affected by the stage of purchasing evolution reached. Thus an undeveloped purchasing function is unlikely to get involved in key purchasing decisions, but at high stages of evolution, it is likely to be a key influencer.

2.23 Overview

Within two organisations, similar in every way other than development, different purchasing decisions being taken could be seen. Similarly, one might expect those organisations where purchasing is of average development to be extremely concerned in terms of the 'marketing mix' with price, a highly developed purchasing function however, may be more concerned with other strategic considerations and concepts like the lowest cost of supply, Bertodo (1991), Hines (1993), LaForg and Stone (1984), Evans (1994) and Stevens (1995).

2. 24 Purchasing Development Models

There would appear to be relatively few purchasing development models perhaps one of the earliest ones is Jones (1983). This was a relatively unsophisticated model developed for analysing price negotiations. Also references to stages of evolution can be found in an article by Van Weele (1985), which describes measures of purchasing performance and how they develop with purchasing. This model has already been described and will be further developed in the next chapter.

2.22.1 Buyer Sophistication Matrix

In an article by Barnes and McTavish (1983), "Segmenting Industrial Markets by Buyer Sophistication", an attempt was made by authors to develop a simple development or buyer sophistication model. The model is illustrated below Fig. 2.12.

Fig. 2.12   BUYER SOPHISTICATION MATRIX

	Level (1)	Level (2)	Level (3)
Sophistication Levels Buying Stages	Simple informal buying process, price dominate buyer acts as clerk	More advanced buying process, price and other factors considered , buyer enjoys greater discetion	Advanced buying process, strategic aspects of buying considered, buyer full procurement executive
Recognition and analysis needs	Buyer receives requisitions from senior management, performs order clerk activity	Buyer participates in drawing up of specification/ some discretion	Buyer participates fully in initiation of purchases/ member of senior management team concerned with procurement
Search for Supplier	Buyer passively receives catalogues from suppliers	Buyer initiates some supplier contact/ receives data	Buyer initiates two-way communications with suppliers
Evaluation an selection of supplier	Buyer buys what is specified to him at lowest price	Buyer concerned with non-price factors/ concerned with total cost to firm, not just price	Buyer concerned with strategic importance to firm of purchasing
Performance feed-back	No involvement by buyer; assessment done by using departments	Some participation in feed-back analysis	Buyer fully involved in wide-ranging assessme activity

Source: Barnes and McTavish (1993)

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The vertical axis consist of four stages in the buying process, mainly developed from the work of Robinson, Faris, and Wind and Miller (1973) capital equipment purchase model, whilst the horizontal axis shows three stages of buyer sophistication, partly influenced by the work of Cardozo (1968).

These stages are described as the classical stage (1) where the buyer is virtually an order clerk, and development at a low level. The second stage is "neo classical", "here the buyer is seen as dealing with more complex requisitions, demanding greater discretion". In the third stage, the buyer emerges as a fully fledged procurement executive, recognising his responsibilities have extended far beyond purchasing. At this stage, the procurement executive is seen as solving a variety of economic intellectual and personal problems.

The model developed is mainly useful in the area it has been developed for but unfortunately it is only concerned with one category of development variables, namely buying stages and purchasing's involvement. To measure development of the function effectively, far more variables will be required, to allow greater measurement precision.

Barnes and McTavish illustrate why such a model is useful. They cite an organisation where it was found that buying standards and procedures were typically highly systematic and professional, conforming to (level 3). However, in terms of purchasing professionalism, it fell far short of level 3, so much so, that despite its international spread "should be treated as a small company for marketing purposes," he was arguing for micro segmentation based on buyer sophistication. This also highlights a problem of this model - too great a reliance on one category of variables may be misleading.

It is envisaged that any purchasing development model would need to consider a wide variety of measurement criteria. Thus one might find a purchasing organisation is developed in some areas, but not in others, and by measuring a number of variables, a "composite profile" would indicate the general development level of the purchasing organisation, but also identify non developed areas. Such a model, if constructed correctly would be useful to those marketing organisations attempting to tailor their promotional

responses, and identify which areas of the "marketing mix" to highlight when dealing with various purchasing organisations at different stages of evolution. Another problem with this model is that three stages of evolution are rather limiting. Many other growth models in the economic, management and marketing literature tend o for more stages. This allows more accurate separation of the variables concerned.

2.24.2 Reck and Long Development model

Reck and Long (1988) in an article designed to show the strategic importance of purchasing, proposed a four stage purchasing development model. Their four stages identifying purchasing development in terms of passive, i.e. clerical, independent, supportive and integrative Fig 2.13. The integrative stage being the most advanced of the proposed four stages of development. At the integrative stage, purchasing is seen as a totally integrated part of the organisation and has an equal say in strategy determination. Reck and Long also give twelve characteristics associated with the four stages of development.

Reck and Long also give twelve characteristics associated with the four levels of purchasing development. Their model is a useful indicator of general levels of development, but it is limited in two major respects, namely the number of measurement criteria, more are probably required for depth of analysis, and the measurement criteria are not operationalised.

Fig. 2.23 Reck and Long, Purchasing Development Model.

CHARACTERISTICS OF EACH STAGE OF DEVELOPMENT

Stage/ Characteristics	PASSIVE	INDEPENDENT	SUPPORTIVE	INTEGRATIVE
Nature of long-range planning	none	commodity or procedural	supportive of strategy	integral part of strategy
Impetus for change	management demands	competitive parity	competitive strategy	integrative management
Career advancement	limited	possible	probable	unlimited
Evaluation Based On	complaints	cost reduction & supplier perf	competitive objectives	strategic contribution
Organisational Visibility	low	limited	variable	high
Computer System Focus	repetitive	techniques	specific	needs of
Sources of new ideas	trial and error	current purch practices	Competitive strategy	interfunctional info exchange
Basis of resource Availability	limited	arbitary/ affordable	objectives	strategic requirements
Basis of supplier Evaluation	price & easy availability	least total cost	competitive objectives	strategic contributions
Attitude towards Suppliers	adversarial	variable	company resource	mutual inter-dependence
Professional Development Focus	deemed unnecessary	current new practices	elements of strategy	crossfunctional understanding
Overall Characteristics	clerical function	functional efficiency	strategic facilitator	strategic contributor

Source: Reck and Long (1988) - Purchasing, A Competitive Weapon

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2.24.3 Syson's Focussed Development Approach

Sysons (1989) suggests that as purchasing develops, so its focus changes, he identifies three principle areas of focus, transaction basically clerical or passive, commercial and finally proactive. Whilst he explains in general terms what is likely to occur within a purchasing activity at each of these levels, he does so in a general way. The model, Fig 2.14, however is limited in its ability to measure purchasing development in much the same way as the other models already described.

Fig 2.14 Syson's Focussed Development

Positioning Graph 2

PROACTIVITY
FOCUS

VECTORED
THRUST
JIT

INTEGRATED LOGISTICS

SINGLE SOURCE

COMMERCIAL
FOCUS

LONG TERM CONTRACTS

SUPPLIER DEVELOPMENT

PROGRAMME

EDI

QUALITY INITIATVES

COST SAVINGS

TRANSACTIONS
FOCUS

OPTIMISE USE OF

CAPITAL EMPLOYED

SYSTEMS DEVELOPMENT

CODING

HANDLE HIGH VOLUMES OF
TRANSACTIONS

EFFICIENCY   EFFECTIVENESS
STRATEGIES/POLICIES

Ref: Sysons - Purchasing and supply Management (1984)

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2.24.4 Purchasing Development Model - D.M.Jones (1983)

This model was developed by D.M.Jones in 1983, to enable the selection of purchasing organisations at different stages of development. The model developed was basically designed for classification purposes. It was postulated by Jones that the stage of purchasing evolution would effect the outcome of price negotiations. More developed purchasing organisations obtaining better price "deals" than less developed ones. The model is described in Fig. 2.15. The main criteria used in the model, below, were scaled from 1 to 5.

(i)   Purchasing systems

(ii) Purchasing procedures

(iii) Measurement of purchasing performance

(iv) Extent of back up services to aid buyer in negotiations

(v)   Training of staff

(vi) Salary of buyer

(vii) Who the head of purchasing reports to

(viii) Title of purchasing head

(ix) Percentage of buyer's time spent of clerical work, i.e. routine systems, enquiries, quotations, ordering; to percentage of time spent negotiating, supplier development work, planning,

(X)   Purchasing planning and research activity for strategic and tactical purchasing decisions.

(xi) Hospitality to seller

(xii) Buyer/seller relationship - measured in terms of visits to each other, information flows and consultations over future development.

Fig 2.15　　　　　STAGES OF PURCHASING DEVELOPMENT

Criteria	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
Purchasing Systems	No Systems	Basic Filing	Filing Organised	Computer Assisted	V.D.U's
Purchasing Procedures	None	Verbal	Verbal	Basic Manual	Purchasing Manual
Back up Services	None	Occasional Help from other Depts Records	Regular Help from other Depts Records	Supplier Analysis Vendor Rating Other Depts Reports	Product Cost Analysis V.Analysis Planning Vendor Rating Supplier Profiles Financial Analysis
Measurement of Performance	None	Occasional Reports	Regular Reports	Reports & M.B.O.	M.B.O. Reports to M.D. Savings Evaluation by other Dept.
Training	None	Occasional In Plant	Regular for Senior Staff Outside & In Plant	Regular All Staff In Plant & Outside Appraisal Interviews Quals	Regular levels Training Program Manual In/Out Encouraged
Salary of Buyers (1976 Stand)	2,500 2,999	3-3,999	4,000 - 4,499	4,500 - 5,000	£5,000+
Head of Purchasing Reports to	Various People	Works Manager	Works Manager & M.D.	M.D.	Board & M.D.
Title of Purchasing Head	None	Buyer	Chief Buyer Senior Buyer	Purchasing Manager	Purchasing Director

Fig 2.15   STAGES OF PURCHASING DEVELOPMENT (CONT)

Criteria	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
% of Buyers Time spent of Clerical Work OR Negotiating	90	80	70	60	
Supplier Devt Planning	10	20	30	40	50% +
Purchasing Planning	None	Little	Occasional by Purchasing	Regular by Purch	Purchasing Planning
Research Activity	None	None	Dept Head	Manager	Section Manager
Hospitality to Reciprocity	None	Seller	Seller		Occasionally
Seller		Provides	Provides	Reciprocity	Lunches
Code of Ethics	None	None	Understanding	Written & Enforced	Written manual enforced
Buyer/Seller relationship in terms of visits, planning meetings	None	Occasional Visits	Regular Visits	Regular Reciprocal visits	Regular Reciprocal Planning

Reference: Republished from Msc thesis, D.M.Jones, Lancaster, (1983)

As Jones (1983) comments: "These criteria were then rated from 1 to 5. Using each of these criteria, it was possible to decide which stage of development the purchasing company under investigation had reached, stage 1 being the lowest, stage 5 the highest. One would expect for example, those companies where purchasing was well developed, to have good systems and reporting procedures, regular training for their staff, good back up services, and pay reasonable salaries to the buyer. Further, high priority would be given to measurement of buyer performance, with head of purchasing reporting to the managing director and possibly may even have director status himself. A good deal of emphasis would also be placed on the buyer/seller relationships in terms of activities aimed at improving it, particularly with strategic suppliers. Whilst this conceptual framework may not have included other criteria that could be equally important, it does allow measurement of most of the major variables concerned. Many of the variables described in this model are

mentioned in the literature, some of which have been developed based on a 1 to 5 development model, others have merely been identified awaiting measurement after further analysis. It is envisaged that this model can be used as the basic framework on which to develop a more sophisticated model later.

2.25   Purchasing Overview

Rich et al (1996) believe that purchasing has now reached a watershed, a process of "gratification" from academics, the CIPS and practitioners may have overstated the role of purchasing development overall, particularly in terms of it's place in a fully integrated Corporate structure. The development of World Class concepts, Lean supply, value chains etc. however require a strategic proactive function.

An article by Stanwick and Jones (1996) explores shifts in the conceptualisation of the purchasing function. It considers the effects of these changes suggesting that they are so fundamental that they call for a re-definition of the profession. In turn they identify a four stage purchasing evaluation structure based on:

• product centred purchasing
• process centred purchasing
• relation purchasing and
• performance centred purchasing

This four stage approach is also recorded by Stannack and Scheuing (1996) and similar purchasing development ideas noted in this research.

These ideas however have one re-enforcing the view that the purchasing function is very much affected by the stage of development it has reached within an organisation. The more developed the activity is the more likely it will be an integrated cross-functional strategic activity adding value and giving the organisation competitive advantage.

With the growth of outsourcing particularly from the 1990's onwards there has been a wealth of articles considering the outsourcing of the purchasing activity, Benmeridja and Benmeridja (1996), Pedersen and Torvajn (1996), and Evans (1996).

Outsourcing of the purchasing function may indeed make sense if the purchasing function is poorly developed and incapable because of it's stage of development in making the contribution to strategic goals that are expected of it. In the Public sector outsourcing of the purchasing function may also be likely because such factors as outmoded ideas in the areas of regulations, sourcing policy and tendering procedures are affecting good purchasing practices.

As the purchasing activity develops one is also likely to see purchasing devolving the authority to buy and manage low value items and transactional business, either internally or externally, so that it can evolve to take on board more strategic aspects of supply chain management i.e. in order to evolve it must devolve. This research dissertation is concerned with the development of the purchasing function which in most cases will be found in a purchasing department, however one will need to examine the purchasing activity generally within an organisation if purchasing is fragmented.

Whether the purchasing activity is provided in-house or outsourced we still need to know objectively what it's current stage of development is and how it needs to be developed to meet future corporate needs.

2.26   Summary
Criteria likely to be indicative of purchasing development have been identified from the literature review, these include:-

- the scope of purchasing and buying activities involved as the function develops
- purchasing's position in the overall structure
- the extent and use of back up services to assist the buyer
- status of the function
- training and development of purchasing staff
- salary and positioning
- criteria for measuring purchasing performance
- organisational purchasing aggregates
- systems and computer developments
- purchasing procedures

- corporate culture
- buying centre concepts
- buying process involvement
- buying characteristics and development
- degree of specialisation of the purchasing function
- buyer seller relationships and ethics

other criteria such as competition, technology, environmental factors, organisation size and new management innovations are seen as major external factors likely to have an impact on purchasing development.

2.27   Conclusion
In the next chapter development criteria generated from this literature review will be separated into dependent and independent variables and an operationalised purchasing function matrices will be constructed .

CHAPTER 3 Development Criteria

3.1 Introduction

From the literature review a number of dependent criteria have been identified as useful indicators of purchasing development. It is now proposed to consolidate these criteria into a more general five stage purchasing development framework. Some of the development criteria are already multi-staged, others will need modification to allow for five stage development. Independent variables likely to affect the development process are detailed at the end of the chapter.

The objective behind this part of the research is to provide a development framework for more rigorous empirical investigation in Chapter 5 and eventually produce a framework for measuring the stage of purchasing development reached in an organisation.

3.2   Purchasing Development Criteria - Dependent Variables

Criteria have been identified as major indicators of purchasing development from the literature review. These criteria, in order to be operationalised need to be multistaged, five stages are suggested for precision.

The conceptual framework developed by Jones (1 983) is to be the one used to achieve the above objective with suitable modifications.

Each of the criteria indicative of development and indicated in the development framework constructed are now given and operationalised into five distinct stages of development for measurement purposes.

(A)1 Organisation and Scope of the Function - Activity Range

STRATEGIC, MANAGERIAL AND OPERATIONAL ACTIVITIES

Strategic Negotiations   Strategic

Purchase Research

Sourcing Policy

Policies Development

Intra functional Developments

Systems Design

Sourcing

Expediting   Operational

Contracting

Systems Operations

Invoice Clearance
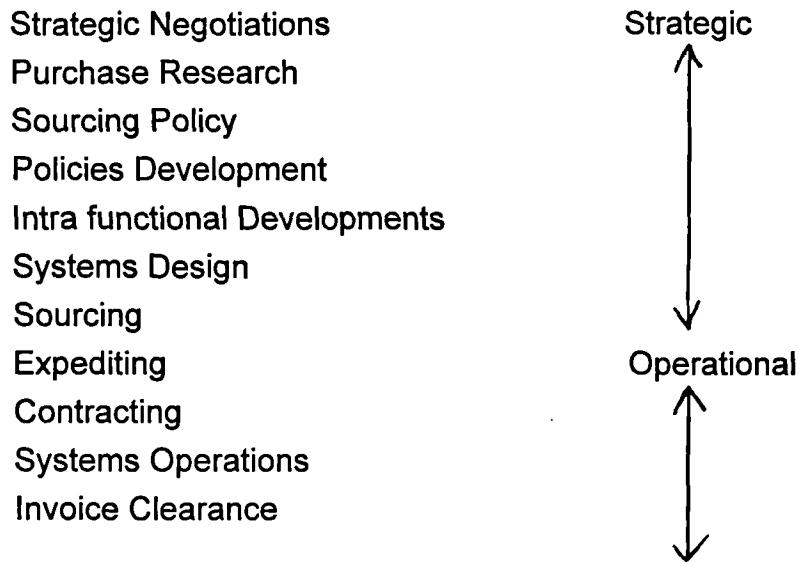
As purchasing develops, one might expect a bigger proportion of the buyer's time to be spent on more "strategic and managerial aspects" of purchasing and less on the operational activities. In measuring strategic and operational activities as in the Jones model (1983), one could have the following measurement criteria for each of the stages of development concerned:

Stage		1	2	3	4	5
Clerical/	%	100	90	80	70	60
Operational						
to						
Real Buying						
(Strategic	%	0	10	20	30	40 or more
Activities)						

NB "Real buying" covers such things as purchasing research, supplier development long term sourcing, negotiation, cost reduction etc.

(A)(2) Purchasing Organisation

How the function is organised is likely to affect its development, thus from the research findings, we find;

(i) small purchasing structures are likely to be less developed than larger ones.

(ii) Materials Management concepts with purchasing responsible for a limited range of activities is indicative of development. Those smaller organisations where the buyer is responsible for a whole range of materials management activities, including buying, are likely to be less developed.

(iii) Logistical Management structures are likely to increase the development of the purchasing function.

(iv) centralisation of the activity is likely to increase its development.

Again, if we try to conceptualise these variables, we might have:

STAGE 1	SIMPLE STRUCTURE. ALL PURCHASING AND SUPPLY ACTIVITIES PERFORMED BY ONE OR A FEW STAFF.
STAGE 2	AS (1). MOVES TO RESTRUCTURE FOR GREATER EFFECTIVENESS
STAGE 3	POSSIBLY MATERIALS MANAGEMENT STRUCTURE, OR ONE THAT ALLOWS PURCHASING SPECIALISM, BUYERS CONCENTRATE ON BUYING ACTIVITIES. MOVE TO CENTRALISATION OF KEY PURCHASING ACTIVITIES.
STAGE 4	SPECIALISATION WITHIN MM OR SIMILAR CONCEPT. HELP FROM SPECIALIST ACTIVITIES WITHIN ORGANISATION, SPECIALIST BUYERS DEVELOPING.

STAGE 5   4 +

          CENTRALISED PURCHASING
          FUNCTION, DECENTRALISATION
          OF CERTAIN PURCHASING TASKS
          ON A MATERIALS MANAGEMENT
          AND LOGISTICAL BASIS,
          PURCHASING RESEARCH
          FUNCTION, SPECIALIST BUYERS
          AND NEGOTIATORS.

(A)(3) Back Up Services

As purchasing evolves, so the services available to the function are likely to increase, to make performance of the function more effective.

	EXISTANCE OF BACK UP SERVICES
STAGE 1	NONE
STAGE 2	OCCASIONAL HELP FROM DEPARTMENTS IF REQUIRED
STAGE 3	REGULAR HELP FROM OTHER DEPARTMENTS IF REQUIRED
STAGE 4	SYSTEMS THAT DIRECT THE BUYER TO USE SPECIALIST HELP IN LIMITED AREAS, FOR EXAMPLE, LEGAL AND COSTING INFORMATION ON ITEMS OF HIGH EXPENDITURE.
STAGE 5	EXTENSIVE USE OF SPECIALIST SKILLS - PRODUCT COST ANALYSIS, VALUE ANALYSIS AND ENGINEERING, VENDOR RATING, SUPPLIER ASSESSMENT, AND FINANCIAL ANALYSIS ON ITEMS OF HIGH EXPENDITURE.

(B)   Status of The Function

This is evidenced by a number of variables within the literature, i.e. who the head of purchasing reports to, salary levels, training and general ethos of the function within the rest of the organisation.

(B)(1) Who Head of Purchasing Function Reports

STAGE 1   Various other functional heads

STAGE 2   One special functional head, but below Managing
Director level

STAGE 3   As 2, Occasionally M.D.

STAGE 4   Managing Director

STAGE 5   Direct to Board Level

(B)(2) Title of Head of Purchasing

STAGE 1   None

STAGE 2   Buyer

STAGE 3   Senior Buyer - or Equivalent

STAGE 4   Purchasing Manager - or Equivalent

STAGE 5   Director of Purchasing - or Similar

(B)(3) The research indicates that training and staff development was an important pre requisite to development of the function. Thus we might have:

<u>Training of Purchasing Staff</u>

STAGE 1   Occasional in plant

2   Regular for senior staff

3   Regular for all staff

4   Regular in plant and outside courses. Appraisal interviews.
Qualifications encouraged

5   Regular training at all levels. Training programme maintained.
Regular audits. Qualifications necessary for promotion. IPS
Qualification sought.

(B)(4) Salary of Purchasing Staff

One normally finds the real importance with which the organisation measures its activities, is when it comes to salaries. Higher salaries beingpaid in those organisations where buying is likely to be well developed and involved in a "real buying job", as opposed to a clerical one.

This variable can best be expressed by percentage variations above or below an accepted average, e.g. salaries quoted in various industrial surveys, for example'Fortune' or CIPS - Salary Surveys.

Thus you might have a measurement of buyers salary as:

STAGE 1   30% or less below average

2   15% or less below average

3   average

4   15% above average

5   30% above average

(B)(5) Measurement of Purchasing Performance

The research in this area suggests that as purchasing evolves, so the variables that measure performance expand and deepen. The more advanced the function becomes, the greater its concern is likely to be in terms of measuring concepts like "the total cost of supply." From the research, an adaption of Van Weele's model produces a five stage performance measurement model Fig. 3.1

Fig. 3.1 CONCEPTUAL PERFORMANCE MODEL

STAGE OF DEVELOPMENT	POSITION OF PURCHASING	STATUS	PURCHASING PERFORMANCE MEASUREMENT	FOCUS ON
1	FRAGMENTED PURCHASING CARRIED OUT MAINLY BY FUNCTIONAL AREAS. SMALL CLERICAL PURCHASING FUNCTION	LOW	VERY FEW STAYING WITHIN AGREED BUDGETS	GETTING THE GOODS IN
2	PURCHASING FUNCTION ESTABLISHED MAINLY CLERICAL FUNCTIONAL AREA STILL INVOLVED IN BUYING	LOW BUT IMPROVING REPORTING VIA OTHER FUNCTION TO TOP MANAGEMENT	MAINLY MEASURING CLERICAL EFFICIENCY OF THE FUNCTION I.E. ORDERS AND REQUISITIONS OUTSTANDING	CLERICAL EFFICIENCY
3	PURCHASING FUNCTION COMMERCIAL	RECOGNISED FUNCTION WITH PURCHASING MANAGER REPORTING TO MD. ALL PURCHASING CARRIED OUT BY PURCHASING DEPT	CLERICAL BUYING EFFICIENCY IE. SAVINGS COST REDUCTION NEGOTIATING EFFICIENCY	CLERICAL BUYING EFFICIENCY
4	PURCHASING FUNCTION COMMERCIAL BUT ELEMENTS OF STRATEGIC INVOLVEMENT	REPORTING DIRECTLY TO TOP MANAGEMENT PURCHASING MANAGER	AS WITH 3 + SUPPLIER DEVELOPMENT AND INTRA ORGANISATIONAL INTERFACE DEVT.	AS WITH 3 + BEGINNING TO MEASURE OVERALL EFFECTIVENESS LONGER TERM
5	PURCHASING IS A STRATEGIC BUSINESS FUNCTION	REPORTING TO TOP MANAGEMENT PURCHASING DIRECTOR HEADS FUNCTION	AS WITH 4 BUT CONCERNED WITH STRATEGIC DEVELOPMENT JIT, ETC. MEASUREMENT OF "TOTAL COSTS OF SUPPLY CONCEPT"	STRATEGIC EFFECTIVENESS

C) Organisational Aggregate Purchasing Variables

It was found in the literature that organisational size and purchasing to sales expenditure tended to correlate well with development of the purchasing function. Thus the following model could be constructed.

(C)(1) PURCHASING EXPENDITURE SALES
REVENUE

STAGE 1   Less than 40%
      2   40 - 49%
      3   50 - 60%
      4   61 - 70%
      5   71% +

(C)(2) Size is a more difficult variable to deal with further analysis is required at the pilot study stage.

(D) Technology Diffusion
The rate at which diffusion takes place is indicative of development or otherwise of the purchasing function. How this variable can be effectively measured will be resolved later, after some preliminary fieldwork.

(E) Advanced Systems and Computer Technology
The operation within an organisation of advanced computer controlled systems, again is indicative of purchasing development, or the need for it. Thus such concepts as JIT, Logistics, CADCAM, BS5750, are heavily reliant on developments at the input end.

(E)(1) Advanced Systems/New Philosophies
One would expect such concepts as JIT, Logistical Management, CADCAM, FMS, to be associated with higher levels of purchasing evolution. Thus in terms of five stages of purchasing development we may have,

STAGE 1 Simple systems, manual in operation
        2 Simple computer purchasing systems
        3 MRP and more advanced systems developing
        4 Introduction of Logistical Management, JIT
        5 4 + Computer links with suppliers - EDI

It is difficult to be too precise with this variable, further fieldwork should enable greater clarity of definitions.

(E)(2) General Computer Developments

Whilst the existence of advanced computer systems and linkages within the organisation and with outside suppliers does not always mean an advanced purchasing function, one would expect to find the two associated. Using refinements of the model developed by Bernard, Londe and Emmelhinz(1985) we have:

<u>Stage of Computer Activity</u>

STAGE 1   No action on any function
STAGE 2   In planning or implementation stage
STAGE 3   On line with at least one, but not more than four functions
STAGE 4   On fine with 5 or more functions
STAGE 5   On line with one or more suppliers

(F)   Purchasing Procedures

As the function evolves and grows, so the need arises to ensure all those involved with the activity follow laid down procedures and policy and follow agreed methodologies in such areas as cost reduction, completion of documents in the purchasing cycle, negotiations, and policy.

With increasing specialism within an organisation, and increasing size, systems become increasingly advanced with the trend towards standard operating procedures. Organisations will, during their development go through stages of centralisation/ decentralisation. Almost certainly one will find controls over functional activities in the form of standard operating procedure contained in various functional manuals.

Such purchasing operating procedures are likely to cover:

- general systems documentation
- policy statements - ETHICS
- methods of measuring purchasing performance
- methods of assessing supplier efficiency

Aijian (1989), Dobler Lee and Burt (1990) give various examples. The existence scope, and the depth of such standard operating procedures is in itself indicative of purchasing evolution.

Thus, interms of this variable we could have:

STAGE 1   No laid down procedure

STAGE 2   Verbal procedures not necessarily followed

STAGE 3   Verbal procedures, but also the existence of written procedures that must be followed.

STAGE 4   Written procedures that must be followed. Existence of Purchasing Manual in early stages of development.

STAGE 5   Comprehensive Purchasing Manual covering all current standard operating procedures and systems.

(G)   Corporate Culture

This variable was identified in the literature, but requires more development after the proposed pilot study.

The OBB literature survey suggested a number of interesting variables likely to be associated with varying levels of purchasing development.

(H)   Buying Centre Concepts

From the research it would appear that purchasing involvement in the buying centre is likely to increase with purchasing development. Interface development with other functional areas and outside suppliers is also likely to be higher with more developed purchasing functions.

One could use the buying centre concept and purchasing's involvement to indicate evolution of the function, thus we could have:

(H)(1) Buying Centre and purchasing Involvement

STAGE 1 No real involvement

STAGE 2   Little involvement other than ordering the goods

STAGE 3   More positive involvement, but only in terms of price

STAGE 4   Involvement to a degree in most aspects of the product, but a major say only in terms of price

STAGE 5   Involvement and consultation in all aspects of the purchasing of goods and services, and all elements of the "deal". Ability to veto others involved in the buying centre.

(H)(2) Involvement in the Buying Process

The literature suggests far greater involvement from the purchasing function in various stages of the buying process, the more developed it becomes. In Fig 3.2 Wind's (1978) classification of the buying process, 12 stages are suggested. These stages can be usefully employed to indicate how involved purchasing, at different stages of development, is likely to become in stages of the buying process. Thus one might expect organisations at stage 5 of development may be involved in all the stages other than (1), on major items of expenditure, whilst at stage 1, the purchasing function merely keeps records of the transactions. Again, further development of this variable is required.

Thus, if we take Winds (1978) model Fig. 3.2, we might find less developed purchasing functions spending most of their time from stages (3) - (10). As purchasing evolves, it becomes more involved at the design stage of specification and use, and post purchase evaluation as well. This would be indicative of such organisations like Ford, Marks and Spencer, who, to effectively obtain lowest cost of supply, must be able to challenge specifications and evaluate supplier's performance as it happens.

Wind's (1978) model could be used in a purchasing development model. The more advanced purchasing tends to be, the more likely it is to get involved in all the stages of the buying process on significant items of expenditure. One might not find this occuring on items of expenditure involving small amounts of money, Pareto analysis might dictate effort is concentrated on those high value items that account for most of the expenditure, i.e. 20% of items account for 80% of the value. This again may be a characteristic of purchasing evolution, thus purchasing effort is

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concentrated on those items of expenditure where "real savings potential" is the greatest.

In those organisations where the function is not so well developed, buyers may treat all items of expenditure as the same in terms of effort. This is often one of the reasons they cannot get involved in other often important stages in the buying process. They thus tend to react to specifications rather than discuss them in a more orderly way with designers and end users.

More advanced purchasing functions would not want to get too involved in all the stages of the buying process particularly with items of low levels of expenditure.

Fig. 3.2   WIND (1978) CLASSIFICATION OF OBB BUYING PROCESS

(1)   Identification of needs
(2)   Establish Specifications
(3)   Search for alternatives
(4)   Establish contact
(5)   Set purchaselusage criteria
(6)   Evaluate alternative

Stage 5 | Stage 4 | 3 | 2 | 1

(7)   Budget availability   5
(8)   Evaluate specific alternatives
(9)   Negotiate
(10)   Buy
(11)   Use
(12)   Post purchase evaluation
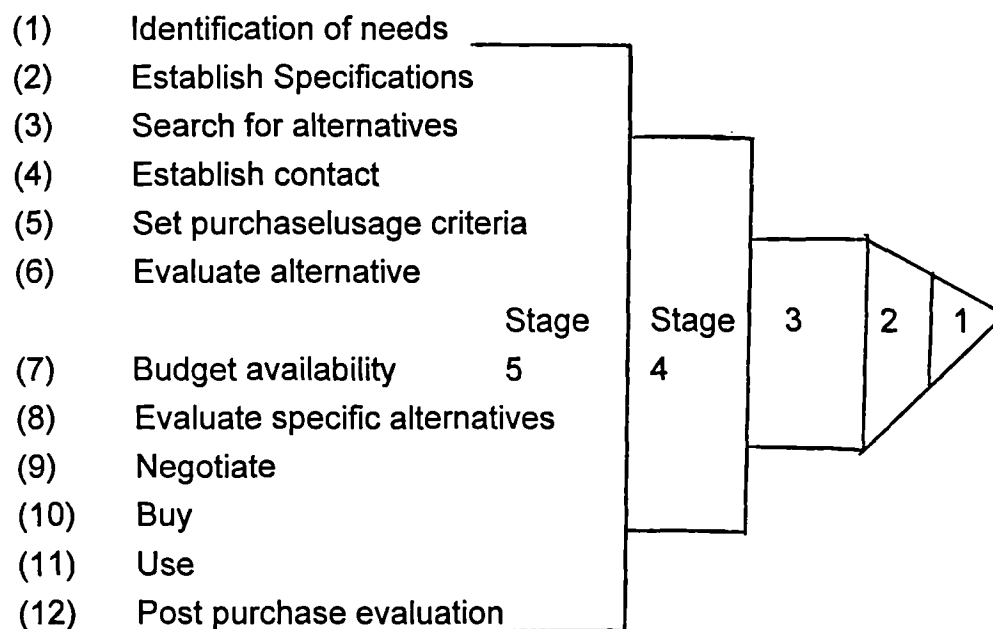
(I)   Buyer Characteristics and Development

As the purchasing function develops, so the characteristics sought in buyers is likely to change. The literature would indicate calls for more professional career buyers. Those developed purchasing organisations in many of the "blue chip" organisations, spend considerable time and effort carefully selecting staff with potential and developing them. This variable could be developed in the following way:

(I)(1) Buyer Characteristics and Development

STAGE 1   No special requirements

STAGE 2   Experience useful but not essential - no training

STAGE 3   Experience essential and training given

STAGE 4   Experience essential, but training given to develop right people. Probably 25% of staff have qualifications above A level. Professional IPS Qualifications being encouraged.

STAGE 5   As (4) but newcomers tend to be at graduate or equivalent level. All encouraged to be professionally Qualified with IPS. Corporate Membership. Regular in company and outside courses arranged. Regular staff appraisal and reviews.

(I)(2) Specialisms within Purchasing

As the purchasing function develops, so the specialists within purchasing are likely to increase, the following is suggested:

STAGE 1   Buyer responsible for all aspects of buying and supplies

STAGE 2   Buyer responsible for all aspects of buying

STAGE 3   Specialisms begin, buying expediting, invoice clearing separate functions performed by individuals within purchasing.

STAGE 4   Stage (3) + specialist buyers, ie buyers specialise in a product range

STAGE 5   As (4) + growth of such functions:
                Value Analysis
                Product Cost Analysts
                Purchasing Research
                Planners
                Specialist Quality Control Teams

(J)   Buyer-Seller Relationships

One of the hallmarks of a developed purchasing function is the closeness and maturity of its relationships with key suppliers. A number of the aspects to this relationship are:-

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(J)(1) Buyer-Supplier Bonding

This variable is relatively complicated, and can be developed after suitable fieldwork has been completed in the pilot study. The literature review reveals strong bondings between buyer and supplier organisations to be indicative of purchasing development. This will be developed further.

(J)(2) Buyer-Supplier Ethics

Ethics

STAGE 1   None mentioned

STAGE 2   General common sense

STAGE 3   Understanding - Gifts

             of key areas - Lunches

                                  - Information

STAGE 4   Written and enforced set of rules and guidance

STAGE 5   As (4) + covers wider range

(J)(3) Hospitality to Seller

STAGE 1   None

STAGE 2   Seller Provides

STAGE 3   Buyer occasionally invites seller to dine in work's dining room

STAGE 4   Recognised as important part of relationship. Reciprocity encouraged.

STAGE 5   As (4) + wider range of hospitality issues.

(J)(4) Visits and Meetings Between Two Sides

STAGE 1   None

STAGE 2   Occasional visits from supplier

STAGE 3   Regular visits from supplier

STAGE 4   Regular visits from supplier, + visits from buyer

STAGE 5   Regular reciprocal visits regarded as essential

3.3 Purchasing Development Matrix

If we now bring all the development criteria together in a matrix, we have the following Fig. 3.3. The pilot study may reduce or increase these measurement criteria. These further refinements of the D.M.Jones (1983) model, together with additions from other research areas, enables the production of a more sophisticated operational model. After the pilot study, the matrix framework can be further refined and any difficulties with operationality of the variables addressed.

Fig. 3.3   STAGES OF PURCHASING DEVELOPMENT FRAMEWORK

CRITERIA/STAGE	1	2	3	4	5
A. SCOPE					
A.1					
A.2					
A.3					
B.STATUS					
B.1					
B.2					
B.3					
B.4					
B.5					
C. ORGANISATIONAL AGGS.					
C.1					
C.2					
D. TECHNOLOGY DIFFUSION					
D.1					
E. SYSTEMS/TECHNOLOGY					
E. 1					
E.2					
F. PURCHASING PROCEDURES					
F. 1					
G. CORPORATE CULTURE					
G.1					
H. BUYING CENTRE					
H.1					
H.2					
I. BUYER CHARACTERISTICS					
I.1					
I.2					
J. BUYER/SUPPLIER DYAD					
J.1					
J.2					
J.3					
J.4					

The unrefined or basic framework suggest "five stages of development", it might be necessary to add or reduce such stages. In order to avoid any confusion as to whether Stage 1 is the highest or lowest stage of development, it might be necessary to name each stage of development:

Stage 1   Infant stage
Stage 2   Awakening stage
Stage 3   Developing stage
Stage 4   Mature stage
Stage 5   Advanced stage

Such "named" stages of evolution may well be easier for executives to understand, or for subsequent researchers to expand.

3.4   Stages of Purchasing Development, Independent Variables

From the literature survey, it would appear that a number of variables are likely to be crucial in purchasing evolution.

The following variables are of particular interest here:

(i)   Technology changes

(ii)   Extent of competition in buyer's market

(iii)   Inflation - Cost increases

(iv)   General and specific shortages or surpluses in markets in which the organisation is involved

(v)   Type of production techniques and products which are associated with the buying organisation.

(vi)   New management developments and concepts:
- MRP 11
- JIT
- Logistical Development

(vii)   Supplier Market Variables
Competition
Sophistication of supplier
Propose buyer seller relationships

(viii)   Government intervention in the markets.

The affect these independent variables have on purchasing development has already been examined in the literature survey. The impact of these independent variables is likely to vary from organisation to organisation. Further analysis from the pilot study and main survey should further clarify their likely effects on purchasing development and indeed others may be added after the Main Research Survey.

3.5   Conclusion

The literature survey in Chapter 2 has identified major dependent and independent variables likely to affect purchasing development. Various purchasing development frameworks or models have been identified and evaluated. A proposed purchasing development operational framework Fig. 3.3 has been suggested with appropriate modifications. The proposed framework and purchasing development criteria will form the basis of the pilot study and main survey sample described in more detail in the next two Chapters. Empirical research will be used to test and further refine the development framework, and conclusions drawn.

CHAPTER 4 RESEARCH METHODOLOGY

4.1 Introduction

The literature review in the proceeding chapter reveals a lack of literature in the area of operationalised purchasing development. Relatively few references are found in the area [Barnes and McTavish (1983), Reck and Long (1988), Sysons (1989)], whilst Jones (1983) suggested a more detailed, although limited set of variables to measure different stages of purchasing development. It is the aim of this thesis to provide operational measurement criteria for measuring purchasing development. From the literature review however, a number of well researched areas are cited as indicators of purchasing development. These indicators or criteria have been identified and will be used in subsequent chapters to measure purchasing development.

This chapter is divided into three main sections. The first section describes the alternative research methodologies. The second section explains why a qualitative approach was taken, identifying potential problem areas and how they might be overcome. The final section briefly summarises the chapter.

4.2 Research Philosophies - Overview

Traditionally, research has favoured the idea of a paradigm based on objectivity, replicability requiring large sample sizes, and pre-determined hypotheses - positivism based on the premise that no real knowledge exists but that based on factual information. The implications of this philosophical approach are clearly summarised by Easterby Smith, Thorpe and Lowe (1991) and follow:

- Independence: the observer is independent of what is being observed.
- value-freedom: the choice of what to study, and how to study it can be determined by objective criteria rather than by human beliefs and interests.
- causality: the aim of social sciences should be to identify causal explanations and fundamental laws that explain regularities in human social behaviour.

- hypothetico-deductive: science proceeds through a process of hypothesising fundamental laws and then deducing what kinds of observations will demonstrate the truth or falsity of these hypotheses,

- operationalisation: concepts need to be operationalised in a way which enables facts to be measured quantitatively.

- reductionalism: problems as a whole are better understood if they are reduced into the simplest possible elements.

- generalisation: in order to be able to generalise about regularities in human and social behaviour, it is necessary to select samples of sufficient size.

- cross-sectional analysis: such regularities can most easily be identified by making comparisons of variations across samples.

These implications are not from any single philosopher, but are rather seen as a collection of points associated with the positivist viewpoint. This traditional research methodology has been challenged over the last twenty or so years, as being too rigid and restrictive in the areas of social science, where it is often difficult to obtain large sample sizes of the population concerned. Also the difficulty arises, when dealing with people, as to whether they have understood questions put to them and are answering the questions correctly. In the case of the physical sciences, where one may simply be observing objects and recording actual data, these problems of interpretation do not occur.

Even with traditional research, major scientific break throughs have not necessarily been the result of logical and rational application of scientific methods, for example, the discovery of penicillin by Fleming. Kuhn (1962) makes the point that scientific discoveries are often reported in different ways as to how the actual discovery occurred. Easterby-Smith, Thorpe and Lowe (1991) believe that new theories and questions have lead to a new paradigm in terms of research methodology. They observe:

"The new paradigm that has arisen during the last half century, largely in reaction to the application of positivism to the social sciences, stems from the view that the world and 'reality' are not objective and exterior, but that they are socially constructed and given meaning by people", Husserl (1946).

As one might expect, this phenomenology is not logically derived from positivism in any way.

A summary of the two types of research design is given by Easterby - Smith, Thorpe and Lowe (1991) in Fig, 4.1, they indicate the differences in approach to research in three major areas.

Fig 4.1   Alternative Research Paradigms

	Positivist Paradigm	Phenomenological Paradigm
Basic Beliefs:	The world is external and objective. Observer is independent	The world is socially constructed and subjective. Observer is part of what observed.
	Science is value-free.	Science is driven by human interests.
Researcher should:	Focus on facts. look for causality and fundamental laws. Formulate hypotheses and then test them.	Focus on meanings Try to understand what is happening. Develop ideas through induction from data.
Preferred methods include:	Operationalising concepts so that they can be measured. Taking large samples.	Using multiple methods to establish different views of phenomena Small samples investigated in depth or over time.

Source: Easterby-Smith M, Thorpe R, and Lowe A (1991)Management Research.

In the Social Management Sciences, the "people interaction element" is crucial in explaining processes and may be difficult to measure using a positivist approach. Views that the only data that should be used should be directly measurable is now under attack. Habermas (1970) states "human interests not only guide the way we think, but also affect how we construct our knowledge of the world". The claim that positivist methods are

independent of values and interests is also strongly challenged by Habermas. The positivist view of the world is seen as being external and objective. Knowledge derived is based on facts from "independent observers". From the facts, causality can be determined, and by reductionalism laws can be derived. Hypotheses can be formulated, and tested. Such an approach requires operationalised concepts and large samples.

Both reductionism and generalisation techniques used in the positivism approach lead to problems in themselves. They often simplify situations to such an extent that important issues are either ignored or treated as being of little importance. In the case of exploratory research into new areas, this can lead to superficiality in terms of data collected. Habermas (1970) observes:

"The positivist tradition in scientific methodology has been based upon the principles that the only reliable knowledge of any field, area reduces to particular knowledge of particular instances or patterns of sensations. Laws are treated as probabilistic generalisations of descriptions of such patterns. The sole role of laws is to facilitate the prediction of future sensory experience. Theories are logically ordered sets of laws".

The problem with this approach is that correlations between variables does not necessarily provide an understanding of the underlying process behind the observed facts, Milton Freedman (1969), writing about economic theories observed: "As long as economic models predict correctly they do not have to mirror reality or explain the process of what is actually going on". Other economists believe without an understanding of the process and connections, development of the subject would become a nonsense.

Using the traditional quantitative approach of data collection leads to other problems in terms of sampling and questionnaire design. Large scale sampling is seen as being inappropriate in terms of the validity of data collected and the amount of time that would be required to collect such information to make the sample representative.

4.3 Qualitative or Phenomenological Approach

Whilst the literature survey contained a considerable amount of information on factors likely to affect purchasing development and various ways of measuring it, the information available tended to deal with separate aspects of development. In certain areas it was fragmented and generalised. The objective behind this research thesis was to produce an operationalised framework or model that could clearly identify, using a number of measurement criteria, what stage of development had been reached by the purchasing activity in an organisation. It was also necessary to be able to identify those factors likely to affect purchasing development. In order that such research objectives could be realised, a different methodology was required. The qualitative approach encourages the researcher to understand processes and interactions far more than the traditional research approach. Whilst major measurement criteria were identified in the literature survey, there could be others not yet identified. Using in depth interviews and semi structured questionnaires, respondents could identify further development criteria or issues, again traditional research methods would not be suitable for this type of investigation.

In order to avoid misunderstanding and authenticate findings, it was felt the researcher should be actively involved with the organisations being sampled. If there is any confusion over meanings or interpretations of questions, this can then be dealt with immediately. It is also possible to ask additional questions if it is required. Often body language may convey useful information about issues that can be followed up in the interview at a later stage. The requirements of the above meant that an alternative research paradigm had to be found to deal with this type of research design.

This lead to a research design based on the phenomenological paradigm. Rather than formulating hypotheses one is attempting to develop ideas through data induction. This involves detailed evaluation of the information derived from interviews and organisations, and formulating concepts that can be further refined to produce an explanation of the process being investigated. It should not however, be believed that only one type of research can be undertaken, this research project relies on a major literature review in order to provide the generally accepted measurement criteria of

purchasing development. Additionally, a pilot study was used as part of the fieldwork or primary data collection, in order to identify problems that could occur later in the main survey. Thus one is not relying totally on an inductive approach in order to obtain information.

Sample sizes in the traditional research approach are large, with carefully constructed questionnaires. Such an approach taken in the area of purchasing development would have lead to a number of problems:

- as this work was essentially breaking new ground, supplementary questions and discussions are necessary, this could not be achieved adequately using a large scale postal sample.
- areas of interest in the questionnaire may require additional explanation in order to increase accuracy and avoid any misunderstandings.
- in order to establish the validity of information obtained, the researcher needed to have access to both respondents' staff and records.

A variety of methods were used to obtain information and establish views in the process of purchasing development.

4.4   Qualitative Methods

The phenomenological approach suggests a number of qualitative methods open to the researcher, as Van Maanen (1987) observes:

"The label qualitative methods has no precise meaning in any of the social sciences. It is at best an umbrella term covering an array of interpretative techniques which seek to describe, decode, translate and otherwise come to terms with the meaning, not the frequency, of certain more or less naturally occurring phenomena in the social world".

Van Maanen (1987) lays great stress on the meaning rather than the frequency of observations made. In the qualitative approach, meaning is particularly important, not frequency. Thus one could have a high frequency of a particular correlation that could be incorrect due to misunderstanding mistakes or incorrect recording. This is considerably reduced with a qualitative approach.

4.5   Interviewing

A semi structured interview was used to examine areas of interest and possible measurement criteria derived from a literature survey.   The literature survey contained a wealth of possible factors that could affect purchasing development and identified measurement criteria.   Questions asked therefore were semi structured, but allowed for flexibility when required.   Supplementary questions could be asked and clarification sought from either side.

Many of the areas of interest had been developed from the literature review, there was however, concern here that the interviewee might not be allowed to express his or her true opinions.   Jones (1985) observes:

"There is no such thing as presuppositionless research.   In preparing for interviews, researchers will have, and should have, some broad questions in mind, and the more interviews they do, the more patterns they see in the data, the more likely they are to use this grounded understanding to want to explore in certain directions, rather than others".

How this was achieved is described in detail in the next chapter - Fieldwork and Pilot Study.

4.5.1 Interview Bias

One of the problems associated with this type of research over the traditional quantitative methods, is bias.   No easy way around this problem can be seen and it is more difficult to handle using qualitative techniques.   However, from what has already been discussed, problems of bias, if handled correctly, are more than compensated for by a more holistic view of purchasing development than taking a quantitative approach.   The handling of bias is dealt with throughout this chapter in various sections.

4.6   Analysis of Case Study Approach and Data Collection Models

Two basic methods are available to analyse the information in the research. The first is Content Analysis, essentially concerned with numbers and frequency.   The second method, Grounded Theory is more concerned with feel for the data and intuition.   With this method, one is attempting to

produce common or contradictory themes, patterns from data and effective interpretation. The major method used to analyse data in this research was grounded theory with the researcher close to the data being analysed.

Grounded theory provides a far more open approach to analysis of data collected. In handling qualitative data, structuring is more difficult. In the case of quantitative data, there is likely to be an external structure imposed on the data. Often with qualitative data the structure may have to be developed from the data. In the case of this research, more structure in terms of the data is used as the majority of the measurement criteria have been identified from the literature survey. With new exploratory research however, one has to be careful to avoid missing any areas of interest. The grounded theory approach helps to avoid this. Jones (1987) comments:

"Grounded theory works because rather than forcing data within logically deducted derived assumptions and categories, research should be used to generate grounded theory which 'fits and works' because it is derived from the concepts and categories used by social actors themselves to interpret, and organise their worlds". The approach developed by such researchers as Glazer and Strauss (1967), Turner (1983) and Jones (1987) is particularly useful in processing and sifting through volumes of non-standard data. The difference between Content Analysis and Grounded Theory is given below in Fig 4.2.

Fig. 4.2   DIFFERENCES BETWEEN CONTENT ANALYSIS AND GROUNDED THEORY

CONTENT ANALYSIS	GROUNDED THEORY
Bitty	Holistic
Objectivity	Closer to data, open much longer.
Deductive	
Testing hypotheses.	Testing out themes, developing patterns.

Source: Management Research, Easterby-Smith, Thorpe & Lowe (1991)

According to Easterby-Smith, Thorpe and Lowe (1991) grounded theory assumes that one is working with transcripts of in-depth interviews. They identify seven stages to such analysis:

(1)   Familiarisation - this involves re reading and understanding the data transcripts, any file notes can be added here, together with attitudes of respondents.

(2)   Reflection - here, one attempts to examine meaning in the rich data derived. Questions such as:

- does it support existing knowledge?
- challenge it?
- where is it different?

Knowledge of previous research models is important here. Ideas began to be formulated and reformulated. It is held at this stage, explanations or solutions are still very much at the 'gut feeling' stage and need further thinking about.

(3)   Conceptualisation - concepts or variables are now more clearly identified and how they relate. It is at this stage the researcher may come across other concepts previously missed.

(4)   Cataloguing Concepts - Here other concepts that have been identified, require a labelling system for cross referencing in order to handle the data in a comfortable way. Of concern at this stage, is the problem of mechanising what ought to be an intuitive process, and damaging the power of explanation.

(5)   Re-coding - It is likely that not all references to concepts are known, confusion may have occured over certain questions, there could be too many concepts to be manageable, or the framework might be too refined or crude. There is therefore likely to be a need for re- coding and further new interpretation and analysis at this stage.

(6)   Linking - from work already conducted an analytical framework and explanations become clearer, patterns emerge and concepts begin to fit together. The variables are more clearly identified into a more holistic view. Easterby-Smith et al comment that this means tracking backwards and forwards between the literature and the evidence collected in practice.

(7)   Re-evaluating - at the final stage and after comments from others the work can be further refined. This stage can be time consuming.

4.7 Case Study Approach

Earlier in this chapter some of the problems were discusssed concerning large scale samples in terms of handling the data but more particularly the quality of information obtainable. In line with the qualitative research methodology a small research sample will be used based on the Case Study Approach to the research question.

New conceptual developments of service management, industrial marketing and service marketing have been grounded in qualitative data gathered in case studies. The adoption of a different approach to the collection and assembly of data has yielded new insights into marketing. The case study approach used in this research can, according to Glazer and Strauss (1967), have general applicability, based on a limited number of cases. They comment "since accurate evidence is not so crucial for generating theory, the kind of evidence as well as the number of cases is also not so crucial".

A number of criticisms of the case study approach as a scientific method can be used which are; they lack statistical validity, they can be used to generate hypotheses but not to test them, and can not be used to generalise. In terms of generalisations from case studies, ideas have changed considerably over the years. Gummerson believes that generalisation from the case studies have to be approached differently, and is influenced by the views of Norman (1970) who contends:

"If you have a good descriptive or analytical language by means of which you can really grasp the interaction between various parts of the system and the important characteristics of the systems, the possibilities to generalise also from very few cases, or even one single case, may be reasonably good. Such a generalisation may be of a particular character; it might be possible to generalise a statement of the type "a system of type A and a system of type B together comprise a mechanism which tends to function in a particular way". On the other hand, one cannot make any generalisations about how common these types of systems and interaction patterns are related. But the possibilities to generalise from one single case are founded in the comprehensiveness of the measurements which make it possible to reach a fundamental understanding of the structure, process and driving forces

rather than a superficial establishment of correlation or cause and effect relationships".

Yin (1984), distinguised three types of case study; exploratory, descriptive and supplementary. Whilst this research project uses them for exploratory use, the other two reasons for their use are also present. Kjellen and Soderman (1980) indicate the case study approach is also useful to generate theory and initiate change. Gummesson (1991) however, is not happy with such distinctions of case studies as explanation and theory generation, he argues that: "exploratory studies as well as descriptions can be theory generated, descriptions may be explanatory and so forth". He continues: "an important advantage with case study research is the opportunity for holistic views of a process. The detailed observations entailed in the case study method enable us to study many different aspects and examine them in relation to each other."

Validity of the case study approach has also been criticised however. Work by Gustavssen and Sorenson(1982), Hunt (1983) and others, would indicate that as long as you keep searching for new knowledge and do not believe you have found the ultimate truth, rather than the best available for the moment, the traditional demand for generalisation becomes less urgent. This is particularly true in the case of exploratory research, which is one of the objectives of this research thesis.

4.8   Summary
In this chapter research methodology has been evaluated. In terms of this research a qualitative approach has been identified as being most appropriate for the work involved.

4.9   Conclusion
Having identified the methodology in this chapter and measurement variables in Chapter 3 developed from the literature survey, it is now possible to undertake preliminary fieldwork prior to the main research sample.

CHAPTER 5 FIELDWORK METHODOLOGY AND RESEARCH SURVEYS

5.1   Introduction

Purchasing measurement criteria have been suggested and developed, and research methodology evaluated in previous chapters. However, before a major survey is conducted both measurement criteria and methodology need to be developed and "honed" further. In order to identify problems arising out of the methodology or measurement criteria two small pilot studies were undertaken. Information derived from the two pilot studies was then used to improve the more practical implications of the methodology and measurement criteria.

5.2   Fieldwork Methodology and Pilot Studies

Having justified the basis for the methodology chosen in the proceeding chapter, the fieldwork was then conducted. This consisted of two pilot studies and the main survey. The pilot studies were undertaken in order to more clearly define problems that could occur in the main Case Study Surveys. Pilot study 1 looked at the possibility of obtaining the information that would be required in the main survey, and attempted to identify any problems. The two organisations chosen for pilot study 1 were: Leyland Daf, with a turnover of £450 - £500 Million; and TML Plastics, Sales turnover £5-6 Million. Full details on the two organisations is given in Chapter 6. The more specific objectives behind this study were to:

- test the research design;
- identify problems involved in obtaining information and measuring variables identified in the literature;
- establish the extent of records and data to authenticate information required;
- identify the ease of access to organisational records;
- test questionnaire andother methods of collecting information;
- identify more clearly dependent orindependent measurement criteria;
- develop a suitable framework or structure for measuring purchasing development.

Both Leyland Daf and TML Plastics were able to provide information in the areas identified, although the quality of information varied. In general terms,

Leyland Daf provided a wealth of information of a high quality. TML Plastics had more difficulty in providing the depth and breadth required. On balance however, the information was available. Certain of the questions posed difficulties to both organisations.

5.2.1 Main Survey Semi Structured Survey Questions

From the literature survey in Chapter 3, a number of development criteria have been identified and developed into measurement criteria. All the measurement criteria chosen from the literature survey are believed to be indicative of purchasing development. For each of the criteria chosen, measurement is rated on a scale of 1 - 5, stage one being the least developed, stage five the most developed. This measurement is in line with existing purchasing development frameworks of Jones (1983), Barnes and McTavish (1983) and Reck and Long (1988).

5.2.2 Responses to Main Survey Questions

The literature survey had revealed eighteen major development criteria. The two organisations in the Pilot Study 1 were asked questions concerning these criteria and any difficulties noted. Each of the Questions and topics of interest are given below, and any problems or difficulties in these measurements is discussed under each of their headings. Full details of the measurement criteria derived from the literature review were given Chapter 3. The subsequent operationalisation of these criteria for the main survey, after two Pilot studies, is given in Appendix 4.

Question A1 - Clerical/Managerial & Strategic Elements of the Job

This concerned the degree of purchasing involvement in strategic or managerial aspects of purchasing, compared with clerical activities. Respondents were shown a listing of purchasing activities taken from the Purchasing Handbook, Aljian (1985), and asked to indicate in rough percentage terms, how much of their time was spent in various activities. A full listing of the activities is given in Appendix 1. From their results it was possible to identify the proportion of the buyer's time spent on clerical and strategic or managerial activities.

Several problems occurred at this stage, that needed to be addressed:
- Who were we asking the question of - Purchasing Manager, Senior

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Buyer or Buyer?
- What about other activities not mentioned on the list?
- How could we check the information?
- General problems of interpretation.

In all cases we were concerned with the Buyer's involvement, or equivalent function in managerial and strategic or operational and clerical activities. This helped, when making comparisons at a later date and comparing like with like as far as possible. One would expect to find, as the purchasing activity develops, a far greater part of the 'buyer's' time is spent on strategic and managerial activities, as opposed to clerically orientated operational activities.

Additionally, it was becoming clear that the interviewer would need to have greater involvement than initially envisaged, in terms of the questions, to avoid problems of misinterpretation. Activities not included on the list could be noted and analysed in greater detail later. Measurement of the strategic or operational criteria were originally used in a purchasing development model, Jones (1983).

Thus in terms of purchasing development, those buyers who spent more of their time on managerial or strategic activities were seen as being more developed than those who spent less. Purchasing development was graded using this measurement criteria, as follows:

STAGE	1	2	3	4	5
% Clerical Time	80 - 100	79-60	59-40	39-20	20 or less
% Management or Strategic	0 -19	20-39	40-59	60-79	80 or more

Question A2 - Purchasing Structure
The purchasing structure was of interest in terms of where it was, what it is now, and how it is likely to change in the future. Both organisations were able to produce current organisation charts for purchasing. Leyland Daf was far more comprehensive and complex as might be expected from an organisation that has had a purchasing function for some 50 years.

The literature had identified a number of purchasing structures that in themselves were indicative of development, these had been categorised from relatively simple undeveloped structures to be more highly developed structures, on a scale of 1 to 5. It was shown in the literature that for the most part, developed purchasing functions tended to adopt more streamlined integrative structures, with managers reporting directly to the Managing Director. They were also more logistically conscious.

Question A3 - Extent of Back-Up Services

It is believed that the extent and depth of back-up services are themselves an important indicator of development. The existence of such back-up services, according to the literature, is likely to allow the buyer to spend more time on main stream purchasing and supply activities.

Question B1 - Status of Function

This proved an interesting criteria to measure in terms of salary, and general ethos of the function within the rest of the organisation. Some respondents were expected to over inflate their importance, others the opposite. It was therefore considered necessary to avoid opinions and measure variables that were available as indicators of status, for example, who the Head of Purchasing reports to. It is likely that this would reflect its perceived importance and stage of development within the organisation. In the Pilot Study, Leyland Daf Senior Purchasing staff reported to the Board. There was also more than one Director of Purchasing. In the case of TML, the Purchasing Manager reported to a Commercial Director and was paid a much lower salary.

Question B2 - Title of the Head of Purchasing

One would expect a Purchasing Director title to have a higher status than one with the title of Buyer or Senior Buyer. Problems occur though, the buyer in some organisations is likely to have much greater responsibility and status than a Purchasing manager in another. It became noticeable that the Purchasing Manager at the smaller TML Plastics organisation was equivalent to a buyer at Leyland. Both had similar salaries and responsibilities.

Question B3 - Training of Purchasing Staff

The research indicates that training and development of staff is an important prerequisite for existing and future functional development. The stages suggested would appear to be satisfactory. At Leyland Daf, training and development was a regular part of a buyer's job, at TML Plastics it was severely limited and ad-hoc.

Question B4 - Salary of Purchasing Staff

Both this initial Pilot Study and the limited questionnaire identified problems in this area. Higher salaries tend to be associated with "functional importance". The salary of the Buyer with three years experience at TML was £9,000, whilst at Leyland Daf it was £11,000. Respondents can often be concerned about giving such information. The variable can be expressed in such instances as percentage variations above or below an accepted average, for example, salaries quoted in various Industrial Surveys, eg Fortune.

Question B5 - Measurement of Purchasing Performance

The research suggested that as purchasing evolves, so the variables to measure it's "true" performance must deepen and expand. The more advanced the function, the more concerned it becomes in measuring "true cost of supply", that is, real acquisition cost, rather than price reductions. Performance measurement at Leyland Daf was concerned with measuring purchasing performance in a number of areas; prices paid, cost reduction, vendor rating and moves towards strategic objectives, TML Plastics was only concerned with stock reduction and clerical efficiency.

Question C - Organisational Aggregate Variables

Question C1 - Purchasing Sales Ratio

This variable attempted to identify purchasing to sales expenditure and required actual figures from audited accounts. Collecting the requisite information was not a problem.

Question C2 - Actual Size of Organisation (Sales Turnover), there were no difficulties in obtaining information.

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Question D - Technology Diffusion

Whilst this is an interesting criteria developed from the literature, it proved a difficult concept to both explain and develop. Confusion occurred in both Organisations. It was therefore felt that general questions should be asked concerning changing technology within the organisation concerned. No attempt is made to measure it on a 1-5 scale.

Question E - Advanced Systems Technology and Computer Technology

As "World Class" concepts develop within an organisation, it is likely that the organisation's systems and computer technology would develop in a similar direction. Such developments, to be successful, are heavily reliant on the "input management" within an organisation, i.e. Purchasing and Supply. The 5 stage model appeared to give the classifications required, although Leyland Daf were not as developed as would have been expected and had only reached stage three in the proposed development model, TML Plastics were at very early stages of development in terms of this criteria, that is stage one.

Question E1 - The general computer model developed by Bernard Londe and Emmelhinz (1985) was useful here. Observations and questions indicated the degree of development in this area, and the information was freely available.

Question F - Purchasing Procedures

This required further clarification. TML believed their procedures to be more limited than they were. The stages however, gave a reasonably accurate account of developments in this area.

Question G - Corporate Culture

This proved difficult to explain and discuss. It was better to ask general questions on how they thought their organisation was different to others and in what ways. It was easier for the researcher to get an understanding of this variable after the research had been completed. A 'feeling' for the culture was all that could be satisfactorily achieved,

Question H - Buying Centre Concept

The buying centre was developed from the literature and was used to give general indications of purchasing's involvement in the buying process of major items of expenditure. Whilst it is accepted that the type of buy will affect involvement from purchasing, i.e. Wind's "Buy Phases", one would expect a more developed purchasing activity to be more involved in the buying process generally, particularly for the new buy and the modified re-buy.

Buying Centre criteria measured general involvement and specific involvement in the buying process. There were however, problems here of purchasing respondents understanding the question and not overstating their importance. Samples were selected at random and purchasing's contribution examined accordingly.

Whilst Wind's classification was useful, not all the stages could be identified by TML. Explanations and assistance were required to increase response in this area.

Question I1 - Buyer Characteristics and Development

The literature suggested that as the purchasing function develops, so the characteristics sought in Buyers is likely to change. Many of the "blue chip" organisations do appear to spend time and effort in selecting suitable staff and developing them. This was certainly true at Leyland Daf, and was beginning to occur at TML. Measuring this criteria was not a problem at the extremes, for example, stage 1 or 5, however it required more skill in identifying stages 2 - 4.

Question I2 - Specialisms Within Purchasing

As the purchasing function grows and develops, many large organisations, for example, IBM and Ford, have tended to encourage specialists within the function. Specialisms were divided into five categories and rated accordingly. Leyland Daf had far greater specialisation than TML, where the buyer was expected to perform an extremely wide range of purchasing activities.

Question J - Buyer-Supplier Relationships

Perhaps one of the most interesting features in the development of the purchasing activity, is how both the internal and external nature of relationships are likely to change. Considerable research has been undertaken in this area, and is recorded in the literature survey. With the development of strategic concepts, JIT, TQM, EDI and other 'World Class concepts' there has been a noticeable increase in the need for purchasing to spend more time improving its relationship with key suppliers, if such World Class concepts are to succeed.

Measurement of the actual bonding relationships is complicated, but the pilot study did suggest possible methods. One idea that seemed to have merit with both Leyland Daf and TML, was to examine such factors as:

- length of contract on key items of expenditure;
- value of contract;
- both the quality and quantity of information exchanged;
- involvement of supplier in developing new products;
- ethical codes.
- evidence of partnerships

Other aspects of the relationship included ethics - J2, hospitality - J3, and visits between the two sides - J4. These variables did not prove difficult to identify and measure.

Additional Variables

It was decided to attempt to measure the nature of the internal relationship between the purchasing function and others within the organisation. One of the hallmarks of a developed purchasing function is its acceptance by the rest of the organisation as a specialist skill. Measuring this variable however, proved more difficult, and was simply recorded.

5.2.3 Conclusion

The measurement criteria described, for the most part, were identifiable by those respondents interviewed in the pilot study, and it would therefore seem feasible to construct a development framework based on these questions.

The development framework or matrix is an extension of the Jones (1983) purchasing development matrix with additional measurement criteria.

5.2.4 Independent Variables Likely to Affect Purchasing Development

The variables described above were used to identify the development of the purchasing activity. Other independent variables likely to impact on the development or otherwise of the purchasing activity exist. These variables are the subject of the second part of the survey, and cover various environmental and general organisational variables.

In attempting to understand other internal and external variables likely to have an impact on purchasing development, it became clear that questions had to be less structured than the first part of the pilot study.

5.2.5 K - General Open Questions

This section was concerned with attempting to identify factors that various respondents felt might have either developed the function or increased its status. The respondents were also asked to explain what they thought development of purchasing constituted. Full details of the questions asked are given in Appendix 4, and are numbered A to 0 in the semi-structured Questionnaire. The more general open questions are found in questions K to Q. K4 asked the question "if purchasing is concerned with obtaining goods and services at the lowest cost of supply, which of the following organisations or sectors is furthest down the road in achieving such an objective?". A number of organisations or sectors were mentioned, ranging from ICI and Ford, to their own organisation. The idea behind this question was to invite comparative analysis, for example, was the organisation doing well or badly compared with the others. The respondent generally had some knowledge of other organisations or sectors. The idea is to find out how they perceive their own purchasing activities' strengths and weaknesses in relation to other purchasing activities.

Other questions refer to problems likely to be faced by purchasing in the future, how their purchasing activity could be restructured to make it more efficient, and how the skills and qualities of the buyer are likely to change. Responses to these questions were largely as expected, and helped in checking for any inadequacies in the main survey.

One of the questions of particular interest, and explored in more depth in the main survey was K8. This asked respondents what they understood by the purchasing function changing as opposed to developing. It also helped the researcher and respondent clarify the issues in greater detail.

Environmental Factor Questions

A number of general questions were asked in an attempt to identify how and in what ways various external factors might affect development. Questions were asked on such external factors as:

- inflation
- technology
- Shortages/Surplusses from which the buyer purchases competition in the markets from which the buyer purchases.

Question M1 attempted to identify how new strategic developments such as JIT, TQM, MRP II, and other "World Class Concepts" have affected the purchasing function within the organisations involved. Both of the organisations had been affected greatly by such strategies. It would appear that such developments highlight any shortcomings within functional specialisms, particularly purchasing. Both of the organisations suggested that moves towards such strategies had helped the purchasing function and increased its profile within the respective organisations.

Question N - Supplier Market Variables

It was believed that competition amongst suppliers in which the buyer purchases was likely to affect development. Responses to this question varied considerably from product to product. When asked about the role major suppliers had on purchasing development, both organisations felt that suppliers on the whole, did have an impact on development of the purchasing function. TML for example, tended to deal with a small number of relatively advanced suppliers, eg Ford, Rover, Nissan. Such organisations demanded their supplier chain was also advanced. They were even prepared to advise suppliers on methods of becoming more efficient and effective. In the case of Leyland Daf, the company tended to be leading the way in terms of efficient and effective supply chains.

Question P1 - Government and EEC Involvement With Purchasing

Various questions were asked concerning the role of Government and the European Community. Interestingly, such questions were often difficult to answer mainly because many types of Government control had not been experienced by respondents. Most, however, were aware of various EEC directives that affected them.

Question Q

Section Q was mainly concerned with "Purchasing Aggregates", i.e. the level of purchasing expenditure to sales revenue, both in percentage and absolute terms. In both cases, bought out material expenditures were reasonably high.

5.2.4 Conclusion

Pilot Study I was extremely useful in highlighting major problem areas and ways of resolving them. Of paramount importance in the main survey, was to establish that respondents clearly understood the questions. It was therefore felt that another pilot study covering a larger sample should be undertaken in order to identify interpretation problems relating to the main survey. This was undertaken in Pilot Study 2.

5.3   PILOT STUDY 2 -   Limited Study of 11 Measurement Criteria to be
                          used in the Main Survey

The process of formulating semi-structured questions of topics for discussion was further assisted by a special pilot study. Questions were asked in eleven of the eighteen major measurement criteria in eighty different organisations from the Public and Private sectors, selected at random from short courses run by the Chartered Institute of Purchasing and Supply on which the researcher taught. These courses were of 2/3 days duration, and the researcher was involved in lecturing for one of the days on purchasing topics. The completed questionnaires are available in Book 2, but the general results analysis is shown in Chapter 7. The questionnaires were completed after careful explanation of each of the measurement criteria. Questions and clarification were taken before and after the questionnaire was completed, and notes kept. Pilot Study 2 covered some 40 different

organisations, and was answered by respondents at Buyer, Senior Buyer and Purchasing Manager levels.

In certain cases there was more than one respondent from the same organisation. In such cases, it was felt important that there should be no collusion between them in presenting their results. A points system was introduced into the questionnaire to indicate how developed their purchasing activity was; 100 points being the maximum. The measurement factor was not of importance at this stage, and it was explained to the groups that such research findings were still in their infancy, and they were not to pay too much attention to the results.

Measurement of these criteria was of importance at this stage, in order to uncover any definitional problems. In the process of completing the questionnaire respondents asked for further clarification or exposed difficulties that were addressed for the most part in the final formulation of questions/topics for discussion in the main survey. The eagerness shown by the respondents completing the questionnaire showed there was considerable interest in knowing their organisation's stages of development and how it compared with others.

5.3.1 Conclusion

Pilot study 2 was useful in helping to identify further problems with questions and interpretation, and lead where necessary, to additional question clarification in the main survey semi structured questionnaire, Appendix 4.

It was felt however, that this information, although not as well researched as pilot study 1, should be presented. Some of the general findings were particularly interesting and are included in the results, Chapter 7.

5.4 General Observations from the Pilot Studies

The Pilot Studies revealed the information was available and could be extracted, provided that appropriate methods were used. The following problems emerged and appropriate solutions were evolved to improve the quality of the research.

- Checking responses

One of the major problems faced in the Pilot Study was that of checking the authenticity of statements made by various respondents. As the research proceeded, it became necessary to check statements. Those of a quantitative kind could be substantiated using files, operating procedure and archival material. A majority of the questions however, were qualitative in nature, and were more difficult to authenticate. It was decided therefore, to ask the same questions at different levels within the organisation, that is, Buyer level, Purchasing Manager level, and MD or Director level. This triangulation of results would reveal inconsistencies that could further investigated.

One typical example of inconsistencies in response was the question concerning time spent on clerical as opposed to managerial/strategic activities. The Buyer tended to overstate clerical activities, whilst the Purchasing Manager or Director tended to do the opposite. One solution to this problem was to observe the Buyer on a number of different days and times, and identify the type of work they were involved in.

More careful subsequent questioning of respondents eventually resolved the discrepancies, in other cases a composite figure was taken. One was not too concerned with discrepancies up to 10%, but beyond this additional investigations were required.

- Questionnaire and Responses

The very nature of the questions being exploratory, meant that some unstructured questions and more open dialogue was required between researcher and respondent. Questions often had to be posed in slightly different ways to obtain the necessary information sought. Some respondents were nervous, others suspicious. A major part of the information, it was felt, could only be obtained accurately if there was sufficient trust between researcher and interviewee. There were instances when no responses were recorded until the chemistry was felt to be right between the two.

- Recording information

As a result of an in depth qualitative approach being used,   interviewing took the following form:

- Interviewee was contacted about a possible date and time to record a 3/4 hr - 2 hr interview. At this time the interviewee was reassured that information was confidential, and would not be made available to anyone other than Strathclyde University, without their permission.

- All interviews were recorded on a small Sony hand sized tape recorder. The respondent was invited to stop the machine if they were having difficulty answering the questions.

- Prior to the interview, all respondents were given full information as to the purpose of the interview, and possible areas for questions.

- The interview then proceeded with the recorder only being switched off for clarification, or whilst certain information was being studied by the interviewee. On certain occasions, information of a sensitive kind was given off tape, and if this was relevant to the study, it was noted in separate case notes for further reference.

- All the information obtained from recorded interviews was typed and verbatim transcripts produced. If there was any confusion over information obtained, that particular part of the transcript was given to the respondent in an attempt to seek clarification (Book 2).

- Because of the detailed nature of the work, it was felt that fewer rather than more organisations would be appropriate, to obtain both the breadth and depth of information required.

- Both pre and post interview visits were required in order to study the organisations concerned, and to obtain additional information.

If particular issues are considered to be too sensitive, the interviewee was invited to switch off the tape recorder. In such instances information had to be collected in note form. In order to avoid anxiety by the respondent, other ploys were adopted in the interview;

- trying to get all the information in one go
- avoiding theoretical concepts and research jargon
- listening to the voice of the interviewee who might not be happy with certain questions
- returning later to difficult or complicated areas

By listening carefully to responses and understanding the meanings interviewees attach to issues, greater depth of information is gained. Burgess (1982) comments that the interview is "the opportunity for the researcher to probe deeply to uncover new clues, open up new dimensions of a problem, and to secure vivid accurate inclusive accounts that are based on personal experience". Insights into how respondents see issues are particularly important in exploratory areas of new research.

In the purchasing development area, asking certain questions, particularly in the areas of salaries, status and beliefs, were dealt with in a particularly sensitive way.

Whilst the research was semi structured, it was conducted in such a way as to allow respondents to "open up" in certain areas. If it was felt that the interviewee was wandering too far away from areas of research interest, the researcher had to lead them back. A totally non directive interview was likely to give rise to more problems in this area than a semi structured one. Because of the volume and scope of such interviews all interviews were taped and transcripts produced. This allowed the researcher additional time to concentrate on forming questions particularly supplementary ones, and to identify any non verbal clues. Of particular concern in this and any other similar research, is avoiding being told what respondents would like you to hear rather than telling the facts as they are. This often involved putting the same questions to different respondents in the organisation, inconsistencies were revealed and dealt with by more detailed research.

5.5 Main Sample

The pilot studies were used to refine and develop the main survey and its methodology already described, formed the basis of the approach to the main survey.

5.5.1 Sample Size

It soon became apparent from the initial pilot study 1, consisting of two organisations, Leyland Daf and TML Plastics, that too large a sample size would lead to problems in collecting information in sufficient depth. It was however, necessary to be able to make comparisons between large and small organisations, the Public and Private sectors and different industrial classifications. With a relatively small sample, obtaining information with the above characteristics can be difficult. In order to obtain the depth and quality of analysis it was felt that the sample size should be limited to six organisational case studies.

A small number of organisations researched in depth is likely to be far more reliable and revealing than a large scale survey with such problems as:

- non response
- Questionnaire design difficulties in order to obtain the quality of information required.
- More general administrative problems of a large sample size.

5.5.2 Main Research Sample

As the research was 'breaking new ground' and there was a need to understand the process and nature of relationships within organisations used in the samples, the six organisations eventually chosen were already known to the researcher from either previous research, consultancy assignments, or through training links. Whilst the the problem of bias exists with this approach, it was believed that other advantages more than adequately compensated. The major advantages were:

- trust had already been developed between staff and the researcher at the organisations involved, allowing greater access to information that might not otherwise have been available.
- the researcher already knew something about the organisations and structures, making it easier to identify potential problem areas.
- interviewing was less stressful in most of the organisations involved,

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- checking the authenticity of data obtained was considerably eased.
- with some of the organisations it was possible, because of the researcher's knowledge, to make comparisons of purchasing development over longer time periods, and suggest major factors instrumental in the purchasing development process.

Whilst the possibility of bias can occur, the researcher selected the six organisations used in the survey from a possible 85 organisations that conformed to general characteristics sought in the sampling frame, in terms of size, organisation, and business type.

Originally it was intended to use seven organisations. This was subsequently reduced to six after the pilot study revealed the time taken to obtain information and the fact that six organisational case studies would still be representative of the characteristics sought in the research sample, that is:
- organisations were from the Public and Private Sectors.
- organisations would be of different sizes, in terms of sales turnover.
- organisations were from different types of business and industry.

Whilst much of the research would be undertaken at a particular time, comparisons of an organisation's purchasing development would be more interesting if a longer time period could be used. It was therefore decided to use three organisations that the researcher had investigated during the period 1979/80 when conducting an MSc study into Price Negotiations. The research sample chosen in 1979/80 contained substantial information in terms of purchasing development, but this information was used more as a framework for the main part of the study into Price Negotiation for an MSc. Stages of purchasing evolution were therefore measured in a simplistic way.

Much of the information collected then to measure purchasing evolution could be re-worked using the newly developed measurement criteria framework. This allowed period analysis and comparative evaluation of purchasing development, in addition to cross sectional analysis. The seven organisations originally investigated in 1979/80 were chosen on the basis of size, varying financial turnovers, and industry type:

ORGANISATION	NAME	SALES TURNOVER
Aerospace	British Aerospace Missiles Div.	£281 Million
Motor	British Leyland Trucks & Buses	£380 Million
Heavy Engineering	Reynolds/Holroyd Gears	£9 Million
Textile Industry	Textile Mouldings	£1.6 Million
Light Engineering	Primrose 3rd Axle (not available)	£0.425 Million
Chemical	Galigan Foam	£5.1 Million
Chemical Textile	Storeys (Closed)	£36 Million

Some of the above organisations were no longer in business, and it was therefore necessary to add new organisations to give the necessary depth and breadth to the survey. The new sample includes three of those organisations still operating, and three new organisations from the Public/Service sector:

Computers	TDS Terminal Display Systems	£5 Million
Motor	British Leyland Trucks & Buses	£450 million
Electronics/Text.	TML Plastics	£16 Million
Public Sector	Lancashire County Council Supplies Directorate	£1000 Million
Public sector	Kent County Council Supplies Directorate	£680 Million
Public/Communi-cations	BBC	£1200 Million

Three organisations were selected from the Public sector, Lancashire County Council, Kent County Council, and the BBC, although it could be argued that the BBC straddles both the Private and Public sectors. Selecting Kent and Lancashire County Council Supplies was done for comparison purposes. It is generally held that Kent County Council Supplies were particularly advanced in terms of the purchasing activity, whilst Lancashire County Council supplies have only recently been formed. The BBC is a large organisation of some £1.1 Billion income, with elements of both Public and Private sector features. The other three organisations are all from the Private sector and were used in the original MSc survey (1983), they were Leyland Trucks and Buses, TML Plastics and TDS. In terms of location of the six, two are located in the South East of England, the other

four in the North West. More detailed information concerning the organisations' case studies are given in the next chapter.

Main Survey June 1989 - July 1991

The main survey took place between June 1989 and July 1991, when personnel in the organisations were interviewed in depth. Much of the methodology and collection of data was derived from the Pilot Study work already discussed in detail. All transcripts of interviews undertaken have been bound in a separate volume, actual recordings are also available subject to strict confidentiality (Book 2).

5.5.3 Research Procedure - Main Sample

Organisations involved in the main survey were contacted prior to any visit and permission obtained to interview. All the organisations involved had been informed about the nature and scope of the research survey and any problems identified. In almost every case, collecting the information was relatively straightforward, but time consuming. Although each interview took between 1/2 hour to 2 hours, subsequent checking and verification took many months to complete.

The semi structured questionnaire developed from the literature survey and further refined from the two Pilot Studies, provided the main framework from which questions were asked, and responses recorded. Full details of the questionnaire are given in Appendix 4. Using the semi structured questionnaire, detailed case studies were produced for each of the six organisations.

The same questions and areas of interest were asked of each interviewee from all of the organisations involved. As explained in the pilot studies, in order to check authenticity of responses, triangulation of results was used in each of the organisations involved. The same questions were asked at Buyer, Purchasing Manager, and Director levels. Any disputes were investigated and resolved. Additionally, records, files and other secondary data was used in all the organisations to add further clarity to information obtained and for checking purposes.

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5.6 Grounded Theory Approach

Following the qualitative grounded theory approach to data already explained in Chapter 4, the following procedures were undertaken:

5.6.1 Grounded Theory Procedures - Main Case Studies

Familiarisation

The data was collected. Initially this involved bringing together all the data obtained from the semi structured questionnaire (Appendix 4 for each of the six organisations), the transcripts which yielded from the taped conversations (complete sets of which are contained in Book 2 of the research). At this stage, filed notes, attitudes of respondents and any other data was included in an attempt to identify what was going on. Any gaps or differences in the information obtained, particularly in the same organisation, were investigated further. This often required additional visits or phone calls. In other cases, secondary data helped to resolve different views.

Reflection

Information was catalogued under the measurement criteria already derived from the literature review and pilot study 1. Any criteria not found in the literature survey but believed to be of interest was noted under various headings. In addition to measurement criteria, other factors identified by respondents as likely to affect development, was also recorded.

Conceptualisation

After the reflection stage, as measurement criteria and factors affecting development had been more clearly identified, an attempt was made to identify more clearly the relationship between the dependent variables, and to demonstrate how developments in one of the measurement criteria variables was affected, or could affect other variables. The process of development within the purchasing function would appear to be inter dependent, that is there was a need to develop more than one of the dependent variables or criteria, if development was to occur. At this stage, common external variables likely to affect change became more obvious in the development process.

Cataloguing Concepts

In order to handle the data more effectively, numerous tables were constructed to more clearly summarise the findings from each of the organisations involved, and allow comparative analysis.

Recording

Where data or concepts had been misinterpreted, or further classifications were required, re-recording took place. In certain instances, there were too many concepts and a more manageable approach was sought.

Linking and Re-Evaluation

As the conceptual framework became clearer, it was possible to link all the variables into a more holistic theory. In certain areas, re-evaluation took place, particularly in terms of the number of criteria used to measure purchasing development as well as the need to make some of the measurement criteria clearer in operational terms.

5.7 Summary

Using a qualitative methodology, in depth interviews and a grounded approach based on a selective number of case studies, measurement criteria were evaluated and variables affecting the development process more clearly identified.

5.8 Conclusion

Results derived from the six Case Studies is presented in the next chapter.

CHAPTER 6 RESEARCH RESULTS

6.1   Introduction

The Literature Review in Chapter 2 identified criteria that formed the basis of the qualitative measurement process for purchasing development.   In the preceding chapter, aspects of research methodology and sampling were discussed.   In this chapter the results of the main case study survey are described in detail.   There are also references to Pilot Study II, which was essentially concerned with identifying problems with terminology used in the main case study survey.

The chapter begins with an overview of results, highlighting the findings of Pilot Study II and the Main survey. A much fuller explanation for using Pilot Study II has already been given in the preceding chapter.   At the time this survey was originally conceived, information derived from it would was to be used for questionnaire design. Results from this survey, however, proved to be more interesting than was originally expected.

Purchasing development is measured in the main survey, using the eighteen measurement criteria developed from the literature survey and then rated on a scale 1 - 5, and profiles produced.   Results relating to each of the measurement criteria taken from the six organisations involved in the main survey are now described.

Full details of the organisations surveyed in the main case study sample are given later in this chapter.   Responses from each organisation are summarised, with fully detailed transcripts being seen in a separate volume of the research (Book 2).

6.2   Results Overview

The results are presented in two sections - Pilot Study II followed by the Main Survey results.

6.3   Pilot Study II - Results.

The results of Pilot Study II cannot be viewed with the same degree of reliability as those in the main sample.   It was not possible to check validity of answers given with those organisations involved, or to be fully sure

respondents understood the measurement of the criteria examined. After allowing for these reservations, it was felt useful to include further analysis of the information obtained from Pilot Study II in this chapter. The additional information, with its limitations, does reveal some interesting findings, and adds to the richness of the overall survey. Using a limited number of measurement criteria, buyers in such organisations were asked to give a general indication of their organisations purchasing development.

Further analysis is given in Table 6.1, where the information from the survey is re-arranged in terms of purchasing development. This Table shows a wide variety of organisations at different stages of development. It also covers a variety of organisations from the Public and Private sectors, and from a number of classifications, manufacturing to the service sectors, hospitals to retail organisations and of different sizes (sales turnover).

Full details of the methodology and questions are given in the preceding chapter. Information obtained from this sample was originally designed to help in the forming of questions in the main survey, and Pilot Study II was extremely useful for this purpose alone. Whilst the quality of the information is not as good as in the main survey, its inclusion and the results were of interest in terms of the breadth of the survey.

6.3.1 Pilot Study II - Measurement Criteria

Points were awarded for each of the variables that indicated Purchasing development, from 1 - 5, Stage 5 being the highest level, gaining most points. In terms of the points system, the following stages were designated in terms of purchasing development.

	Rating (Points)			
Stage 5 (Most developed)	80	-	100	ADVANCED
Stage 4	70	-	79	MATURE
Stage 3	50	-	69	DEVELOPING
Stage 2	39	-	49	AWAKENING
Stage 1 (Least developed)	38 and less			INFANT

Eleven of the eighteen major questions eventually used in the main survey were answered from individuals, mainly Buyers, or Purchasing Managers.

TABLE 6.1   DEVELOPMENT STAGES - PILOT STUDY II

ORGANISATION	RESPONDENT	POSITION	PURCH SALES REV	SCORE
DEVELOPMENT STAGE 5 - (ADVANCED) (80 - 100)				
4 Square Mars	N Stoke	Buyer	55	90
British Fermentation	P Gough	Buyer	66	84
Seimens Plessey	G Wakefield	Buyer	65	82
Amoco	R Andrew	Buyer	?	81
G P T	M Brewer	P Manager	?	80
Amoco	S Waite	Buyer	?	80
DEVELOPMENT STAGE 4 - (MATURE) (70-79)				
Metito	W Wardman	S Buyer	60	78
Electrolux	G Cantwell	Buyer	65	78
Glaxo	C Kinsworth	Buyer	?	76
G P T	Z Francis	Buyer	40	76
Kratos	J Smith	Buyer	?	74
S T C	D Connolley	Buyer	?	74
Chippardos Dairy Prods.	T Dunbar	A Buyer	?	74
4 Square Mars	A Williams	Buyer	?	74
B P Explorations	G Hall	Buyer	?	72
Smith & Nephew	D Johnson	Buyer	?	72
Woolworth plc	J Conway	Buyer	?	70
Rexham Vic	I Owen	Buyer	?	70
Warlo Automotive	P Thompson	Buyer	?	70
DEVELOPMENT STAGE 3 - (DEVELOPING) (50 -69)				
B P Exploration	N Smith	Buyer	?	68
Kalamazoo	R Eaton	Buyer	?	68
B P Exploration	M Philips	Buyer	?	68
Post Office	L Hartree	Buyer	60	68
B P Exploration	M Philpott)	Buyers	?	68
B P Exploration	A Davidson)			68
Wyco	D Taylor	Buyer	?	66
Rockwell	T Ree	S Buyer	?	66
Shell UK (Major Serv.)	F Nelson	Buyer	?	64
Natwest Bank	J Wagger	A Buyer	?	64
T R Fastenings	J Roberts	P Manager	50	64
Rockwell plc	N Amendela	Buyer	?	64
Dunaham and Bush	T Angell	Buyer	?	64
B P Exploration	A Skilling	Buyer	?	64
Midland Bank	P Dun	Buyer	?	64
Alcan	D Francis	Buyer	40	64
Total Oil	A Griffon	Buyer	?	64
Janaby Oil	A Tallon	Buyer	?	60
British Timkin	E Masters	Buyer	?	60
Electrocue	J Maxwell	Buyer	?	60
Rockwell	L Royal	Buyer	?	60
Amoco Norway	O Vistues	Buyer	?	58
Elizabeth Arden	J Wit	A Buyer	?	58
Unipart	B McKenzie	Buyer	?	58
Linn Products	S Cavanagh	Buyer	?	58
Tractell	B Jeeney	Buyer	?	58

TABLE 6.1   DEVELOPMENT STAGES - PILOT STUDY II CONT.

ORGANISATION	RESPONDENT	POSITION	PURCH SALES REV	SCORE
DEVELOPMENT STAGE 3(cont) - (DEVELOPING) (50 - 69)				
Royal Mail	C Lowe	Buyer	?	58
Arthur Shaw	P Parton	Buyer	-	58
Barclays	S Walpole	Buyer	?	56
Vauxhall Motors	M Adams/H Jones	Jnt Buyers	70	56
Duraflex	J Patterson	Buyer	?	54
T S B	T Hanson	Buyer	50	54
Brett Oils	R Stimpson	Buyer	?	52
T S B Trustcard	J Flahey	A Buyer	?	52
Lotus Cars	S Hill	Buyer	?	52
Janaby Oil	M Wallace	Buyer	?	50
Dufaxlite Dev.	C Humphries	A Buyer	?	50
Pilkington Bros.	L Jameson	Buyer	?	50
DEVELOPMENT STAGE 2 - (AWAKENING) (39 - 49)				
B P Chemicals	N Naraine	Buyer	?	48
Gent	A Blackburn	Buyer	38	48
Bischof & Klein	L Mathieson	P Admin	40	48
British Aerospace	B Newman	Buyer	60	48
Gent	R Loomes	Buyer	30	46
B P Chemicals	E Craig	Buyer	?	46
United Technologies	M Prior	A Buyer	?	44
Clayton Dewandre/Partco	C Cardwell	Buyer	?	44
Prices	S Hoban	A Buyer	?	42
DEVELOPMENT STAGE 1 - (INFANT) (38 and less)				
Kratos	P Harvey	Buyer	?	36

? = Information not available

General analysis revealed that for the most part, respondents understood the nature of the questions, and felt competent about giving opinions and 'scores'.

The general sample contains 68 responses from 58 different organisations, and 12 responses from one organisation (Short Bros.). It was decided to keep the Short Bros. responses separate from the rest, so as not to distort the general sample. The spread of organisations at different stages of development is found with Table 6.2.

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TABLE 6.2   PERCENTAGE ANALYSIS OF STAGES

Numbers	% of TOTAL	DEVELOPMENT STAGE	
7	10.3	Stage 1	(Advanced)
13	19.1	Stage 2	(Mature)
38	55.9	Stage 3	(Developing)
9	13.1	Stage 4	(Awakening)
1	1.5	Stage 5	(Infant)
TOTAL 68	100	(Excludes Short Bros.)	

From the general information obtained, analysis reveals the following:

- In general terms, respondents from the same organisation interviewed at different times, indicated their purchasing function's development was at similar development levels, e.g. BP Explorations is rated by 4 different respondents on different short courses. All 4 respondents tended to put its development at the higher level.
- Another respondent from BP gave a rating of 4, and a score of 74.
- Gent plc - again two respondents on different courses, 48 and 46 score.
- Janoby Oil gives a wider difference - 60 and 52, but still at stage 3 of development.
- Rockwell plc give 60, 64 and 66.
- BP Chemicals have 46 and 48, stage 2.
- TSB have 54 and 52.
- Those sampled at the higher stages of development covered a range of organisations, i.e. oil, food, consumer durables, chemicals, retailing, automotive and electronic. Similar organisations were also represented at lower levels of development.
- If one examines major sectors, some interesting results appear:

Oil Sector	-	tends to be between 3.5 to 4 in terms of development.
Banking Sector	-	tends to be between 3 to 3.5
Chemicals	-	tends to be between 2.5 to 3
Cars/Automotive	-	tends to be between 3 to 3.5

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Whilst the sample sizes are small, it seems strange that such major sectors do not have their purchasing functions more developed in view of the strategies and problems certain of them were facing when the research was conducted. The Oil sector, particularly BP, would be expected to have a more developed purchasing organisation. The Banking sector, faced with huge losses in the period 1990/1992 would certainly be helped by a more developed purchasing activity, although the Banks are now realising the profit potential in the purchasing and supply area. The Automotive industry as represented by 6 or so of the organisations in the general sample is not as developed as the researcher would have expected. It is interesting to see several large organisations at stage 2 of development, for example BP Chemicals, British Aerospace and Gent.

Special Sub-sample - Short Bros.

Short Bros., in the Defence industry, supplies aircraft, military equipment to the Ministry of Defence, and is based in Northern Ireland. Over the past three years it has started to invest in the purchasing function and develop a more proactive approach to contract management. It commissioned a series of short courses from the Institute of Purchasing and Supply, on which the researcher was involved. This particular group were involved in a 3 day course on purchasing in Belfast. It was a mixed group in terms of ages, experience and sex.

The researcher explained the questions and the objectives behind the research, and forms were duly completed. As can be seen from the results, the general average level of purchasing development was between stages 2 - 3. What was surprising was the relative consistency in terms of the scores. The findings also tended to reinforce a belief that considerable items of expenditure were not receiving the management attention they deserved from a purchasing stand point. In the case of the Short Bros., they had a purchasing to sales revenue of between 65 - 70%, that is for every £100 of sales, £65 - £70 was spent on bought out materials and supplies. The more developed the purchasing activity, the greater the potential savings available in this area. The organisation had a sales turnover in excess of £100M, over 1990/1991.

6.4 Conclusion

Further comparative analysis of these findings will be included in the next chapter.

6.5 Main Survey - Analysis

6.5.1 Introduction

The purpose of the main survey was to undertake in depth interviews with six organisations, using the measurement criteria developed. Using the measurement criteria, profiles could then be produced to indicate what stage of development had been reached by the purchasing function concerned.

Information derived from each of the core study organisations involved is given. This includes a brief description of those respondents involved, and their positions in the organisation, a short overview of the organisation and purchasing structural development. An analysis for results for each of the criteria measured is then presented. The profile for each of the organisations concerned and an analysis of the results is given in Chapter 7.

ORGANISATIONS PARTICIPATING		1990/91
• Motor	British Leyland Trucks & Buses	£450 Million
• Public Sector	Kent County Council Supplies Directorate	£680 Million
• Computers	TDS Terminal Display Systems	£5 Million
• Service/Public Sector	Lancashire County Council Supplies Directorate	£1000 Million
• Public Sector Communications	BBC	£1200 Million
• Electronics/Textile Industry	TML Plastics	£16 Million

A summary of the findings is presented in this chapter.

It is the intention in this analysis section to review the answers given by the respondents from each of the organisations concerned. Major differences of opinion are examined. The respondents' ability to relate to the variables chosen as indicators of growth are evaluated. Finally, using comparative analysis, general evaluation of each of the variables is completed.

6.5.2 Main Survey Results

The actual survey of the six organisations was conducted between June 1989 and July 1991. All interviews were recorded and transcripts produced. Triangulation of results was possible by questioning purchasing staff at Director, Purchasing Manager and Buyer levels.

WELCOME TO THE LEYLAND ASSEMBLY PLANT

1. High Bay Automatic Warehousing

All deliveries from Leyland DAF suppliers are logged on computer and inspected by quality control before moving to the input area. Here parts are programmed and automatically stored in the High Bay Warehouse.

The High Bay Automatic Warehouse logs all movements of parts to over 20,000 storage locations and can cope with the assembly capability of more than 30,000 vehicles per year each with over 2,000 parts. As items are required, the computer automatically removes them from the Warehouse and issues these to line assembly locations.

There are 8,000 separate storage locations for all fastener requirements to support the extensive model range.
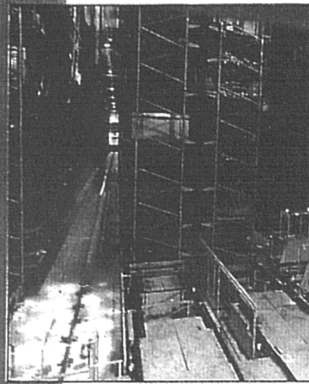
2. Frame Assembly

The frame is assembled on a moving floor conveyor in the upside-down position making it easier to instal springs and axles.

3. Spring and Axle Assembly

These are lowered from overhead cranes which are synchronised to the conveyor speed. This is followed by an inspection approval stage.

4. Turnover

A special device turns the chassis through 180° and couples it to an overhead conveying system.

5. Steering and Brake Pipes

The chassis' electrical cables, steering and brake pipes are fitted.

6. Engine Fit

The correct sequenced engine is lifted from its pallet and positioned by the crane carousel to the chassis frame.

7. Cab Mountings

Cab mountings, hydraulic tilt pump, prop shaft and exhaust are installed followed by an inspection approval stage.

8. Radiator and Fuel Tank

Radiator, fan cowls, air cleaner, fuel tank, fuel and radiator piping are assembled to the chassis.

9. Paint Masking

The chassis is then masked prior to painting.

10. Chassis Paint

The chassis enters the paint booth. Every component and assembly is supplied with primer protection. Here the paint coat is applied to the whole chassis in line with the customer's paint specification.

11. Wheels and Vehicle Fluids

The chassis is taken onto a mezzanine floor where the wheels are fitted and the chassis is lubricated.

12. Cab Drop Section

By the time the chassis reaches this point its sequenced cab has left the computer controlled store. After minor cab preparation and vehicle registration plating, the cab is married with the chassis.

Based at Leyland in Lancashire, UK, the Assembly Plant utilises some of the most advanced truck manufacturing equipment in the world. Covering an area equivalent to ten football pitches the plant makes extensive use of mechanical aids in the assembly process. Many functions are computerised and fully automated and the plant has a production capacity of 425 trucks per week.

It is here that Leyland DAF is producing trucks spanning the gross vehicle weight range from 6 tonnes to 38 tonnes. These vehicles are manufactured to suit customers throughout the world, each vehicle being tailored to fit the individual customer requirements.
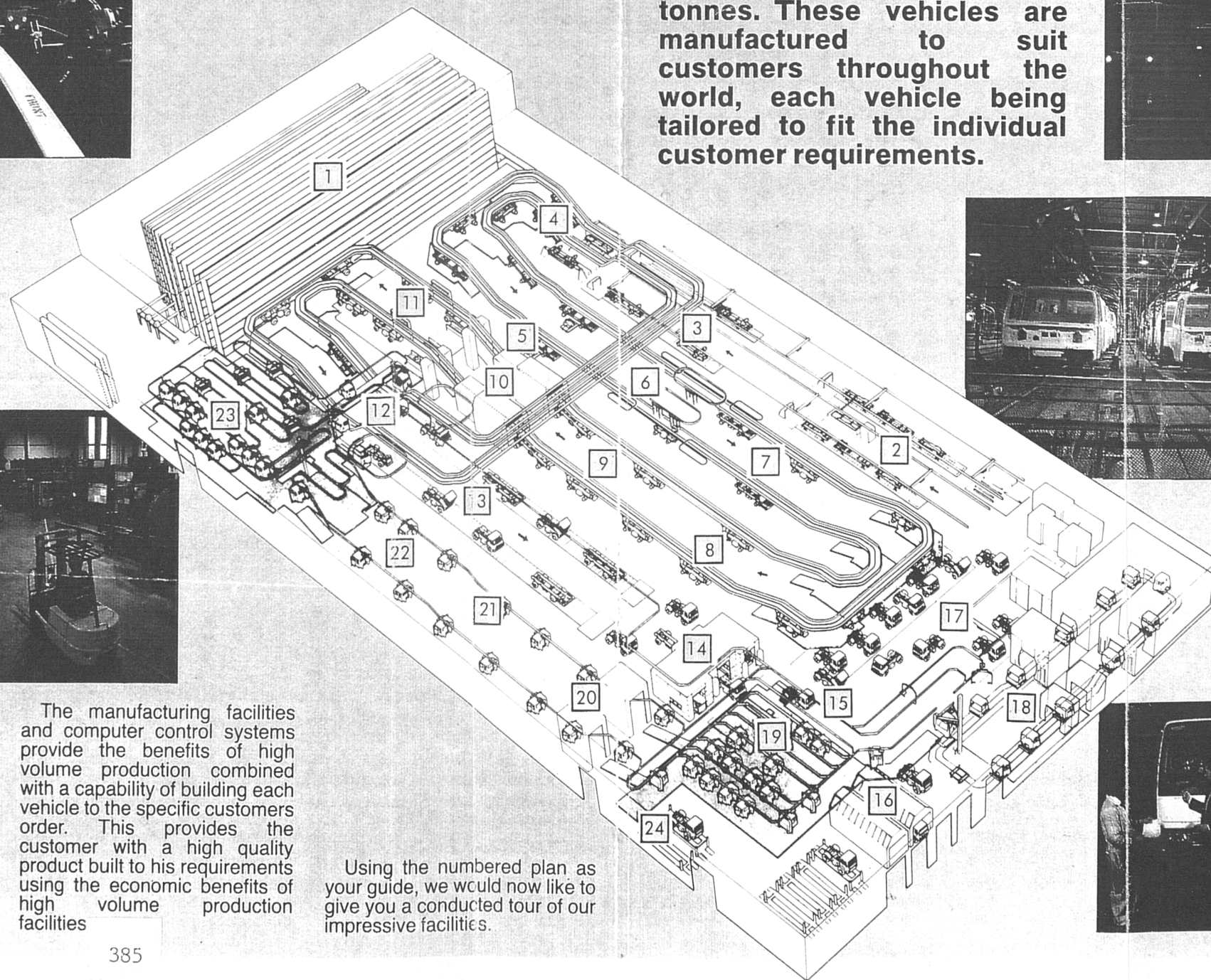
The manufacturing facilities and computer control systems provide the benefits of high volume production combined with a capability of building each vehicle to the specific customers order. This provides the customer with a high quality product built to his requirements using the economic benefits of high volume production facilities

Using the numbered plan as your guide, we would now like to give you a conducted tour of our impressive facilities.

13. Finishing Slat Conveyor

The functional systems between the cab and chassis are connected, front bumper assembly, intermediate grill, mudwings, batteries, then functional and electrical tests are undertaken prior to the vehicle being started and the test inspection stage.

14. Rolling Road Test

At the end of this line the complete vehicle goes into one of three dynamometer test cells.

Quality inspections during assembly have ensured that all systems function properly but these test cells simulate road conditions and put the total vehicle through a series of rigorous examinations.

15. Brake Test

After these tests there are final checks, including brake tests to verify performance standards.

16. Vehicle Paint and Waxing

All vehicles receive a paint check and touch up as necessary, followed by protective waxing of exposed components.

17. Final Inspection Approval

After a full vehicle final inspection check and rectifications as necessary, the vehicle is approved for customer sale.

18. Cab Preparation and Painting

The cabs arrive at the plant already bearing a primer coat of paint and thoroughly undersealed. Inside the paint area the cabs travel on a floor conveyor. In the preparation area any imperfections are removed and the cab then passes through a rinsing tunnel. After drying off in an oven, two coats of gloss paint, in a choice of colours, are applied.

19. Painted Cab Store

The painted cab is lifted by an overhead conveyor system. It travels to its storage lane. When required a cab is automatically called to one of the two trim lines.

20. Wax Injection

Inside the wax injection booth a protective wax is injected into all box sections and doors.

21. Cab Trim Lines

The cab now goes into the trim line where the electrical harnesses, floor mats, trim, instruments, glass, operating pedals, heater, steering shaft, cab services and seats are installed.

22. Electrical Test

Following the trim operation the cab is functionally and electrically tested.

23. Finished Cab Store

Each cab, having been through quality checks at each stage, is finally inspected before being passed to an overhead holding store. It will travel from here to be fitted to the chassis for which it is destined.

24. Quality Audit

Every working day a chassis is selected at random from the finished stock for audit and review by the plant management and shop floor operators. This ensures that attention is constantly given to quality improvement and the high quality standards set by Leyland DAF are maintained.

Leyland DAF

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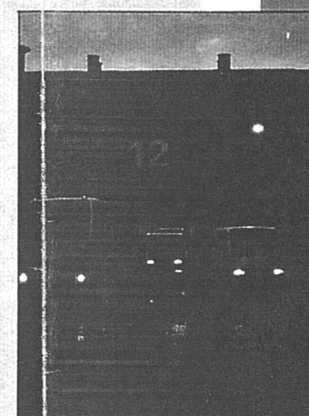
6.6 Leyland Daf - Analysis of responses

6.6.1 Introduction

The first organisation chosen was Leyland Daf, an organisation originally comprising Leyland Vehicles - a part of British Leyland group, and Daf, a major Dutch vehicle organisation. Leyland Daf (Trucks) had a sales turnover of some £450 Million for the financial year 1988/1989. About 70% of this was spent on bought out materials and supplies.

6.6.2 Respondents Interviewed

The three respondents interviewed were:

Bill Craig	-	Purchasing Director
Mike Smith	-	Purchasing Services Controller
Gill Armstrong	-	Buyer

Interviews were conducted between September 1989 and April 1991.

6.6.3 Development of the Purchasing Function within Leyland Daf

The UK Headquarters of Leyland Daf is at Leyland in Lancashire, their main assembly plant. The plant has a production capacity of 425 trucks per week, ranging from 6 to 38 tonnes. The layout of the plant and the production process involved are shown in Appendix 3. Looking at the history of the development of purchasing within Leyland Daf, we find the following:

1965 - 1970	Decentralisation with some control at centre. Plants regulate their own purchasing deals.
1970's	Period of centralisation. Purchasing centralised at Leyland for major value items. Lower value items left at plant level. Strong control from centre over systems and procedures.
1980's - 90	Rationalisation of plants. Purchasing is decentralised, but there are fewer plants. It is presently organised on a plant based structure, with each major operational unit responsible for its own purchasing, and with little formal interchange between the groups.

1991onwardsThey are now in the process of establishing a centralised
purchasing organisation, which will have two major functions,
one which will be co-ordination, and the other which will be
the actual commercial and technical negotiation for major
vendors.

The existing structure is shown in Fig. 6.1 - 6.3. Bill Craig, the Director of Purchasing, when interviewed in April 1991, explained in more detail the new centralised structure, with four manufacturing plants in the UK, 14 purchasing staff and total authority vested in the central purchasing area for purchasing decisions taking the form of a lead buyer type establishment.

The sales turnover of Leyland Daf was £450 Million (1989/90), with a purchasing turnover of £300 - £350M. Bill Craig comments, "at the moment, the central purchasing consists of a purchasing and supply director, myself, and Jim Lynch, the other central purchasing director. We split the turnover responsibilities down the middle. He has a large number of suppliers, and I have a small number, but about the same turnover, but I have the heavy components such as gear boxes, axles etc. The purchasing expenditure is roughly £150 - £170M each for the buyers under our control. We set a strategy up and agree a policy, and set the supplier up. We do not place any orders from the centre at this moment in time. The control for purchasing within the plant is still with the plant director. Purchasing managers report to the plant director. We, form the central team here, and report to the purchasing director in Holland. In order to avoid confusion over responsibilities over purchases between plants, a lead buyer concept was introduced".

CORPORATE PURCHAS. .G ORGANISATION

FIG 6.1 _EYLAND DAF CORPORATE PURCHASING
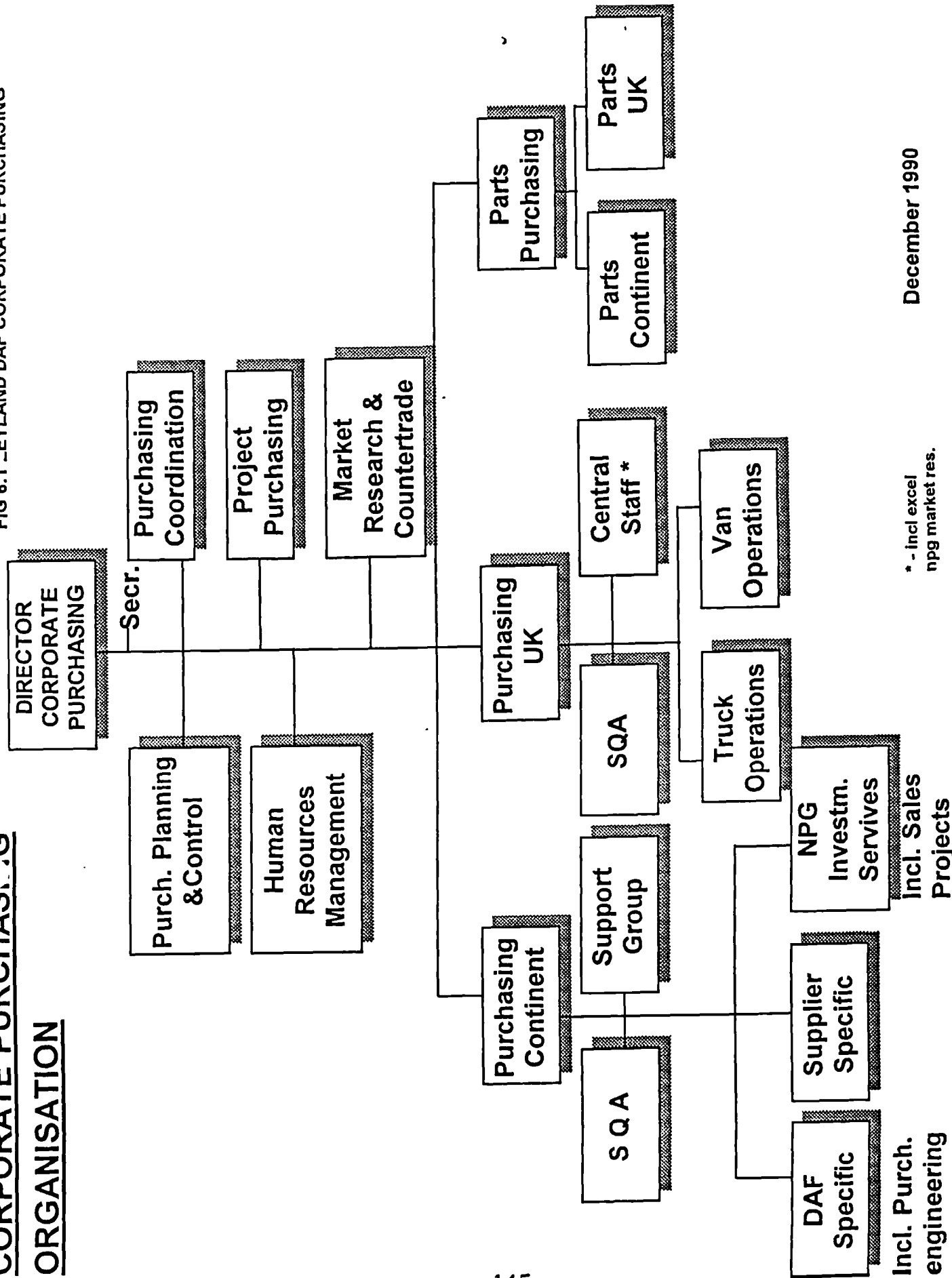
December 1990

* - incl excel npg market res.

Incl. Purch. engineering

Incl. Sales Projects

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CORPORATE PURCHASI.G - VANS

PURCHASING DIRECTOR
VAN OPERATIONS

PURCHASE MANAGER
METALS &
NON-PRODUCTION

PURCHASE MANAGER
TRIM, PLASTIC,
& RUBBER

PURCHASE MANAGER
PROPRIETARY

SUPERVISOR
PURCHASE
SUPPORT

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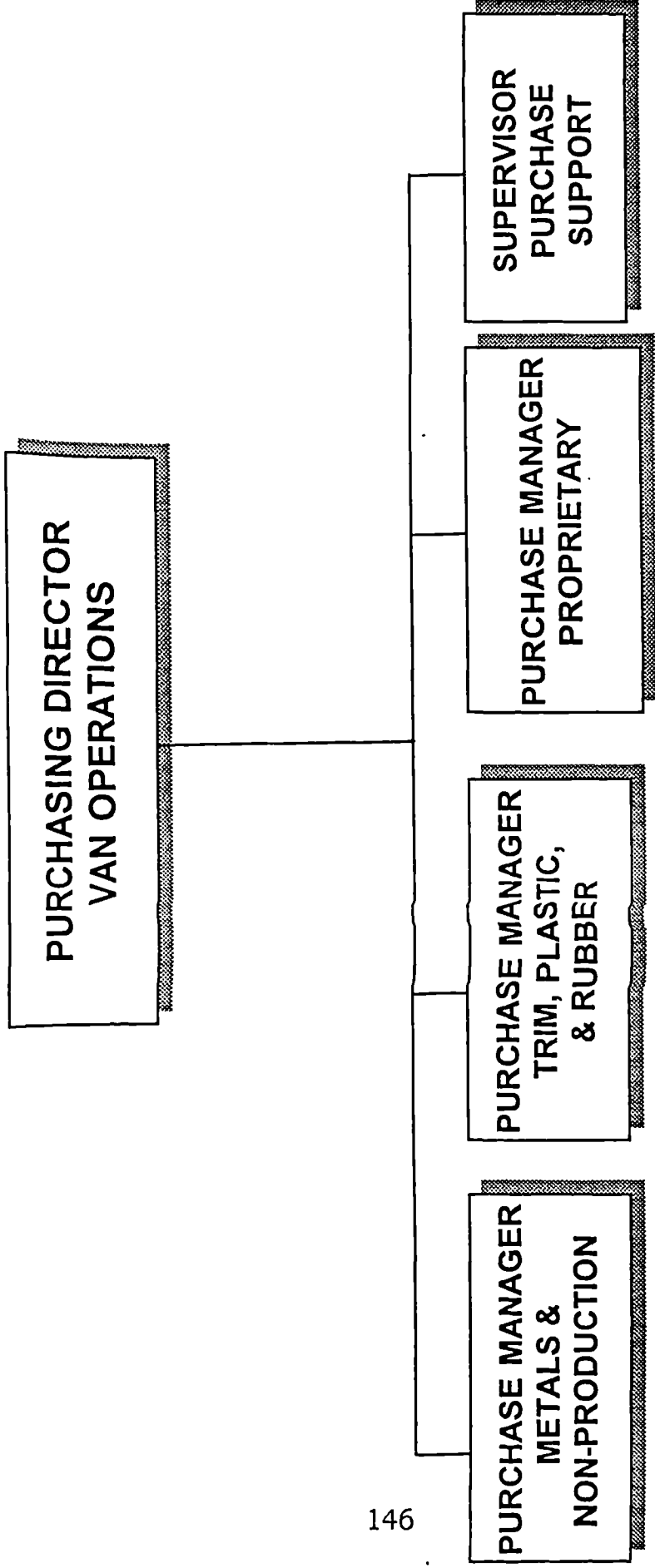
FIG 6.3 TRUCK OPERATIONS
PURCHASING ORGANISATION

TRUCK OPERATIONS PURCHASING ORGANISATION


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                    ┌─────────────────────────────┐
                    │   PURCHASING DIRECTOR        │
                    │   TRUCK OPERATIONS           │
                    └─────────────────────────────┘
                                  │
   ┌──────────┬──────────┬──────────┬──────────┬──────────┐
┌────────┐┌────────┐┌────────┐┌────────┐┌────────┐┌────────┐
│ SENIOR ││PURCHASE││PURCHASE││PURCHASE││SUPER-  ││TOOLING │
│ BUYER  ││MANAGER ││MANAGER ││MANAGER ││VISOR   ││MANAGER │
│ ALBION ││METALS &││TRIM,   ││PROPRIE-││PURCHASE││        │
│ PLANT  ││NON-    ││PLASTIC ││TARY    ││SUPPORT ││        │
│        ││PRODUCT.││& RUBBER││        ││        ││        │
└────────┘└────────┘└────────┘└────────┘└────────┘└────────┘
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147
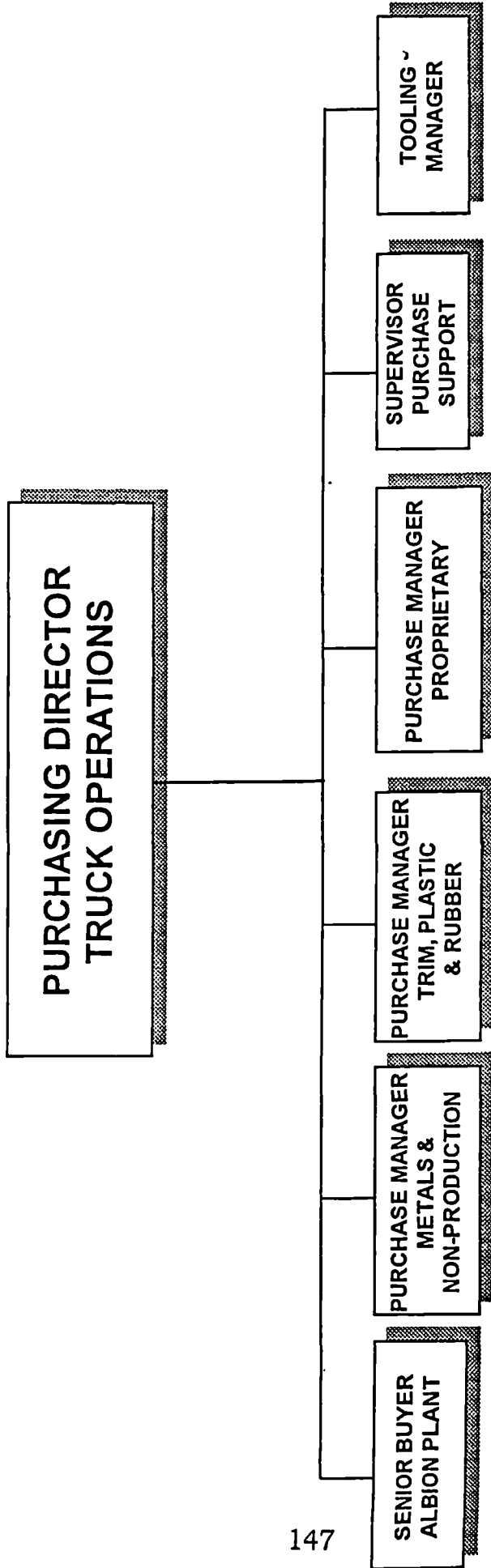
This involved giving major purchases for Leyland Daf to a senior buyer, responsibility for all purchases of a particular item in the UK. Teamwork was essential, with everyone working together. In the early 1980's purchasing was de-centralised. Bill Craig headed purchasing at the centre, but with basically no staff. It was decided that greater control was needed from a manufacturing point of view, and the only way that could be achieved was to identify lead buyers. Those buyers would be responsible through the buying centre, back to Bill Craig. From 1986, when Daf took over, the lead buyer principle was discussed and introduced during 1988 and 1989.

6.6.4 Analysis of Leyland Daf Responses to Measurement Criteria
Q A1- Buyer's Time Spent on Clerical Managerial/Strategic Activities
There was a divergence of views here, at Director, Manager and Buyer level. Gill Armstrong, the buyer involved, reckoned that about 50% of her time was spent on clerical activities, and suggested it should be nearer 60 - 70% of her time spent on management activities. She considered that not enough of her time was spent on negotiations and supplier development activities. Quality improvements generally tended to be on the basis of 'fire-fighting'.

Mike Smith said due to "the purchasing role being distorted by a high level of product change", more of the buyer's time than normal was being spent on clerical activities. He continued, "The ideal situation, in my view, is that supplier development and sourcing policy, would be 40% of a buyer's time, and that strategic negotiations, if by that we mean on-going quality, performance negotiations with particular vendors, would be 15-20% of his time, and the rest of the time would be spent on sourcing and expediting".

It would appear that at certain times, the clerical activities involved in the buying role may rise short term, for example, in times of crisis, but the ideal would be to reduce such incidences. He goes on to comment that the computer systems should be able to reduce such clerical activities, particularly in terms of reporting the results of expediting and sourcing activities. Mike Smith continued that buyers on the whole were spending 40-50% of their time on clerical activities, and that it ideally should be around 20%. Both Mike Smith and Gill Armstrong were referring to operational buyers.

Bill Craig, at Purchasing Director level, had a central team of buyers, who spent considerably more time on management and strategic activities. He observed: "The plants are probably spending 80% of their time on clerical activities, they are not getting the time to do their job, and that is another area that has driven the central team, because the management here now realise that the work that should have gone on in the plant has not been done because they have not got the time, or the ability, so they become order clerks".

Thus a difference of opinion exists here. Further research identified that about 60% of the buyer's time, at plant level, was concerned with clerical type activities, although there have been times with restructuring, and new developments, when it may have been even greater.

Q A2 -   Purchasing Organisational Structure

It was expected that as purchasing developed, so its structure would develop, both in depth and breadth, in order to function more effectively. At the time of the interview the Leyland Daf purchasing function was undergoing some fairly intensive restructuring. Five purchasing structures were identified. In the interview, both Mike Smith and Gill Armstrong felt that the Leyland Daf structure was at level 5; that is a centralised purchasing function with a materials management/logistical function at a plant level, with specialised buying skills at the centre. In terms of its future development, it will become more centralised with a new central purchasing function, based on a new "lead buyer" approach for major expenditure. This will result in a consolidated activity measurement system, co-ordination of policy and attitudes/relationships towards major vendors.

Q A3 -   Back Up Services to Purchasing

The extent of support services available to the purchasing function varies from organisation to organisation. It appeared that typical services available to the buyer in Daf now included:

- engineering assistance
- supply quality assurance
- systems support

It was envisaged that the support services were likely to increase in the future, with the new central purchasing unit. Gill Armstrong felt that there was no legal back up, and had used the services of a product cost analyst on an ad hoc basis. Mike Smith further explained the extent of such services. Both felt that Leyland Daf was at stage 3 of the back up services listing, but felt they should be moving towards stage 5 for complete coverage. Stringent budget controls were blamed on lack of services. On a previous visit to Leyland Vehicles in 1978, prior to their take-over, they were certainly at stage 5 in terms of back up services.

B - Status of the Functions

From the interviews with all three correspondents, the purchasing function within the Leyland Daf organisation, according to criteria used, had a high profile. Bill Craig, the Plant Purchasing Director observed, in answer to a question on the levels of purchasing status: "Comparing with what Leyland used to be like back in the 1970's, we had a Purchasing Director, and I reported to the Managing Director. Gradually, with all the changes, we became part of Manufacturing and the function dropped in its visibility in the organisation. During the late 1980's, it has gone the other way, with an increasing profile. In the late 1960's it had a very low profile, by the beginning of the 1970's it was beginning to be recognised as an area that could bring benefits. In 1987 Daf brought in consultants, and a Director of Purchasing from Holland for the whole European operation, his profile has been extremely high. Purchasing now reports to Manufacturing Directors at a particular plant, and the Manufacturing Directors at the plant report to the Managing Director at Leyland who controls the UK operations. The Purchasing Director who heads up corporate purchasing is also on the board, and is looked upon as having the same status as a Manufacturing Managing Director".

At plant level, the Purchasing Managers report on an operational basis, to a Materials Manager; this activity encompasses purchasing, material control and production control. The Materials Manager reports both to the Operations Director of the plant, and also to the purchasing director. There are two Leyland Purchasing Directors who report to the UK Director of Purchasing, Neil Wade, who reports to his equivalent at Headquarters in Holland.

It appears as the status of the purchasing activity has increased, so does the access to the head of the organisation concerned. Purchasing is reporting directly now to the main board. In the 1960's it did not report directly to the Board. Interestingly, far more senior positions exist in the purchasing area than in the mid 1970's. In the 1970's and early 1980's there was only one Purchasing Director.

B3 -   Staff Training and Development Within the Purchasing Function

Interviews with all three respondents clearly showed that the training and development occurred at all levels within the function on a regular basis. Staff coming into the function are recruited at graduate entry level. Gill Armstrong observed: "There are three members of the Department who are either studying for IPS, or have got IPS qualifications. We're not really encouraged as such to do external qualifications, although you are given funding, and maybe half a day off a week. You don't get study time. As courses go, I'd say we get quite a few, and then there's the external IPS courses". Internal courses are reasonably extensive, and there is a formal appraisal every year with the immediate manager".

At Director level, it was felt that more should be spent. The Director of Purchasing indicated that very little time and money had been spent on training until 18 months before. This would coincide with the introduction of Total Quality Management concepts.

B4 -   Salaries Paid to Buyers

Generally, Leyland Daf paid well above the local rates for its Buyers. Gill Armstrong, with about three years experience, received an annual salary of about £14,000. With bonuses and benefits this would be about 30% above the local average.

B5 -   Measurement of Purchasing Performance

Mike Smith explained there were two aspects to the measurement of purchasing performance at Leyland Daf. One that measured commercial performance in price negotiations with vendors, through put of work; others measured delivery and general supplier performance. It was likely that the extent and depth of supplier performance would increase in the future. The

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second major area of concern, in terms of performance concerned strategic measurement in the areas of:

- reduction of the supplier base
- strategic reduction of cost of supply
- supply and delivery profiles

These strategic performance measurement criteria indicated that the purchasing function within Leyland Daf was actively involved in strategic issues. Reduction of the supplier base is necessary in order to effectively introduce and sustain Just in Time and Total Quality Management strategies. Whilst concern over strategic reduction in cost of supply is likely to be of more concern longer term than price. The measurement of these factors in themselves is indicative of a developed purchasing activity.

Assessment tended to be yearly in terms of buyers' performance, but more frequently in terms of reviewing supplier performance. Gill Armstrong indicated that measurement of buyers' performance was more in terms of cost savings both direct and indirect. Further she felt that vendor rating, that is, supplier measurement in terms of quality, delivery, price and service was measured on a continuous basis with major suppliers. Subsequent research revealed that this information was indeed available. Mike Smith confirmed that the organisation was moving towards a measurement system that looks at "lowest cost of supply" rather than lowest price, that is, whole life costs, rather than purely price measurement. When shown the conceptual model, all felt that they were at least at stage 4, and moving rapidly towards stage 5. Reviewing their systems tended to confirm this view.

C1 - Purchasing Expenditure to Sales Income - Aggregates
The ratio of purchasing to sales expenditure was 70% in the UK, but in Europe it was less because of fewer items being bought out. As Leyland is absorbed into the Daf organisation, "there will be higher levels of plant manufacture," suggested Mike Smith.

C2 - Size and Development
Mike Smith believed whilst there was a correlation between the size of an organisation and its development, what was more important was who controlled the expenditure and their attitudes towards commercial activities.

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In the Public sector, he thought they tended to operate under very strict rules and regulations - probably not unreasonable, given the background. Purchasing status in those organisations would tend to be low, in spite of their size. Although they spend a great amount of money, they are more concerned with preventing misuse of money rather than the optimism of the benefits to the company or organisation.

D - Technology Diffusion

Leyland Daf would appear to be an organisation facing many changes on the technical side. It would appear to be ahead of the field in applying new technology. Little other major information concerning this criteria was available.

E - Computer Technology/Systems

Leyland Daf are generally advanced in this area, they are an MRP II A class user. That status was awarded in 1988, so operation systems as far as MRP II and the factory operation, and the integration of those systems is concerned, is very high. As a result of their merger with Daf, their purchasing systems had tended to fall somewhat behind. There had been no development of a puchasing system as such for the last 2-3 years. A plan that would have lead to the development of a fully integrated purchasing system within the next few years had been discussed, but nothing had happened.

All of those interviewed stated they were behind in this area, and although they had EDI with some suppliers, it was limited. In terms of development there appeared to be between 3 - 4 in computer and systems development.

F1 - Purchasing Procedures

Leyland Daf have a series of plant operating manuals. These cover various activities or principles to be observed by buyers, they cover establishment of principles or establishment of protocols for supplier relationships; the security of those relationships; passing on of information etc. They also cover detailed procedures to be adopted in the placement of new business, placement of new orders, progressing of orders, and the interfaces with other departments, which are described very clearly.

Gill Armstrong indicated there were some 14 manuals covering everything from receipt of gifts at Christmas, to how you process an amendment. The manuals were up-dated regularly, and were followed by the buyers. Following procedures encourages a uniformed and integrated approach to decision making. In terms of the 5 stage framework, they were clearly at the highest level with regard to this variable.

G1 - Corporate Culture

Corporate culture, according to Mike Smith, had changed over the last 3 - 5 years, he comments: "With extensive education on MRP II principles and practice, and also on Total Quality Management, has certainly changed the culture, quite considerably. In addition, the managers have been trained to make much better use of the human resources, of which they are a part, and for which.they are responsible, so we have found quite a significant culture change over the last 3-5 years, which has been reinforced by the merger with Daf".

"The error friendly approach has developed as part of the quality improvement process, being able to admit mistakes occur, without the whole weight of the world descending on your shoulders". Gill Armstrong however, believed the structure was not particularly dynamic in terms of job opportunities and development.

H1 - Buying Centre Concepts
H2 - Buying Process

Generally, from observation in the purchasing department and from interviews, it appeared the purchasing function was totally involved in all aspects of the buying process and buying centre. It had the right to overrule, provided there was a logical argument, and it had a major influence in supplier selection. Leyland Daf was at stage 5 both in terms of the buying centre involvement and the buying process.

I1 - Buyer Characteristics/Development

The desired characteristics of a buyer in general terms were tabulated in Fig 17 of the questionnaire. The general requirement was degree level graduate entry for newcomers to the organisation.

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I2 - Specialism

Buyers at Leyland Daf specialise in a product range. Such specialisation increased the effectiveness of the purchasing activity from a commercial and strategic viewpoint.

J - Buyer/Supplier Bondings

Over the last 5 years or so, there has tended to be a move from major buying organisations to rationalise their supplier bases, as they move towards JIT, TQM, Logistics etc. It should lead to lower real costs of supply long term, and Leyland Daf were not an exception to this trend.

A closer bonding between buying and supplying organisations was regarded as indication of development of the purchasing activity, particularly in the development of new products. Systems integration between buyer and supplier via EDI was developing at Leyland Daf.

In terms of operational activities, regular visits between the two sides was seen as being important. Gill Armstrong, whilst agreeing with this, indicated that she tended to visit suppliers when there was a problem, rather than on a regular basis. She recorded about one or two visits a month, which she felt was rather low for an organisation that appeared to be so well developed in other areas.

A general problem with Leyland Daf has been the continuing cut backs due to recession. This has meant fewer staff, and the need for buyers to spend more time than usual at their desks. Mike Smith believed one of the problems that occurs with a reduced supplier base is the need to spend more time in dialogue, cultivating the supplier relationship. With the number of suppliers falling, the qualitative aspects of the relationship needs to increase. New relationships also meant longer term contracts, that is between 3-5 years with key suppliers, rather than contracts on a batch system, renewed each year.

J2 - Ethics

All respondents recorded that Leyland Daf had, and followed, a strict code of ethics which were laid down in a manual and enforced. They also have a

conflict of interest procedure, which covers any problems in this area. Examination of the procedure is far ranging, covering all aspects of relationships with suppliers, that is hospitality, impartiality, avoidance of Dutch auctions, confidentiality of information etc. It also covers internal relations.

J3 - Hospitality to the Seller

According to Mike Smith: "Hospitality is certainly recognised as an important part of the relationship". He felt that Leyland Daf were at stage 5 in terms of development, in that when they invite a selection of vendors to Leyland to discuss a range of issues, Leyland provides the hospitality. Gill Armstrong, however, recorded that lunches were not reciprocated, and she relied totally on the supplier. Further investigation here revealed that buyers normally got their supplier to pay for lunches.

At Director level, there was an understanding, probably for more senior buyers, that they could reciprocate hospitality, and money was available for this.

J4 - Visits/Meetings Between Buyer and Supplier

There would seem to be difference in opinion in policy over visits. Mike Smith commented: "That is a difficult question to answer, in that the work pattern at the moment is distorted by the new model range of production, but we would expect a buyer to spend a considerable amount of time visiting his suppliers, and would expect them to be out at least a day a week visiting suppliers". Gill Armstrong observed that because of the quantity of day to day work, she was lucky to be able to visit a couple of suppliers a month.

The Director of Purchasing comments: "The buyers are told that they are not doing their job if they sit at their desks - they're normally out and about". It would appear that whilst ideally, buyers could be spending a few days a week with major suppliers, at the moment this is severely curtailed due to operating pressures on the purchasing activity.

Open Questions

K1 - Status and Development of The Function

These questions attempted to solicit factors that might have a bearing on the status and development of the activity, and were therefore very much more open ended. When asked for general comments in this area, Bill Craig observed: "It may be a strange thing to say, but the tidiness of an office impresses me. If there's paper lying about you've got a problem".

Mike Smith supported the view that such factors as large proportions of bought out supplies and the savings potential, and a purchasing main board member were crucial to its development. In the future, he sees consolidation and improvements in the quality of information systems as being of importance for the development of the activity.

K2/3 - Development of the activity

In terms of future developments, closer and more involved links with suppliers and longer term contracts of 3-5 years duration were likely developments. One commonly occurring theme, both in the literature, and from practising buyers, is the importance attached to developing the relationship and interface with major suppliers. Those organisations developing World Class concepts, particularly JIT and TQM, as a prerequisite must reduce their supplier bases, whilst at the same time improving the qualitative aspects of the relationship.

K4 - Lowest Cost of Supply and Organisational Development

The idea behind this question was to examine what respondents believed to be well developed purchasing activities by analogy. It was generally believed that the automobile industry, chemical and retail industries would score very highly in terms of purchasing development. Government related organisations were believed to be less developed, probably the least developed would be the smaller jobbing shop organisations, who would be more interested in controlling the flow of material than the purchasing of raw materials.

K5 - Problems Facing the Purchasing Function Over the Next 5 Years

All three mentioned the ability to handle change effectively. The need to handle re-organisation of the organisation into smaller business units, Gill Armstrong commented that purchasing is now seen as a career, and this is likely to become more pronounced over the next 5 years, particularly with the Institute of Purchasing and Supply becoming a Chartered body.

L1 General Environmental Factors

Environmental factors, and their effects on the purchasing activity were the subject of interesting observations by respondents. Mike Smith observed, when referring to technological change: "There are said to be some periodical effects in terms of the improved technology and communications between suppliers and buyers in terms of improved technology in systems leading to purchasing evolution and possibly in terms of improved manufacturing technology, which will tend to improve productivity. Hopefully, that will reduce prices. There should be some fairly radical developments over the next 2-5 years in those areas".

He believed however, for the most part, Leyland Daf was not subject to rapid technological change, but rather gradual technological improvement.

L2 - Inflation

All respondents involved believed that the higher the inflation rate, the more developed and proactive the purchasing activity needed to be. Mike Smith commented that true professional buyers could considerably reduce the real inflation rate by more effective cost reduction exercises.

L3 Shortages and Surpluses - Buyer's Market

Generally, it would be expected that buyers would take advantage of surpluses by squeezing prices, and suppliers inflate prices during times of shortage. New thinking at Leyland Daf suggested an alternative scenario by developing much closer relationships with fewer vendors. This could help to smooth out those peaks and troughs. Unpredictable shortages of price sensitive commodities, such as rapid increases in the price of oil were difficult to forecast.

L4 - Competition in Buyers' Organisation Market for the Final Product

All respondents accepted that the existence of competition for their organisation's products did put pressure on purchasing to get its act together and become more efficient and developed.

L5 - Category of Industry

Leyland Daf can be described as a jobbing batch production organisation.

M1 - Management Strategies

A range of "World Class" strategies commonly used these days was shown to respondents, and they were asked to indicate how involved their organisation and purchasing were. Leyland Daf was clearly involved in JIT, TQM, Logistical Management, Materials Management, MRP II, CAD/CAM, and Robotics. As Mike acknowledged: "Clearly, the effect of these changes on purchasing have the identical effects on other departments, which means you have to be sharp, smarter and much more integrated with everyone else".

Interestingly, whilst Leyland Daf encourages competition, such World Class strategies as TQM and JIT lead to single sourcing strategies. Mike Smith argues however, they are more concerned with creating a relationship rather than a monopoly. He observes: "The trick is in choosing the supplier properly, that is creating a close relationship not a comfortable relationship". He continues: "the ultimate power that a buyer has, is that he is the one who spends the money, he can always choose where he spends that money".

Buyer and Supplier Dyad

The bonding between buyer and supplier - as it develops, one finds the relationship with the supplier also gets more sophisticated. Although Gill Armstrong felt that the suppliers Leyland Daf was dealing with tended to be smaller in size and not as well developed.

P1 - Government Controls

This was a difficult question for people to answer if they had not been around when government controls have been exerted. A number of methods of control were shown to respondents, and they were asked to comment. There were no real concrete responses to this question.

P2 - 1992 - European Community

In terms of Europe and 1992, Mike Smith indicated: "It is difficult to answer - we see ourselves as a European company anyway, we are getting more and more integrated with our European bases. We see the use of continental EC supplies as increasing, but we also see the use of Daf European suppliers increasing, so yes, there will be more European integration, but it won't necessarily affect our principles and procedures. We will become less regionalised, more PAN European if you like, but that is part of the not necessarily 1992 equation, that's already happening as a result of the merger with Daf".

6.6.5 Conclusion

From the general information collected in the interviews with Leyland Daf, a development profile was produced in Table 7.1 of the Analysis of Results Chapter.

6.7 KENT COUNTY COUNCIL

6.7.1 Introduction

Kent County Council, like Lancashire County Council, is responsible for a wide range of typical local authority services in the Kent area. It has an income of some £680 M (1989/90) to be spent on such services. Kent County Council has a tradition of being somewhat of a leader and innovator amongst County Councils. In the 1950's and 1960's it was one of the largest County Councils in the UK, and was amongst the first to employ specialists in various areas, notably purchasing. Since the Local Government boundary changes, its size had been significantly reduced.

6.7.2 Respondents Interviewed

The three purchasing staff interviewed were:

Richard Storey - Commercial Services Director, 49. Richard was County Supplies Officer until 1990, when he was promoted to Commercial Services Director. His background is purchasing and he has been employed with other local authorities in a purchasing capacity over the years.

Nigel Pointon, 36, is one Assistant Purchasing Manager. His background is local authority purchasing and supply.

Karen Sinden, 23. Karen is a Purchasing Officer with Kent County Council, and joined the organisation straight from school,

6.7.3 Development Of Purchasing Within Kent County Council

Purchasing within the Council is now under the control of Kent County Supplies which is primarily responsible for purchasing all the needs of the Council. The Unit is currently spending some £70 M (1990/91) on bought out materials and supplies. It is likely that this level of expenditure will rise rapidly in the 1990's.

Kent County Council Revenue and Expenditure

	1989/9	1989/90
Kent County Council Revenue	£620 M	£680 M
Kent County Supplies Purchasing Expenditure	£70 M	£75 M

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The current head of the supplies activity is Richard Storey who has the current title of Commercial Services Director. The purchasing function within the council has, for the last 20 years, a high profile, largely as a result of the previous head of purchasing, J de Knopp. He was in the unique position of reporting directly to the Chief Executive of the Council and having enshrined into County Council financial regulations a clear mandate that all departments of the council went to the central purchasing activity for the majority of their buying requirements. Many other local authorities did not move in this direction until relatively recently, that is the mid 1980's onwards. De Knopp was also well paid in the position he held as Kent Supplies Officer; on his retirement in 1986/87 his job was re-advertised at £35,000 + fringe benefits. This high profile of the purchasing activity was not found in other local authorities until comparatively recently, and even then one would be talking about fewer than four or five such authorities.

The current holder of this position, Richard Storey, took up his post as Supplies Officer in 1986. As a result of the Education Reform Act in 1988, and other changes, all commercial activities, including purchasing and supply came under a Commercial Services Directorate,, with Richard Storey as the head. The new department covered traditional purchasing and supply activities and warehousing, with catering, cleaning and print works also under the new directorate. The structure of the Purchasing and Supply activity is shown below.

CHIEF EXECUTIVE KENT COUNTY COUNCIL

COMMERCIAL SERVICES DIRECTOR   OTHER FUNCTIONAL HEADS
See Fig. 6.4
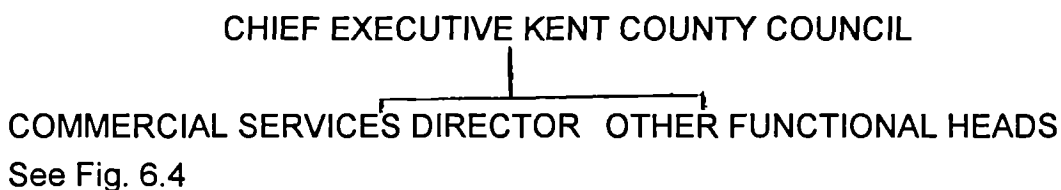
As a result of the Education Reform Act of 1988, and a general move towards decentralisation of authority, budget holders were allowed to decide whether or not they wished to use the services of purchasing. As Richard observed, the "profile" of the purchasing and supply activity was declining. In an attempt to counter this development, purchasing was separated from supplies. Supply is now a separate activity, basically involved with buying and storing for re-sale. Purchasing's role is concerned with placing major contracts "across the board" and all activities involved in this, like sourcing, negotiations, and placing of the contract.

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PRINT MANAGER                    ┌── PRINTING PRODUCTION MANAGER
MIKE RYAN                        │
                                 └── PRINTING OFFICE MANAGER


PRINCIPAL ASSISTANT COUNTY       ┌── COMMERCIAL MANAGER GROUP 1
SUPPLIES OFFICER                 │
JOHN McELROY                     ├── COMMERCIAL MANAGER GROUP 2
                                 │
                                 ├── COMMERCIAL MANAGER GROUP 3
                                 │
                                 └── CUSTOMER SERVICES AND MARKETING MANAGER


ASSISTANT COUNTY SUPPLIES        ┌── DISTRIBUTION AND SERVICES MANAGER
OFFICER                          │
GEOFF WOODS                      ├── MANAGEMENT ACCOUNTANT
                                 │
                                 ├── CONTRACTS AND ADMIN MANAGER
                                 │
                                 └── IT MANAGER


PERSONNEL MANAGER
ANNE WRIGHT

                                 ┌── OFFICE FURNITURE AND SOFT FURNISHINGS
                                 │   MANAGER
FURNITURE AND INTERIORS          │
MANAGER                          ├── FURNITURE PRODUCTION MANAGER
DAVID CRUMP                      │
                                 └── DESIGN GROUP/DESIGN AND SALES


GENERAL MANAGER
COUNTY TRANSPORT WORKSHOPS ──── SUPERVISORS
JOHN BLACKWELL


GENERAL MANAGER
COUNTY TRANSPORT SERVICES ───── CENTRAL HIRE/FLEET MANAGEMENT/LEASE CARS
COLIN WRIGHT


GENERAL MANAGER
"ABACUS" CATERING ───── REGIONAL MANAGER(S) - EDUCATION
STAN GYFORD              CENTRAL CONTRACTS MANAGER


GENERAL MANAGER
KENT CONTRACT CLEANING ───── SENIOR CONTRACTS MANAGER/AREA
SERVICES                      MANAGER(S & E)/AREA MANAGER (N & NW)
ROGER BURKE
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The actual scheduling, expediting etc, is the responsibility of the supply function, As Richard Storey observed: "I've now separated and brought back onto the agenda as I see it, purchasing as a corporate strategic type function within Kent County Council, with its £600 M - £700 M revenue budget, and £200 M - £300 M a year capital budget. What I've tried to do is provide a professional resource for purchasing at that strategic level. So, for example, that function which I call purchasing service, which is staffed by about half a dozen people, will concentrate on strategic type across the board purchasing, for example, fuel oil, and increasingly now, fuel in all its forms, with the liberalisation of the energy industry, electricity, gas and water. We'll also get involved in that unit, in monitoring the County Council's approach to the environmental issues, so we'll have on our plates certain activities concerned with purchasing of hardwoods, unleaded petrol, CFC's and so forth".

6.7.4 Marketing the Purchasing Activity

Kent County Supplies has been established within Kent County Council for same 50 years, and supplies a vast range of goods and services to all Kent County Council Services, and to many other local authorities. The aim has been to deliver the goods as required effectively, and give good value for money in everything from stationery to furniture and computers. With a purchasing expenditure of some £70 Million a year, prices have, it is argued, always been competitive. Demand for Kent County Supplies have spread beyond Kent, and their major customers now include East and West Sussex County Councils, London Boroughs of Bromley, Bexley, Wandsworth, Croyden and Greenwich.

6.7.5 Catalogue Sales

Users of purchasing services are provided with a catalogue each Year, 17,000 of them are printed. They are provided free of charge and contain information on all items in the warehouse, where the consumable nature of those items and the constant demand for them justifies the stocking, warehousing and distribution through Kent County Council's own resources.

6.7.6 Producing the Catalogue

This is done by the commercial people and the catalogue buyers. Whereas the central group will possibly get involved in items which they buy into that

catalogue. If for example a range of items exceeded the EEC threshold limit, then that would be handled by the central staff, as part of their strategic policy activity, but the actual usage of those things in terms of stock control, calling them off when required, presenting them in a catalogue, packing and delivering them, would be the responsibility of catalogue sales.

6.7.7 Role of The Buyer

The buyer at Kent County Council, until 1990, was to a large extent a commodity buyer. As a result of restructuring, they have now become more of a "commercial manager", managing a chunk of the activity, making a "return" to the organisation for the activities involved.

6.7.8 Placing Contracts - Tendering, Purchasing

Local authorities are faced with two major considerations - public accountability and value for money. Tenders for a wide range of goods and services are invited, the standing instruction in this area required tenders to be invited on all business involving more than £125,000. The tendering process involves inviting would be suppliers to submit their lowest prices by an agreed date. There is an increasing tendency these days to only allow "approved tenderers" to submit bids, that is suppliers who have been vetted by the local authority. All tenders are submitted on the local authority's conditions of purchase, and are held in a sealed box until the closing date is reached. During the period up to the closing date, "pre-tender negotiations" may take place between local authority staff and the supplier's personnel. This is often done to avoid any misinterpretation of information.

All tenders or bids are normally held by the Clerk to the Council or the Finance department. After the closing date is reached, all bids are inspected and recorded in a "bid tabulation". The information obtained is then passed on to Purchasing who would normally award the business to the supplier offering the lowest price. A new development for local authorities is the process of post tender negotiations. This is where negotiations take place after the bids have been submitted, but prior to, actually awarding the contract to a supplier. The idea being to improve the "deal" through the process of negotiation with a limited number of suppliers.

The whole process occurs on relatively few occasions, and when it does, the process is well documented for audit purposes. The idea behind the concept is to arrive at a more satisfying deal than would have been the case under straight tendering.

6.7.9 Analysis of Responses at Kent County Council

A1 - Proportion of Buyer's Time Spent on Clerical Activities/Managerial/ Strategic

One of the problems with this question occurred in terms of identifying who best could be considered at buyer level. Richard Storey felt that Nigel Pointon best fitted into this category, although his title was Assistant Commercial Manager. Apparently, the year before, he was a commodity buyer at Kent County Council. Whilst titles often did not adequately describe jobs, it was felt on this occasion, that Karen Sinden, with the title of Assistant Product Manager, best described the "average buyer" in the organisation. She had been with KCC for some 5 years, and had seen marked changes in the job. It would appear from the general consensus of opinion, and having examined a typical buyer's day, that approximately 30-40% of the buyer's time was spent on clerical activities, and about another 10% on clerical administrative duties, leaving between 40-50% on strategic and managerial activities. Their functions were however, changing, far more time was spent on marketing their activities to users within KCC, rather like at Lancashire County Council.

Richard Storey feels the buyer's role is changing, he comments: "He will be more and more now a commercial manager, managing a chunk of the activity, making it viable, making its return to the organisation and presenting himself more as a marketer, as a seller, with buying as a back-up, rather than the reverse". Rather like a mail order buyer, responsible for so many pages of products.

Richard Storey argues the buyer will be more of a product manager, looking after all aspects of the deal. He felt selling their services would come first, then buying would be a secondary activity. This is not surprising, similar findings occurred at Lancashire County Council, although they are not as advanced. It would appear that because customers within the council can buy from whan they want, the purchasing activity has to be far more

proactive and attract business. Their expenditure at the time of the survey was around £40M or about 6-7% of the total KCC budget of some £600 M.

A2 - Structure

Kent County Council had a Materials Management type structure, with specialisation of buyers or assistant product managers in particular areas of expertise. Kent also have their own warehouse function where stock is held and issued. Prior to the present structure they had a centralised purchasing and supply activity. Enshrined into standing orders was the mandate that the total KCC organisation had to use their facilities and expertise. Karen Sinden felt that the purchasing activity was centralised but Richard Storey felt that the Education Reform Act and new budget holders was leading to a more decentralised function.

A3 - Back-Up Services to Purchasing

General specific back-up services were limited, and they were used on an ad hoc basis, although within the Council, many experts could be found. Nigel Pointon however, stressed they did not have to use such services, unless they wanted to. It was not compulsory.

B1/B2 - Status of the Function

All agreed, as did organisation charts, that the head of the function Richard Storey, reported directly to the Chief Executive, Richard Storey observed: "The status of purchasing and supply in Kent County Council has, for many years, been at departmental chief officer level, and that's been continued".

The head of the purchasing activity at KCC is at Director level. His salary, £35,000, and car etc., demonstrates the high profile of the function. If one compares this with Lancashire County Council, the head of the function there is on about £20,000 and at manager level. Historically, Kent County Council has seen the purchasing activity with a high profile.

B3 - Training of Staff

Nigel Pointon recorded three different types of staff training. All trainee buyers were encouraged to obtain the professional IPS exams, either through home study courses or College. There was also on the job training, and special in house development courses. Karen, the buyer, was studying

for an HNC, and then hoped to get more professional training on a CIPS course. It would appear from all interviews, that Kent County Council would be at least stage 4 in terms of this variable, and moving towards stage 5.

B4 - Salaries Paid to Buyer

There was a difference of opinion on this variable. Karen Sinden, felt that salaries were slightly below, the average, whilst Richard Storey and Nigel Pointon felt they were above the average. Comparison is difficult, and so are titles.

B5 - Management of Performance

As with Lancashire County Council, Kent are now becoming more concerned with what the customer wants. They have to sell their purchasing services to budget holders who can buy from where they want. Keeping within budget, saving money, and clerical efficiency were only part of the total measurement process. Measurements of performance were taken between certain interfaces, e.g. customers and purchasing, and supplier and purchasing. In terms of the conceptual model, Kent County Council felt it was at stage 4 here.

One or two comments from Nigel Pointon and Karen Sinden did give grounds for concern over measuring performance. Nigel Pointon believed that savings were not recorded in an objective way. When asked about how he would know savings had been achieved, he commented: "You're talking here of professional philosophy. I have three very experienced people, and myself, who know the market inside out. We know when the buyer has struck a good deal ". When further questioned about recording such savings, he continued: "It's all held in the head. There is no formal reporting. The buyers do not have the power to actually finalise on a deal of any great amount of money without speaking to myself". In view of these comments, and general evaluation of the performance data, it was felt that whilst they were at stage 3, they were only slightly involved at stage 4.

Richard Storey was particularly concerned with how Kent's external customers measured their performance. There was a number of points at which users might measure performance, e.g. delivery services, etc. this in turn meant that KCC was constantly monitoring its responses at such levels.

D - Technology Diffusion

It would appear that the need to interface with their major customers through EDI is perhaps the most interesting strategic development in this area. Kent County Council has taken a decision to allow all its schools, some 800+, to become locally managed and run their own budgets. In order to encourage the schools to order directly from KCC Supplies, there would appear to be an urgent need to get all the schools on an EDI network linked to KCC. This is a rather clever way of making sure the customer uses KCC, rather than the other providers of such services. Using an EDI system, they have an on-line access to all KCC's purchasing services.

E1 - Computer Services

Kent County Council have two systems running side by side. One controls the warehouse stock control, and post purchasing. The other handles all the requisitions from schools and other users, and generates orders. This uses the main frame computer. This second system allows four functions on line, it is not integrated as yet. They are however, in the process of integrating and extending data bases, and would hope within 3-5 years to have a totally integrated database, forward to customers and back to suppliers, using EDI systems. They already use EDI with a few major suppliers, but there is a long way to go. The main benefit of EDI will be when all their major customers are tied into such a system.

F - Purchasing Procedure

As one might expect, those in the public sector tend to spend considerable time and effort establishing laid down procedures covering all aspects of work. Kent County Council is no exception. Richard Storey observes: "Our procedures stem essentially from our place as part of Local Government so that is enshrined in various statutes which require all local authorities to have arrangements in place for effective purchasing in terms of dispensation for community charge payers' money. That then is long enshrined in standing orders, which relate to the whole authority, and most of those standing orders direct themselves particularly towards purchasing".

There was a general belief that for the most part, such procedures, even comparatively new ones, and the existence of laid down operating

procedures did not necessarily lead to a more efficient or developed purchasing activity. In most cases, such procedures were not really intended to improve purchasing effectiveness, their main role was to enable audit to demonstrate that justice had been seen to be done. In the private sector, the main purpose of procedures and manuals was to improve efficiency and performance. This would appear to be very much a secondary role at Kent County Council.

G1 - Corporate Culture

Richard Storey describes the typical culture ethos of Kent County Council: "Traditional culture in local government is one of care and attention to detail, led by professionalism, with very careful thought and practice being given to ensure that there is no room for mistake or error or risk, and that approach then develops the culture. People who have got an eye for detail, who are very careful people, introduces what I call filter management, because the layers of management can filter out any possibility of any danger of a risk. However, over the last 4 years, there has been a lot of input and energy towards changing that culture to a customer culture, a communication culture, and a management rather than an administration culture, and there's been a lot of work done on that , a lot of new blood has been brought into the organisation. New systems, new training concepts and so forth, designed to change the culture from what it was, more to a risk taking entrepreneurial culture. My judgement is that we're at the early end of that process, and it is a long term process".

There are some interesting ideas here, one might well find over a longer time period, practices in the public sector purchasing, moving towards those practised in the private sector. The new purchase culture, according to Nigel Pointon, was to give the customer the best service possible, at the lowest acquisition cost.

H1 - Buying Centre

This is an area where there have been dramatic changes. Up to 2-3 years ago, purchasing would have had "intensive consultations" with major users' departments. The situation appears to have changed with the concept of budget holders. They decide how involved purchasing should be in the

decision to buy. In the past, purchasing had much greater involvement due to standing orders of the council.

H2 - Buying Process Involvement

Involvement varies tremendously from product to product. There was a high degree of involvement in the case of high levels of expenditure but more superficial involvement in items of lower values. Involvement is costly and time consuming according to Richard Storey, so there is thus a need to reduce involvement to areas of expenditure where "best results can be obtained". Certain aspects of the budget holder concept are costing the council considerable sums of money, because Central Purchasing can no longer enforce standardisation. The budget holder can buy what they want, so a much greater variety has been introduced into catalogues, leading to higher prices on certain lines. Whilst it may now be costing the council more because of the range, Richard concedes they may well be using supplies more effectively, wasting less.

I1 - Buyer Characteristics

Generally they try to recruit graduates into purchasing where possible, and train them accordingly, although they have not been particularly successful here, mainly due to initial salaries and competition from other employers. Apparently, many of the buyers are home grown, recruited from school into clerical type activities and then developed via ONC/HNC business studies and then IPS qualifications.

I2 - Specialisms Within Purchasing

Kent County Council encourage specialist product and service buyers and the concept of a product manager. In the case of the product manager concept, that person gets well versed and experienced in all aspects of a particular product, because a large amount of purchasing is, in a sense, for re-sale, where they are buying on behalf of schools, colleges, and other parts of local government. Because of their devolved budget, such institutions perceive Kent County Council as sellers of services and products, so they have to complement the purchasing activity with a degree of product specialist. This also involves how it would be perceived by the customer, the user. They are trying to package a product in all its aspects, so that is meets the demands and needs of the user, as well as being a good

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crucial activity for KCC, and at the same time, representing good value for money.

J1 - Buyer/Supplier Bondings

A close relationship between buyer and supplier these days, would be regarded as conducive to a satisfactory strategic relationship, KCC has however, the dilemma of public accountability on the one hand, and the need to reduce acquisition costs on the other. The private sector has shown conclusively that closer buyer and supplier bondings have yielded significant reductions in strategic acquisition costs. Over the last 2-3 years, Kent County Council have moved along the path towards closer relationships with their suppliers, wherever this does not lead to a conflict with public accountability.

It would seem that links with suppliers are limited on the whole, with most of the contracts being over the phone, or visits from suppliers to the buyer's premises. Certainly visits from the buying staff are much less than in the private sector.

J2/J3 - Supplier Ethics

There are strong controls existing in this area, they follow the Institute of Purchasing and Supply's code of ethics. Hospitality is limited; lunch with suppliers is approved within reason. Reciprocating hospitality is however limited, although they have their own canteen.

K - General Development of the Activity

Richard Storey felt the activity, far from developing, was in fact doing the opposite. Budget holders were "calling the tune, buying whatever they liked, thereby making it difficult to use standardisation volumes and a known demand to obtain good prices. Good purchasing however, can make sure their money goes further than it may otherwise have done. So the relationship has changed, but the significance of the function hadn't changed, it just the way in which it is portrayed as a service and assistance, rather than as a monitoring, policeman role, has had to reflect the nature of the change in the organisational approach to the way the local government sector has been organised".

Richard Storey felt development of the purchasing activity required it to become more proactive and paradoxically, market itself. Getting greater value for money was also seen as a 'hallmark of development'. The continued development was extremely important, and 'Cost of Supply' rather than price, was becoming a more important area for consideration.

K4 - Organisations Cost of Supply

A view within Kent County Council was that the private sector organisations were most likely to achieve lowest cost of supply strategies. Manufacturing and retail organisations engender the greatest sharpness in terms of the way in which they purchase, as that they are affected more directly by market forces, this also improves sharpness in their purchasing activities. Local authority purchasing practices were seen as developing in the future to be more in tune with the needs of the market.

K5 - Purchasing Problems Likely to be Faced Within the Next 5 Years

There would appear to be a move within local authorities to decentralise where possible, in order to increase flexibility and responsiveness to change. If KCC purchasing is to survive in a professional format in a far more fluid environment, then clear policy and very flexible operating practices are needed, according to Richard Storey.

K6 - Restructuring of Purchasing

Kent County Comcil purchasing activity needs to be more flexible and responsive. Studies are therefore required to allow this to occur. There were however, problems of control and accountability to overcome, One of the proposed ways forward might be smaller teams of buyers and supply staff with their own individual identities, that users could recognise more clearly. These ideas were felt to be the way forward by most of the staff interviewed,at a senior level. Another type of structure for the future might be to farm out purchasing specialists to major spend departments with a small hard core central purchasing function to oversee the total activity. Richard feels that both of the above structures may be worth considering in the future, Kent County Council, for the moment, have retained the specialists at the centre, and have tried to make them more user friendly. Inevitably, how the purchasing structure or function develops in the future is very much going to be affected by the many new budget holders.

K7 - Qualities of Buyers in the Future
Nigel Pointon felt that KCC was certainly one of the leading authorities in terms of purchasing expertise. He put their purchasing on a level with the Yorkshire Purchasing Organisation, and Essex County Council, all regarded as in the forefront of purchasing activity in the Public sector.

Richard Storey believes the buyer of the future will have to be more effective in terms of interpersonal skills with the budget holders. In the private sector, the buyer is becoming, by contrast, far more concerned with managing the supplier base. The buyers where purchasing is particularly well developed are seeing their roles developing more into consultants, developing their supplier base. In the public sector, the buyer seems more concerned with selling and developing relationships with the customer, or budget holder. This could well involve a whole range of new activities still to be developed.

L - Environmental Factors Affecting the Development of Purchasing
On the technology side, IT, particularly EDI, would seem to be having important repercussions on the development of the purchasing activity. The clerical side of the activity is being reduced by the introduction of such technology allowing the buyer to spend more time on managerial aspects of the job.

L2 - Inflation
In terms of inflation, in order to minimise price increases, more effort has probably gone into developing the purchasing activity. Price increases have certainly lead to greater activity within an organisation to challenge the need for such increases. According to Nigel Pointon, order clerks would not be up to such a job, whereas trained buyers would.

L3 - Surpluses/Shortages
The effects of surpluses or shortages of goods and services on the development of the purchasing activity appeared to be a difficult question to answer. Whilst Richard and the others understood the question, they had no real information to offer.

M - New Strategic Concepts

Few of the new World Class concepts had been introduced at KCC. TQM was mentioned, but it was only in its infancy. There had however, been significant developments on the computer side - in stock control, warehouse management, purchasing data bases, EDI and a purchasing data base on video with a number of Kent's major customers. Such developments had made the purchasing activity more cost effective, both in terms of administration costs, and in terms of access to data.

N - Supplier Market Variables

Richard Storey felt that the markets in which Kent County Council bought were reasonably competitive. The major areas of expenditure by product were food, fuel oil, paper and cleaning materials and IT. From information analysed at Kent and from other sources, it would appear competition exists, although 'price rings' could reduce effective competition in some of those markets. It was also believed that on the whole, the suppliers they dealt with not as developed as Kent County Council.

P - Affects of Government Controls

The affects of various Government edicts or controls on the development of the purchasing activity are of obvious interest here. Few of those mentioned had any real effect on Kent County Council purchasing activity over the last 5 years. However, in terms of EC regulations, the EC directive on Public Sector procurement would have an effect. Richard Storey observed: "I have to add however, that our experience in EC directives etc., have been, in practical terms, small. It hadn't really added up to anything, even though we have to advertise all our requirements over £30,000 within the European market place, and for an authority of our size, that could mean 40 or 50 tenders annually. However, the actual take-up of those particular advertisements has been minimal. So on the one hand, yes we've had experience of advertising within the wider European context, but paradoxically ,the effects of that have been minimal. We won't change our practices markedly whatsoever because of 1992".

Perhaps the major piece of legislation was the recent Local Government Act already reported elsewhere in the research. This allows budget holders to buy where they want. The Act has certainly put pressure on the purchasing

activities throughout the Public Sector to be more proactive and sell themselves to the ultimate user.

6.7.10 Summary

Whilst Kent County Council is advanced among County Councils in the UK, evaluation of its purchasing profile indicates the need for rapid development in soon of the measurement criteria. A full discussion of the profile results are given in the next chapter, together with the profile in Fig 7.2.

6.8 T D S - PNEUMONICS

6. 8.1 Introduction
This is a particularly interesting organisation in terms of purchasing development, for a number of reasons:

(i)   the researcher has seen the organisation's purchasing activity start from its initial birth.

(ii)   the researcher has visited the organisation on a regular basis, at least twice a year, over a 12 year period.

6.8.2 Respondents Interviewed
The three staff interviewed were Paul Pickup, now the Manufacturing Operations Manager at TDS Pneumonics, and also has overall responsibility for the purchasing function, and developed it from its original inception. Paul's background is purchasing, and he is a full member of the Chartered Institute of Purchasing and Supply. The other respondents are David Smith, the new Purchasing Manager, and George Solomons, a Buyer with TDS.

General Development and Structure at TDS
The company TDS was formed in 1975 and concerned itself with the stocking and distribution of products for Allied Digital Display Systems mainly VDU's. Over the next 2 to 3 years, TDS began to design display systems, selling them through Allied Digital for commission.

During the period from 1978 onwards, TDS began manufacturing on a small scale, some of its new designs for VDU'S, selling in small numbers in the UK market. By 1978, TDS had two divisions, one selling VDU'S, the other was involved in producing digitisers for computer aided design.

The digitiser part of the business grew rapidly, with large investments in the research and development side of the business. By the 1990's 80% of all internally generated funds found their way into the digitiser part of the business. In 1988, in order to expand this part of the business and face up to the European Community competition, TDS was taken over by Pneumonics UK. Pneumonics UK were the distributors for an American company based in Philadelphia, selling types of computer equipment similar to TDS. The take over provided Pneumonics UK with a manufacturing base.

The merger with the digitiser part of TDS to form TDS Pneumonics left TDS Displays Ltd as a separate independent organisation. It was still housed in the same building as the digitisers, but as a separate organisation, using some of the resources of the new TDS Pneumonics company. The new company bought a line of products, and prospered until the beginning of the recession in the early 1990's.

6.8.3 Development of the Purchasing and Supply Activity

No real purchasing function existed at TDS until about 1977, when Paul Pickup joined the organisation as a trainee buyer. At that stage, the organisation was small, about 9 members of staff, most of whom did their own buying with Paul keeping general records. The activity was almost 100% clerical, but with the opportunity of developing a proper purchasing function. As Paul Pickup observes: "My experience of purchasing and supply was limited in the sense that I'd worked in the Forces in the stores. I knew the basics of logistics of supply, but nothing from a commercial aspect".

The company was fast growing, with suppliers in the United States, the UK, and Europe. At that time it was mainly concerned with distribution. In 1980-1981, they started to manufacture their own equipment, cavity generators in those days, and display type products, keyboards and monitors, their main customers being ICI, Ferranti, and British Coal.

Of interest, is a point which has a bearing on development, as the organisation was growing quickly. The requirements of purchasing demanded more than merely a clerical approach. Paul Pickup's background when he started at 23, had been the RAF, where he worked in the supply function. Within a year of starting at TDS (as it was then) he embarked on an Institute of Purchasing and Supply course at the local College. This, he believes, was extremely useful in helping to develop his expertise in the area.

6.8.4 Organisational Development at TDS

When Paul joined the company, he was one of 9 other staff. At that time he reported to the Production Director. In 1977 TDS had a turnover of. some

£1.2 M, 50% of which was spent on bought out materials and supplies, that is £600,000. A developed purchasing activity could make a significant contribution to savings in this area. Senior management were becoming aware of the savings potential. The purchasing function at this stage of its development, was essentially reactive and clerical. Typical activities involved order placing on a daily basis, customs clearance, stores and stock control involvement, and general fire fighting (FIG 4.5) below.

Fig. 6.5   TDS PURCHASING STRUCTURE 1977

General Manager
|
Purchasing
Manager
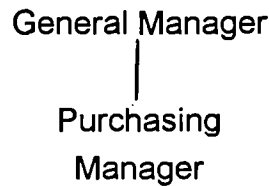
At this stage, many other people within the organisation placed their own orders.

By 1981, the organisation had grown to about 40 to 50 staff, and towards the end of 1981, plans were being made to start manufacturing their own digitisers. The growth of the organisation also had repercussions on the purchasing and supply activity, with the establishment of a purchasing and supply department. The head of the activity Paul Pickup, was still reporting to the production director (Fig 6.6) but now had total control over all bought out material expenditure, and was involved in more proactive purchasing and supply activities.

Fig. 6.6   TDS PURCHASING STRUCTURE 1982

General Manager
|
Purchasing Officer 1982 Paul Pickup

| Storekeeper | Stock Controller | Asst. Buyer |
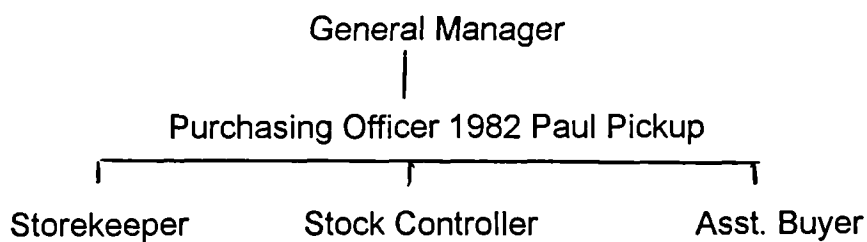
It is also interesting to note that rather than have the buyer looking after stock control, stores, expediting etc., his role is becoming more purchasing orientated. There are still a lot of clerical activities to be undertaken, but an assistant buyer has been employed to deal with more of the clerical

functions. Such changes are allowing a more proactive and management approach to the job from the purchasing officer.

By 1982, the organisation had grown to about £3M, of which approximately 55% is being spent on bought out materials and services. Thus a benefit could be gained from a more efficient proactive purchasing activity. As Paul Pickup observes: "I'd gone from being a trainee buyer to a purchasing officer of one person, to a chief buyer or senior purchasing officer with 3 people, setting up a stores and stock control system, to becoming a purchasing manager with a department of about 8 people under me. That was from 1977 to about 1985". Over a period of about 18 months, they eventually designed and patented their own electronics to make digitisers, and launched the product in 1984 at a computer aided design exhibition. From 1984 they became a manufacturer, and the company grew very quickly, by 1985-6 there were aver 120 people.

In 1986 his title changed again to Production and Materials Manager, with greater responsibilities for input activities. 1987 brought further changes when the functions of the purchasing manager changed again, he was given responsibility for quality control, and became Manufacturing Operations Manager. In this capacity, a new purchasing manager had to be found. The new structure is shown in Fig. 6.7. This structure certainly strengthens the Materials Management philosophy, and with the appointment of an operations manager is beginning to establish a total logistical structure.

Fig. 6.7   TDS PNEUMONICS PURCHASING AND SUPPLY 1986-7

Manufacturing Operations Manager

(Paul Pickup)

Other Activities

Purchasing Manager (Dave Smith)

Secretary

(GeorgeSolomons)

Buyer   Storekeeper Despatch   Prod, Control Stock control

Asst. Buyer   Asst.   Asst. Asst.
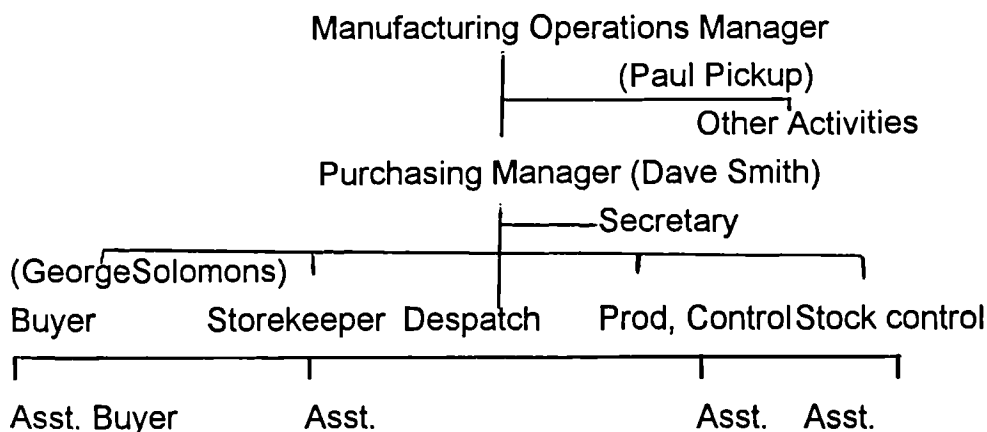
This type of development of the purchasing activity would appear in general terms to fit with the a purchasing activity in terms of its organisational development at stage 3, possibly moving towards stage 4.

It is interesting to note in the interview with Paul Pickup that as purchasing evolves over the years, so its importance within the organisation also grows. By 1986-7, his title has changed to purchasing manager, and he reports to the MD.

The function was essentially a reactive clerical activity when it first started in 1977. Typical activities were order placing on a day to day basis, expediting, customs clearance, and generally fire fighting. Over a period of 12 years or so, the activity has fundamentally changed. It is now seen as a proactive function, managing a sophisticated supplier base. Orders are placed for a year or longer, and a seperate material control activity is responsible for scheduling deliveries into the organisation.

6.8.5 Analysis of Responses
A1   Time Strategic, Managerial, Clerical
The general feelings from the three interveiwed, Paul, David Smith (purchasing manager) and George Solomns (Buyer), was that about 60% was managerial time, and 40% clerical. There was some disagreement, but after some careful explanations and general observations, the above figures were found to be roughly correct.

A2 - Structure
From the general discussions with Paul Pickup, and organisations chart produced, TDS had a Materials Management structure, and was rapidly developing towards more of a Logistics approach. The purchasing department was a part of a larger materials management function. By 1991, the structure looked like:

P M (David Smith)

Clerical Asst.   Buyer   Buyer
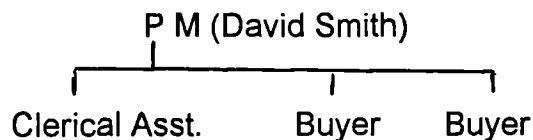
Whilst stores and goods receiving reports to purchasing, it does so within a Materials Management function.

A3 - Back-Up Services to Purchasing

Their services appeared to be rather limited within the organisation. Apparently, back-up legal services were available, and they used the services of Cooper and Lybrand when faced with specialist problems. Sometimes financial checks were made on suppliers, if major sums of money were to be involved. Vendor assessment was apparently also possible in terms of quality variables, by the quality control manager. It would appear however, that in terms of back-up services, this is limited to occasional help from other departments or from outside sources.

B1 - Status of Function

The purchasing manager, David Smith, reported to Paul Pickup, who is now operations manager, and he in turn reports to the operations director who reports to the MD. Paul had given the impression that he reported directly to the MD. Whilst this might be true on an exception basis, his direct line manager was the operations director. This would put the purchasing activity at around stage 3 in terms of development with this variable.

B2 - Title of Purchasing Head

All agreed that the head of purchasing was given the title of Purchasing Manager.

B3 - Development and Training of Purchasing Staff

From the interviews, and the researcher's knowledge of the organisation, the company encouraged training and development of all those in the purchasing and supply activity, as Paul Pickup observes: "I think within purchasing and supply over the years, we've had a very good training and development process. We've brought people in from outside into goods receiving jobs and stores jobs, younger type people, who we've felt that with the ability and the academic grounding, they would progress in a purchasing role, so we've actually trained and developed people. We've sent several people over the years, on IPS courses.

B4 - Salary of Buyer

All three believed this to be about the average for the area, between £11,000 - £13,000. Information provided by the organisation confirmed these findings.

B5 - Measurement of Purchasing Performance

Paul Pickup reported a number of ways the organisation measured the performance of purchasing:

- Vendor rating system - procedures, regular reports from a computer data base on quality and delivery of suppliers.

It appears however, the recession has meant that measurement of purchasing performance has been significantly reduced. It was believed to be difficult at this time. Like many, TDS had cash flow problems, and didn't always pay suppliers on time. This lead to bad feelings among suppliers, this in turn affected loyalty from and performance of suppliers. It would appear that if suppliers are not getting paid on time, this then causes delivery problems, and pricing problems occur because of purchasing smaller quantities. Suppliers have apparently put them 'on stop' on numerous occasions.

It is an interesting point that with recession and cut backs, measurement of performance is also cut back. It is often in times of recession that an organisation should be more concerned about the contribution purchasing is making towards corporate profitability. Other measurements of performance however, will become meaningless if the purchasing function's Organisation is itself compounding the problems by not paying suppliers on time, or making major cutbacks on supplies. When it becomes 'all hands to the pumps', measurement of buying performance becomes rather meaningless.

C - Organisational Purchasing Aggregates

The bought out materials expenditure in 1991 was around 60% of total turnover. Apparently this has only increased slightly over a ten year period. The organisation in 1991 had a total turnover of some £5.5 M and employed about 85 people. This turnover is split between TDS Pneumonics (£2.5 -

3M) and TDS Systems (£2.5M). However, the total turnover has fallen to £5.5 M from £6.5 M in 1990 due to the recession.

D - Technology

Rapidly changing technology has a major impact on sore purchasing functions. Prices were falling as the product was developing. Product development life cycles are reducing each year, particularly in terms of chip technology. Holding stock could be expensive, particularly with rapid product innovation.

E - Computer Technology

The Purchasing function is computerised and functionally integrated. EDI however, is used with 2 suppliers only. The hardware is from Digital Dynamics.

F1 - Procedures and Systems

According to Paul Pickup, up until recently, every procedure was followed. Due to the recession and staff shortages, they are not being followed as they once were. Standard purchasing and operating procedures are not all written down, but, there is an understanding on, for example, how to negotiate and putting demand into the market. In terms of authorisation for expenditure, the level of cost increases acceptable etc., such things are laid down.

G - Corporate Culture

As a result of the recession, the organisation is mainly interested in keeping prices down, but they are still concerned with supplier partnerships, loyalty, and overall costs of supply. Good supplier relationships and partnership sourcing helps during a recession to keep prices under control. The overall impression in terms of culture was a relatively small organisation coping with rapid technoloical change. It had to be flexible enough to meet these changes quickly.

H1 - Buying Centre Concept

On major items of expenditure, the general feeling from all three was that purchasing was involved at all stages of a purchasing deal. They also have the power to veto decisions taken by engineers. As a result of the cutbacks

within the company over the last 12 months, manufacturing and engineering has been integrated within manufacturing, now when a new product is going through design, purchasing are asked to suggest suppliers. In order to do that, they request a specification. In the past this did not happen to the same extent, leading to engineering determining the supplier. Integration of the activities has meant the purchasing function is far more involved in supplier determination.

H2 - Purchasing Involvement in the Buying Process

Purchasing at TDS appeared to be involved in all stages of the buying process when it came to items of high expenditure. Paul Pickup was very concerned that purchasing had control over the 20% of items that accounted for 80% of purchasing expenditure. He commented: "I would much rather go for departmental day to day buying requirements to be carried out by the departments concerned". He was referring to buying low value items. He continues: "If buying low value items means stopping George Solomons (buyer) from negotiating a contract and saving us £15,000 - £20,000, because he hasn't got the time, and he's spent 2 days spending £300, that sort of situation is just a waste of time".

This is an interesting point. Many purchasing organisations, as they develop, try to concentrate their efforts on high value items, and leave the purchase of lower value items more to the requisitioner.

I1 - Buyer Characteristics

Paul Pickup wanted assertive buyers with initiative and good communication skills, who were prepared to obtain professional qualifications. He believed that the days have gone when anyone could get a job in purchasing, particularly those organisation like TDS, where the activity is taken seriously. He comments: "If I'm interviewing someone for a job, I want them to tell me a bit about buying, I want them to tell me why they're going for a buying job, not because 'there's nothing else available', you've got to have someone who wants it".

I2 - Specialisms Within Purchasing

Buyers specialised in purchasing, they were not involved in stores or expediting. This indicates a degree of professionalism within the activity. In

terms of the purchasing expenditure, certain buyers had responsibility for certain products and services, Essentially, purchasing was between stages 3 and 4 in terms of this variable,

J1 - Supplier Bondings

There were regular meetings between major buyers and suppliers, and in most cases, the buyer would be encouraged to visit such suppliers on a regular basis. George Solomons, the buyer, indicated that apart from visits suppliers made to TDS, he would visit suppliers about twice a month. This was not as often as he would have liked, but cut backs meant he spent more time in the office. He explained they had 12 major suppliers that represented over 80% of all expenditure, and met with such suppliers at least once a month.

J2 - Buyer/Supplier Ethics

Paul Pickup explained that he was a strong believer in ethics, he comments: "I don't want buyers being given cars for placing orders - I'm a Corporate Member of the Institute of Purchasing and Supply, and I'm a very strong believer in the ethics. I think at the end of the day, there are ethics to follow. If a suppplier takes me out to lunch when I visit , then I'll take him out when he visits , and I encourage our buyers to do the same. Obviously, you are entertained from time to time, but not to the point where it influences your decision. I don't mind turning a blind eye to a bottle of whiskey at Christmas time, but having said that, I do believe in sending a bottle of whiskey to the suppliers if they've given us a good service, so it's very reciprocal. I'm into reciprocal relationships, because what I don't want to do, is have one guy who thinks he has something on us".

The general feeling from David Smith and George Solomons, was that they could reciprocate if and when required. There was however, no written code in terms of ethics. Interestingly, ethics tended to revolve around the acceptance or otherwise of gifts, rather than how the supplier should be treated in other ways, eg avoiding dutch auctions, confidentiality of information.

K Open Questions

K1 - Development of the Purchasing Function

All three recorded that they felt the purchasing function had both grown and developed at TDS. Structural changes are indicative of such development. In 1977 there wasn't a purchasing function, by 1991, there was a Materials Management function.

Paul Pickup believed that salaries were higher in real terms than say 3-5 years ago. He saw a purchasing executive on the Board of Directors as indicative of growth and development of the activity.

In terms of comparison with other organisations from both the Public and Private sectors, it was felt that TDS was a long way down the road, but not as developed as say Marks and Spencer, and some parts of the Car Industry. Local Authorities were felt to be inhibited by bureaucratic control. Dave Smith placed Marks and Spencer, Ford, ICI and Shell in the top half of the list, but more from reputation.

K5 - Major Problems Facing Purchasing in the Next 5 Years

Computer developments were seen as one of the major developments, and the move towards EDI. Dave Smith commented improvements in efficiencies would enable the buyer to spend more of his or her time on real purchasing activities. Paul Pickup felt the buyer should be spending more of his or her time out with suppliers. In 5 to 10 years, more people will be based out of the office.

L1 - Environmental Factors

Rapidly changing technology, they believed, lead to a more efficient Purchasing function. Buyers needed to be on their toes.

Inflationary increases, it was felt , put greater pressure on the purchasing activity to become more efficient and effective in the way it handled price increases. Price was a very sensitive issue at TDS. The semi-conductor industry is probably one of the few industries where there is negative inflation, that is price decreases. On other commodities, prices were rising, and it was more difficult to fight such increases. It was suggested that close

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relationships with suppliers meant forewarning of shortages. Paul however, felt that in cases of surpluses you "screwed the supplier down on price".

There would be some confusion here, in that good relationships are supposed to control excesses of behaviour to exploit shortages or surpluses, but price still seems to be on top of the list in terms of negotiations. Competition also seemed to put pressure on buyers to become more efficient in terms of their job. TDS was essentially a jobbing type organisation under pressure to keep costs under control.

M1 - World Class Concepts

When asked the question about World Class Concepts such as JIT, TQM etc., Paul Pickup was particularly articulate, he remarks: "If you want me to be frank, I think a lot of them are bullshit, but yes, we've been affected by them to some degree, we have certain customers coming along who profess to know everything there is to know about JIT, and World Class Manufacturing, and because they're 20 times bigger than us - if I sound cynical, I'm trying not to be, I'm being honest - they like to think they can bully us. We give them a good product, and they like to come along here and tell us everything that's wrong about us, and at the end of the day, you end up feeling patronised. Then when you go down to their place, you see all the problems down there in a lot bigger way than they've suggested at your place".

Paul believed that many organisations play around with these concepts without adopting the full philosophy everyone must get involved. Generally, such concepts were felt to put more pressure on purchasing and its development. He felt that JIT and other such World Class concepts were easier for the larger organisations to introduce, although smaller organisations could take board many of the concepts to a more limited degree. Dave Smith was not used to certain of the concepts, and they needed explaining. He felt they had certain elements of some of the concepts but no real strategy to implement them. Surprisingly, these concepts were met with ignorance and ridicule. It was felt by the researcher that those commenting were affected by such strategies and were having difficulties in coming to terms with them.Some major customers of TDS were begining to insist that TDS got more involved iri such concepts in order to

reduce costs and increase efficiency. Dave Smith and Paul Pickup felt such concepts called for a more professional approach from the purchasing activity.

O1 - Supplier Development

Suppliers to TDS were sometimes more developed, sometimes less. The feeling however, was that more advanced suppliers forced changes on TDS. Certainly the relationships with key suppliers have developed significantly over the years, to the benefit of both buyer and supplier.

Government Controls

Such controls did affect the organisation from time to time. Import procedures seemed to be a problem area, although this was not what the question was asking. It was felt that 1992 legislation was horrendous because of the need to learn new systems and procedures. Generally, Government controls were seen in terms of extra work from an already overworked buyer, rather than an opportunity.

6.8.6 Conclusion

TDS Pneumonics is a particularly good example of an organisation where one can see many of the stages of development occuring over time. Its profile is given in the next Chapter in Fig. 7.3.

6.9 LANCASHIRE COUNTY COUNCIL

6.9.1 Introduction

Lancashire County Council, is a Local Authority with a revenue budget of £1.1 Billion (1990), to provide the traditional services expected of a local authority; police, health, social services, education etc. The majority of this income is spent on salaries of those people employed by the local authority. Approximately 5-8% of this budget is spent on bought out materials and supplies, that is between £40M- 45M overall, of which the central purchasing unit spent between £22M - £25M (1989/90).

6.9.2 Respondents interviewed

The three main respondents at Lancashire County Council were Gordon Johnson - Deputy Clerk; Tony Billsborough - Purchasing Manager, who reports directly to Gordon, and finally Geoff Yale the buyer.

6.9.3 Development of the Purchasing Concept

Since 1952, Lancashire had what was called a co-ordinating purchasing scheme, which was a system whereby the major user department for procuring for a particular commodity, bought on behalf of all the other departments who might have use for such goods. They co-ordinated requirements and then sought to arrange a group contract. This is often called the "lead buyer" approach. This was done, not by specialist purchasing staff, but by staff who were in departments and who were working in the main, part-time on purchasing and full-time on their prime jobs. They also developed an expertise in arranging contracts, but they were not specialist purchasing officers. According to Gordon Johnson, the deputy clerk to the council, this was not satisfactory longer term.

There was thus considerable scope for improvement in purchasing arrangements, by for example using specialist officers, and concentrating that expertise, and also maximising the use of the County Councils purchasing power. That combination would derive substantial benefit for the County Council. After a fairly long exercise of discussion and debate with the departments involved, and through the activities of a joint working party, a report was produced in 1985 that recommended the establishment of a central purchasing unit. As the co-ordinated scheme had been in position

for some time, a gradual introduction of the new scheme began. The concept was not new to Local Authorities, benefits of such an approach had been clearly demonstrated by similar earlier developments within Kent County Council, and the Yorkshire Purchasing Group.

Gordon Johnson had seen the benefits of a purchasing function when he worked at Yorkshire Metropolitan County Council, he records: " I went there when it was set up, I actually helped to create the West Yorkshire Purchasing Organisation, which was at the time of Government re-organisation, and when it was actually establishing itself in relationships with the metropolitan district councils - now that was clearly a different type of organisation. It was not one, it seemed to me, that you could transplant to Lancashire because there was not the tradition of centralised purchasing. We did not have the stores facility or the distribution facility, and all of that would require very substantial capital investment which I didn't think was likely to be acceptable, given the way the county council had operated for about twenty years. So we sought to improve the existing arrangements so far as possible at the first step. Having done that, and being satisfies that we couldn't do much more, we then set about trying to convince people of the need to set up a different organisation, which was essentially a contracting organisation, rather than a storage and distribution organisation".

Interestingly here, a purchasing activity was established from knowledge of the gains that could accrue from the development of such an activity.

6.9.4 Development of a Central Purchasing Unit

Following the study of its purchasing arrangements, the County Council establishes a Central Purchasing Unit in the Chief Executive/Clerk's Department in November 1986. The unit was staffed by professionally trained and qualified purchasing officers, working full time on the centralised purchasing arrangements common to many departments, it replaced many of the contracts formally dealt with under the co-ordinated purchasing scheme with new centralised arrangements. Its first head was Tony Billsborough, a buyer bought in from outside, his background was the automotive industry.

In order to maximise the benefits of centralised purchasing, it was necessary to combine the County Council's requirements for a commodity and like

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commodities, into a single contract, ensuring that he most cost effective and efficient methods, and modern purchasing techniques were used to obtain the maximum advantages from the vast purchasing power of the authority. A number of departments still retained their own supply arrangements, which varied according to particular specialist needs. The purchasing function may be centralised within the department. In some areas, purchasing was an integral part of departmental work, and could not readily be separated from the general responsibilities of most managerial staff. In other instances, it was appropriately operated at district or divisional level, with central control and co-ordination, perhaps through departmental supplies, or through purchasing officer arrangements.

Liaison with contract users forms an essential part of the central purchasing unit's work. Prior consultation takes place as part of routine practice, to ensure that new contract arrangements cater for each individual department's requirements

Central Purchasing Unit CPU

The CPU was established in 1986, its major role was to:

- provide departments of the County Council with a professional purchasing service, which will improve standards, and lower costs;
- provide all personnel with an efficient system of procuring goods whilst preserving full public accountability;
- Bring together at one point demands from all departments to ensure the County Council's purchasing potential is maximised.

The central purchasing unit carries out much the same role as the purchasing department of any large commercial organisation whose function is also to act as a centralised procurement agency. The unit, based in Preston , is staffed by professionally qualified buyers with a wide range of local government and commercial experience in their respective fields. These include foodstuffs, hardware, and domestic electrical equipment. Whilst still very much in its developmental stages the Unit is increasingly being called upon to provide purchasing and market information across the whole range of goods and service required by County Councils departments. Advice is given on source of supply, price, quality, reliability and many other

factors that influence "value for money" purchasing. Deliveries are normally made direct to the supplier chosen to the user department concerned.

As the function developed, it has been able to measure its cost savings. Tony Billsborough records audited savings of some £1.3 M over the last 3 years, 1988 - 1991. He also identified a very fragmented approach towards purchasing and lost opportunities for making savings.

For contracts over a certain value, £5,000+, specifications are prepared, and tenders invited and evaluated. Eventually a contract is placed for the goods and services concerned.

6.9.5 Consumer Panels/Specifications

These are panels established representing major users of common items purchased by LCC. Each department has a 'voice' in terms of the specifications concerned. On many occasions, items specified were 'over the top', that is to Rolls Royce specifications when there was no need. Whole 'life cycle' costings are investigated, that is how long does the item have to last. Certain products with lives of many years were only used for a few years and scrapped because of new technological developments. 'Value for money' has tended to become the new 'in' phrase.

6.9.6 Contracting Procedures

To ensure that the County Council obtains the most beneficial prices available, contract arrangements on a competitive basis are made. Tender invitations are accompanied by written specifications, to ensure the maintenance of proper standards and indications are given as to likely volumes. Such contracts must be arranged in accordance with the County Council's tendering procedures, financial regulations and standing orders, copies of which are available to all staff with responsibility for contracting.

It is inevitable that in addition to the items which are on contract, other local purchases will be made. All staff involved in such purchases are advised to ensure that the best 'value for money' is obtained by seeking competitive price quotations wherever this is possible. The Central Purchasing Unit are prepared to provide guidance in all areas of such purchasing .

6.9.7. General Development of the Central Purchasing Unit

When it was established in 1988, to the present, its size has more than doubled from 3-4 staff to 9 in 1991. However, both its role and scope have also changed, ad it is likely to change further. From its inception it has had · to be proactive, and sell its purchasing expertise to user departments. The standing instructions and financial regulations of the County Council were binding on all departments to use Central purchasing Services. However, recent developments within the establishment have seen direct service organisations for building, vehicle maintenance and catering. New standing orders have been created, giving them more freedom to compete with the private sector, so they can operate in such markets more effectively.

The Education Reform Act 1992 now gives colleges and schools through-out Lancashire the freedom and flexibility to buy from whom they like. This has meant the CPU has had to become even more proactive and market its services to schools and other would be users. An interesting development here, has been the employment of a marketing Officer within the CPU. At the moment attention is being focused on selling purchasing's services to schools, but it is likely that marketing activity will be extended into other authority areas, and perhaps to would-be users outside the Lancashire County Council boundaries.

6.9.8. Organisational Size and Expenditure

LCC in 1988/1989 had a recorded revenue of some £ 950M. In 1989/1990 this and reached £ 1,050M. Purchasing expenditure by all departments on revenue items was estimated to be £ 40M in 1989, and £ 45M in 1990. However, of the total revenue expenditure, only £ 22M was directly under the CPU's control in 1989, and £ 25M in 1990. Capital expenditure was treated in a different way by the Public Sector, and was not under the control of the Purchasing function. An organisation chart is shown in Fig 6.8.

6.9.9 Analysis of Questions

A1   Clerical/Managerial/Strategic

Gordon Johnson, when asked about the proportion of a Buyer's time spent on clerical/managerial/strategic, was of the opinion that it was probably too much on the clerical. He believed that as the Unit got better known, it could end up being taken over by clerical activities. Indeed, there was a belief that

more time spent on savings was cost effective, possibly £ 72,000 a year per man, that's simply taking the existing savings over the past years.

Fig. 6.8

Lancashire County Council Structure

CHIEF EXECUTIVE
|
ASST.CHIEF EXECUTIVE G.JOHNSON (Gordon)
┌──────────────────┴──────────────────┐
PURCHASING FUNCTION   OTHER FUNCTIONS

T. BILLSBOROUGH (Tony)
PURCHASING MANAGER
┌──────────────────┬──────────────────┬──────────────────┐
PRINCIPLE PURCHASING   SENIOR MARKETING   SENIORPURCHASING   PURCHASING
OFFICER   OFFICER   OFFICER   OFFICER
| | HARDWARE
FUEL OIL   FOODSTUFFS |

                                                            (Geoff)G.YALE
ASST . MARKETING |
OFFICER
┌──────────────────┬──────────────────────────────────┐
PURCHASING OFFICER   PURCHASING OFFICER   PURCHASING OFFICER
PRINTING & STATIONERY AUDIO VISUAL
|
CLERICAL ASST.
HMSO

+ 3 CLERICAL ASSISTANTS/TYPISTS
- - - - -dotted line indicates interviewees and management level,

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Geoff Yale, the buyer commented that he did a lot more clerical work than he felt he should. In general terms, he felt about two days were spent on clerical activities, the rest of his time was spent on buying, by this he meant managing contracts. Managing contracts however, also seemed to involve a lot of clerical activity by the buyer, compared with buyers in the Private Sector.

Tony Billsborough, the Purchasing Manger, seemed to be involved with most of the 'real buying' that is managerial and strategic aspects of the job.

A2 - Structure of Purchasing

The structure that best described the purchasing operations at Lancashire County Council was the Materials Management structure.

A3 - Back-up Services

Within Lancashire County Council there were specialists of all kinds, legal, technical, design etc. It was up to the individual buyer if they wanted to use such services. Whilst the services were available it was not a pre-requisite that the buyer consulted with them prior to placing a contract. In more developed organisations, laid down procedures demand you do, to avoid what could be costly sourcing mistakes. Gordon Johnson commented that they deliberately put the purchasing function into the Chief Executive department, to enable it to get legal and public relations support.

B2 - Status of the Function

The organisation chart and interviews reveals that the had of purchasing reports directly to the Chief Executive or Clerk of the County. In terms of day to day activities, Tony Billsborough reports to his assistant, who is about to become the new Chief Executive. This is equivalent of reporting to the MD.

B3 - Title of Purchasing Head

Tony Bilsborough's title is Chief purchasing Officer, unlike Dick Storey at Kent County Council, he is not at Director level.

B4 - Salaries of Buyer

Of those interviewed, all three believed that average salaries for a buyer were slightly below the average, as Tony Billsborough indicated, the average salary was about £ 11,000 a year, 1980. Interestingly, the salaries at Kent County Council, one of the other organisations in the survey, were higher, around £ 13 - 14,000. Gordon Johnson felt that the only true test in Lancashire was the market place, and that responses received from job adverts tended to reveal they had the salaries about right. He recorded a salary of around £ 14 - 16,000 for a buyer with 2-3 years experience. Geoff Yale was recording a salary of around £ 12,500 and Geoff and Geoff had some 5 years experience. On balance further investigations tended to reveal that salaries tended to be about 10 -15 % below the average for the area.

B5 - Measurement of Performance

When asked the question concerning measurement of purchasing performance, Gordon Johnson mentioned the need to make cost savings, but also felt a second measure to be 'maintaining their customers', In the public Sector, there is a need to market purchasing services, this is not found to the same extent in the Private Sector. Certainly the researcher is not aware of organisations other than in the Public Sector where measurement of the number of customers is seen as an important measure of purchasing performance.

Tony Billsborough also seems to lay great emphasis on this variable, he comments: "We have a unit that functions in a commercial way, we're not having to sell our services, we've got marketing staff, we equipped ourselves with all sorts of advertising leaflets and marketing aids, and at the same time, we have a strategic role to play, because of the way Central Government have set new areas for Local Government to take on board.

With the development of separate cost centres, and the nation of 'budget holders', the ability of purchasing to sell its services to would be users is extremely important for long-terms survival. In terms of cost savings, savings are achieved on contracts either through negotiating better prices, or altering specifications, with the approval of the user, to get better value, It would seem however that there is not a systematic monitoring of savings in

place. Larger savings however, are reported. In terms of this variable analysis reveals they have reached stage 3 of evolution.

Interestingly, in the interview, great stress was given to sorting out the clerical and administrative side of the contracts. In many ways this is only to be expected with so many contracts to manage.

Tony Billsborough also describes the importance of 'value for money', that is the lowest price may not give he best deal. Apparently there was a great fear when the CPU arrived on the scene, that they would simply be concerned with awarding a contract simply on the basis of cost.

C1 - Organisational Aggregate Purchasing variable
From information already provided, purchasing expenditure to total sales revenue is low, in the order of 508%, which is worth, on an income of £ 1.1 billion, £ 50 - 60 m, of which purchasing controls about half.

Most of the expenditure goes on salaries to general staff. It is therefore not surprising to find that Lancashire County Council has been slow to develop the purchasing activity. If however moves to get better value for money continue, many of the services provided by Councils should be 'bought out'. In such instances, this could well enhance the role of purchasing and supply in the Council, and lead to greater development of the activity and extensions in the overall role.

D - Technology
In terms of technology diffusion, this is much slower in local authorities, due too a more conservative approach in specifications of all kinds.

E - Computer Technology
The computer developments were limited compared with say Kent County. Lancashire County Council purchasing have a micro computer, word processor, but limited with major users. Whilst the County has a main frame ICL, purchasing's own unit's micro computer is not linked to it. They operate an IBM system in order to get price information, from a London organisation called Purchasing Index. In terms of computer development, they would be

at Stage 2 of the 5 stages of development, although orders are generated for the most part manually.

F - Procedural Developments

One would have expected a local authority to be particularly well developed in this area, and this is indeed the case at LCC. Apart from general procedures covering all those working for the council contained in Standing Orders, there is also a purchasing manual. This was introduced by Tony Billsborough when he arrived at LCC, to ensure a uniformed approach to the work throughout the function. It covers day to day office procedures, and a number of strategic type operations. It is up-dated on a yearly basis, or when appropriate. Contained in the manual are relevant standing orders. Unlike the private sector which tends to use manuals more for commercial advantage, the LCC manual is more concerned with accountability and controls. Procedures however tend to be restrictive.

G - Corporate Culture

Tony Bilsborough felt that the culture of a local authority is, by nature, bureaucratic, it is much more rigid than the private sector by far. Standing orders have to be followed. Post tender negotiation had to be witnessed by staff and recorded for audit purposes, leading to much higher sourcing lists.

H1 - Buying Centre Concept

Whilst Tony Bilsborough believed that LCC were involved in all aspects of the purchasing of goods and services, this was not necessarily the case. There were indeed instances when, through the buying panels and consumer research, they did indeed get very involved in the buying centre, however, the budget holder could dictate the level of involvement they wished to release to purchasing.

He indicated that they had the power to veto others in the buying centre. In practice however, they tried to persuade. From talking to others in LCC outside purchasing, a veto would not be tolerated. Some parts of the LCC are far more dominant in the buying centre than others e.g. Engineers, Architects, still tend to keep purchasing at arms length. They have the final say. When the same question was asked of the buyer, Geoff Yale, he felt

that whilst he had involvement in most areas of the buying centre, his main involvement still centred around contract terms and the price.

H2 - Buying Process

In terms of the buying process, it was felt that Purchasing was involved all stages of the process. This would indeed seem the case. Again, the degree of involvement may not necessarily be dictated by purchasing, budget holders decide the involvement. In the future however as 'budget holders' become more experienced, they may well not wish to have the same degree of involvement.

I1 - Buyer Characteristics/Development

The characteristics required of a buyer produced some interesting comments from all respondents. Many were common. Tony Bilsborough was certainly concerned that staff could offer the necessary skills, but also had the right personality i.e. somebody who could talk to customer satisfactorily on a face to face basis, not someone looking down at them. Skill and experience are mentioned, perceived what the customer wants. Whilst CIPS or degree qualifications are useful, without the right buying personality there could be problems. Geoff Yale felt that LCC were at stage 4 in terms of this particular variables. Further investigations agreed with this observation.

I2 - Specialisms within Purchasing

Specialisms within the purchasing activity could develop if and when the function takes on increased responsibilities in the future, at the moment it is limited to an expediting function.

J - Buyer/ Supplier Relationships

General buyer/supplier bonding on the whole were not as strong as in the private sector. For the most part, the suppliers visited the buyer. Visits to suppliers from buying staff were very limited. Tony was trying to change the situation and get his buyers out more to see suppliers' operations. According to Geoff Yale, most of the contract with Suppliers was over the phone, or other general methods of correspondence.

J2 - Ethics

As one would expect, the rules on ethics were tightly enforced - occasional lunches and gifts of small intrinsic value, like diaries, were tolerated. Geoff Yale indicated that staff followed the CIPS code of ethics.

J3 - Hospitality

Hospitality tended to come from the supplier in most cases, the buyer could not reciprocate. Tony felt that hospitality was an important part of the relationship, and the lack of it from the Council side often lead to embarrassment. "I think it is in some instances, especially when we meet with our counterparts from other authorities, and I must be quite honest, what I've actually done, I've ended up paying out of my own pocket for some visitors I've had, because I wouldn't be placed in the embarrassing situation of being refused a meal through the county, so I've paid for it out of my own pocket, whereas in the private sector of course, you don't have that sort of problem or restraint.

J4 - Visits and Meetings between the Two Sides

Visits tended to be from the supplier to the buyer, and are more limited in the private sector. Visits from the buyer to the seller are very limited. From the general questions covering relationships with suppliers, it would appear that this aspect of purchasing development is very limited - between 1-2 overall.

One of the major problems that such lack development causes in this area is in terms of movements in long term acquisition costs. Those organisations in the private sector that have developed the buyer/supplier interface have found it far easier to develop and extend such concepts as JIT, TQM, EDI, etc. It is in the development and extension of such strategies that organisations will be able to dramatically reduce strategic acquisition costs in the future. Unfortunately, the systems and culture of local authorities inhibit such developments.

K - General Development Questions

From all those interviewed there was a feeling that the scope of the activity would grow in the future. In the past, contracts were placed for items used by many departments at LCC, now they are beginning to place contracts specific to one department. As Tony Bilsborough remarks: "Having been

established for three years, having got some sizeable cost savings under our belts, we are now in a situation where we've proved that the concept of centralised purchasing works in Lancashire, and we have been able to demonstrate those benefits to the Council and the Chief Officers of the County. It is now accepted that the development stage in our operation has completed - we're here to stay." Having proved themselves in terms of handling purchasing effectively for part of the County, and making savings, their activities and scope should be extended.

Both the Chief Executive and Tony Bilsborough felt that the buyer must be released from administration and clerical work to get on with more management purchasing tasks such as negotiation and supplier development. The buyer makes similar comments in terms of being overloaded with clerical activities. Geoff Yale also believes the development of a central purchasing unit was a significant development when it occurred, for the purchasing function. Prior to this, individual departments handled their own purchasing. He also believes the quality of the work carried out by the purchasing activity has changed over the years, eg drafting of legal documents, more sophisticated negotiations, and more involved contracts for longer time periods.

According to Geoff Yale, buyers are now expected to obtain purchasing qualifications and develop themselves over their careers. This, he most definitely believes, signifies the development of the activity.

K4 - Developments of LCC Compared with Other Organisations
From a listing of organisations covering organisations like Ford, Marks and Spencer, etc., they were asked where they felt local authority purchasing would be placed in development terms. They all tended to believe that local authorities were near the bottom of the list. Unnecessary restrictive changes imposed on local authorities would have to be removed if they were to develop purchasing in the way as some of the organisations on the list had developed the activity.

K5 - Problems Likely to be Facing Purchasing Over the Next 5 Years
Tony Bilsborough believes that one of the biggest changes affecting the purchasing function over the next 5 years was the European Community

Legislation. Already, tendering procedures have been affected. He illustrated the problem; Directive 88295 required all contracts aver £132,000 to be advertised in the European Journal. This allows European organisations to tender, leading to problems, the problem being that having established a good UK supplier relationship, based on factors other than price, eg the ability of organisations to move towards EDI, JIT and TQM, which should bring overall costs of supply down, price is now being used as the major criteria for awarding contracts. Quality, BS 5750, ISO 9000, were other issues that were likely to affect the purchasing activity during the next 5 years. It was believed that such developments put pressure on organisations to develop the input end of their organisations. He felt that as the purchasing function grew, it should avoid getting too involved in low value items that often take a considerable time to source and manage for the savings involved. LCC could well develop more into materials management in the future, although it is more likely a third party will take over the responsibility for storage and distribution.

As a result of the Education Reform Act of 1991, schools, colleges and other education establishments become budget holders in their own right if they wish. This means they can decide who they buy from. LCC therefore, it was felt, must effectively market its purchasing services to such organisations.

K8 - Changing Role of the Buyer

It was felt that the role of the buyer would have to change from being reactive to more proactive, particularly in terms of customer awareness. There was a need for the buyer to be looking for new product developments and more innovative contracts. Tony Bilsborough saw the role changing from purely purchasing to more supplies management. This would be in line with a more proactive approach, but also requires the buyer to have time to effectively manage both the supplier base, customers and contracts. It also means significantly reducing the clerical side of the job that buyers have to take on at the moment.

He believed there was a need for buyers to be more of a manager and develop more general management skills. Interestingly, this is in line with those organisations where the purchasing activity is well developed. In such

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organisations, the buyer is beginning to take on a more proactive and consultative role in managing the supplier base.

L1 - General Environmental Factors

In terms of inflation, the general feeling was that they must try and keep within budgeted increases. Inflationary trends were monitored and purchasing was expected to keep price increases within the trend lines. Analysis of costs and balance sheets of major suppliers was not a technique adopted here. There was little pressure on purchasing to develop a more proactive approach in this area. In the event of shortages, the user would be rationed. LCC however, held stocks of most items well in excess of most organisations in the Private Sector.

Competition affected the LCC purchasing function in terms of the services it offered. It is in competition with other providers in persuading budget holders to buy through LCC rather than the budget holder dealing direct or buying from other similar organisations. Purchasing itself buys in markets that range from being very competitive to almost a monopoly situation. Tony felt the tender system used to put their demand into the market place was too slow and inefficient, particularly with the European Supplies Directive. The tendering situation would appear to hamper the development of purchasing's ability to really create competition. This situation would appear to inhibit the development of the function. Whilst the process of post tender negotiations should attempt to overcome some of the rigidity, it also is fairly restrictive and time consuming.

M1 - New Management Concepts

When asked about JIT, TQM, MRP II, Logistical developments etc., there was a general feeling that such concepts did not apply to them, these were seen as essentially production and manufacturing concepts. The general lack of interest in such concepts is surprising because they do have an effect on both the Public and Private sectors. Total Quality Management is an essential strategy to be developed in all organisations, it can lead to cost savings and large increases in efficiency. Just in Time concepts can also be applied in the public sector, to reduce stocks and give general reductions in the cost of supply.

N - Supplier Market Variables

In terms of the extent or otherwise of competition in which the buyer purchases goods and services, it would appear that there is healthy competition. In general terms, there were several potential suppliers. A problem likely to arise in this area if the local authorities follow their private sector counterparts, is the issue of single sourcing. In the Private sector, the benefits of co-makership and single sourcing policies, it is claimed, lead to considerable savings in terms of the overall "strategic cost of supply." Thus one could have several potential suppliers, but policy could be to single source in order to reduce longer term supply costs. Changing suppliers purely on the basis of price would not be acceptable.

Larger suppliers that the Council deals with are probably more advanced in their sales and service activities than Purchasing in LCC. Tony Bilsborough believed that such major suppliers were sophisticated in terms of their marketing approaches to the County.

By working more closely with such suppliers, the actual costs and administration of contract could be reduced. Tony Bilsborough, in comparing how contracts were managed prior to the establishment of the CPU, continues: "Prior to taking over, contract staff were really administrators. They had a responsibility to do a tender, then when that job was done they put it down and picked up some admin work, so they weren't working 100% on pure purchasing, and we are getting a lot of respect our contractors. Because we're working with them, we're reviewing items which are on the contracts, we're pruning that down, rationalising. We're putting new items on the contracts. We listen more to what technology's got to do. So there's a good working relationship being developed with our major contractors."

P1 - Government Controls and Their Effects on Purchasing

The Local Government Act of 1988 appears to have had an enormous effect on purchasing within the Public Sector. The Act requires the Council to put out to competitive tender its cleaning services, general services, grounds maintenance, amongst others, which are the areas that have previously used County Council contracts for the supply of good and services to that particular service. Tony Bilsborough comments: "Whilst it's had a negative effect from the point of view that it's meant that it's brought us vast amounts

of additional work, it's also conversely had a positive effect on us in that it's made us develop in a different way, which has had some good positive effects on the organisation, by looking critically at the way we work, looking at the way we've done things, and reacting to those changes in a positive way. Marketing for example, were it not for the effect of the local management of schools, where schools have now been given their own budgets, I don't perceive that I would ever have had a marketing staff to get out and sell my services, I would have had to do that work myself within the confines of the operation."

The other piece of legislation affecting the Public Sector in a major way, was the EEC Supplies Directive of 1989. This requires all contracts to be advertised in the European Journal, with an ECU value of 100,000 or with a Sterling value of circa £132,000 (at 1991) exchange rate. The process was seen as being very time consuming and bureaucratic. The advertising process itself could take between 52-77 days. Tony felt that "sensitive information" could be derived from the award of contracts , and enable future contractors to pitch their prices accordingly. It would appear that whilst there have been requests from tenderers outside the UK, none have, as yet, submitted a formal tender to LCC, mainly because of delivery problems.

6.9.10. Conclusion

Purchasing within Lancashire County Council has, over a period of 4 - 5 years, developed from a fragmented reactive function, to a cohesive proactive organisation. Development of the activity has occurred on many fronts. The purchasing profile for Lancashire County Council can be found in Chapter 7 Fig 7.4.

6.10 B B C BRITISH BROADCASTING ORGANISATION

6.10.1 Introduction

The BBC is a well known national institution. It is divided into a number of Directorates, eg Engineering, Regional Radio, News and Current Affairs. Fig 6. 9 gives greater detail of the structure involved.

The purchasing function in the survey is the only centralised purchasing activity within the BBC, and is part of the Engineering directorate. Fig 6.10 identifies its position in the organisation. The function provides assistance to all BBC staff involved in Purchasing and Supply activities in an attempt to promote improvements in the area through the negotiation of national and local call off agreements, or PACT, Purchasing Against Contract Terms.

6.10.2 Respondents Interviewed

Paul Bennett (36) Senior Purchasing Manager - Design and Equipment Department. Paul has been with the BBC since leaving school. He holds a BA degree from the Open University. His business background is within the BBC context. Prior to his appointment in 1989, he was involved with contracting in the same area, but more emphasis on the technical side. Paul has a purchasing department of some 30 staff, with an additional 90 -100 other staff from the general supplies area, that is stores and supply.

Alan Bridal (29) Assistant Purchasing Manager. Alan joined the BBC from a local authority in 1986. He became a member of the Purchasing and Supply Function in 1989. Tom Hawk (22). Tom Hawk is an Assistant Buyer with the BBC, mainly responsible for day to day buying activities.

Fig. 6.9

BOARD OF GOVERNORS
DIRECTOR GENERAL

Managing Director Television | News and Current Affairs | Regional | Radio | World Service | DIRECTOR OF ENGINEERING C.W. DERRAY | D. Finance

Deputy Director
C P Sandbank

Chief Engineer
Transmission
A E Gallon

Chief Engineer
Information and
Training
P A Laven

Chief
Accountant
Engineering
B R Buist

Chief Personnel
Officer
Engineering
B D Head

Special
Assistant
B J Stamln

Chief Engineer
Regional
Broadcasting
Resources
J M Elles

Head of Research
Dr M E B Moffat

Head of Architectural
and Civil Engineering
J D Alescalf

Head of Design and
Equipment
A R Neale

Head of Engineering
Computer Services
R R Miller

Head of Information
Technology
Engineering
P H Jarrett

Head of Engineering
Secretarial
A R Simpkin

Manager Safety
Services Engineering
D J Turner

Fig. 6.10   Purchasing and Supply Group Structure

PURCHASING AND SUPPLY GROUP STRUCTURE

A R Neale (H D & E D) Head of Design and Equipment

Head of Purchasing and Supply Group - Paul Bennett

136 Staff in total   136 Staff in total   136 Staff in total

36 Directly in Purchasing

Stores and
Stock Control

Senior Purchasing Manager

— Secretary

— Clerk

Purchasing Manager Engineering

Secretary —

Assistant Purchasing Manager

Senior Purchasing Assistants

Purchasing Assistants

Clerical Support

Purchasing Manager Office and General

— Secretary

Assistant Purchasing Manager

Senior Purchasing Assistants

Purchasing Assistants

Clerical Support

Purchasing 36
staff

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6.10.3 Purchasing and Supply Within the BBC

The history of purchasing and supply within the BBC is rather chequered. It appears to have grown and declined in importance over many years. For example, in 1962 there was an edict which said that "every purchase by the BBC must be made through the buying department and the order form must be signed by the head of buying." This applied to all orders, even low value ones. Gradually as the BBC got bigger and the expenditure and the technical involvement in certain areas got greater, the heads of buying relinquished their direct control over the purchase of audio tapes, video tapes and other high value items and delegated that authority to others, but the Purchasing Manager's name was still on the bottom of the purchase order. There was a period of time in the 1970's when the buying department got a bad reputation for not being able to handle all the bits of paper that went through. In the 1970's they took away some of the purchasing responsibilities, heads of buying were no longer seen as the people in the BBC through which all buying had to be done, and the purchasing manager's name began to disappear from the bottom of the purchase orders. In the future buying was done in the name of the head of Engineering, or whatever area it was, so staff bought in an ad hoc way.

In the 1970's, purchasing broke up completely. A Government report helped in the break up of the purchasing activity. It claimed that the BBC was too centralised and needed to be devolved. Managers with their own funds began to avoid using any central agency like purchasing. The ethos of devolution carried on right through the 1970's until 1979, and the head of purchasing disappeared altogether. A Director of Personnel was eventually made responsible for the purchasing function. In the early 1980's it was all switched to a Director of Finance, who subsequently delegated it to the Chief Accountant in each directorate. In 1985, the BBC was under scrutiny to get better value for money and there was a big change, referred to as 'Black Spot', in which the BBC ceased to manufacture their own equipment, and generally concentrate on core business.

6.10.4 Purchasing and Supply within the Design and Equipment Division of the BBC

Paul Bennett is the senior Purchasing Manager in a purchasing and supply group of the BBC, which sits within the central purchasing and supply

agency part of another parent department, the Design and Equipment department which in turn sits within the Engineering directorship of the BBC. The BBC is divided into directorates - these are the main output directorates, television, radio and current affairs, world services, and the regions - each which runs independently, with their own budgets, structures, and purchasing authority, and then there are corporate directorates , such as Finance, Personnel and Engineering, which cut across all of those divisions.

6.10.5 Purchasing Expenditure - Design and Equipment

The Purchasing and Supply group within the Design and Equipment department has a total expenditure of some £50M (1989/90). Total expenditure on bought out materials and services within the BBC is considerably more than this. Various departments however, because of devolution, have responsibility for their own expenditure and are not forced to use central contracts.

It is estimated that total BBC revenue is in the order of £1.1 billion, the majority of the expenditure going on salaries, artists' fees etc. The culture within the BBC is one of quality, programmes; the budget holders are therefore given wide discretion to spend money to achieve this objective. There is not, therefore, any real discipline to critically examine "value for money" as thoroughly as one might. find in say the Car industry. The main control device is staying within the budget.

BBC Purchasing Policy

Purchasing policy within the BBC is to:

- obtain value for money;
- test the market through competition between suppliers;
- develop and encourage new sources of supply;
- improve dialogue and communications with suppliers;
- promote the adoption of BS 5750 and its equivalents.

Whilst these objectives are very laudable, they can only be implemented against a general background of persuasion, purchasing can advise it does not have authority to impose contracts.

6.10.6 Purchasing and Supply within the Design and Equipment Department

The unit is headed up by the Head of Purchasing and Supply group, it comprises of two stores, one in Ware in Hertfordshire which stores furniture and stationery and non-engineering items, and another store in Chiswick which stores engineering items. It carries out a function on behalf of the BBC which is both to store and buy items, and purchase as an agent for staff, where they wish to use their services. It also acts as a contracting agency, setting up central agreements which can be utilised on a local basis.

Purchasing within Design and Equipment is concerned with buying a wide range of propriety items, eg fasteners, computer supplies, general consumables. There are however areas of expenditure, eg video and sound tapes, construction, props and services generally, that are re-negotiated by managers outside the Purchasing area. The Design and Equipment purchasing function must therefore sell its expertise to other functions and departments. It does so by issuing details of its current contracts and prices. A catalogue is produced detailing a range of stock items and prices from which departments of the BBC can buy from if they wish.

6.10. 7 Analysis of Respondents
A1 - Buyer's Time Spent on Clerical/Managerial Strategic Activities

One of the characteristics of Purchasing in the BBC is the fragmented approach to the activity. Whilst perhaps £200-250 Million is spent on bought out materials and supplies, little of this activity is managed centrally. The budget holder can buy when and where he likes, provided he remains within the budget. Paul Bennett, the Senior Purchasing Manager, had control of about £50 M of such expenditure, but could not insist that all buying went through his department. Often major items of expenditure like electricity, gas etc., are negotiated by senior staff from other parts of the BBC. He felt that the BBC could get far better value for money if there were a more integrated approach.

When asked about those factors likely to affect development of the purchasing function Paul Bennett indicated that buyers should be involved in less clerical activities, vet suppliers properly, and 'add value.' He did not like the idea of having professional purchasing people just acting as a post

office, and processing orders. Many of the points raised here have been mentioned by other respondents. Development of the function is seen in terms of being non clerical, adding value and being proactive. Paul Bennett felt that his buyers were probably spending 15 - 20% of their time on strategic and managerial activities. Tom Hawk, the buyer, felt he spent more like 90% of his time on clerical activities.

Alan Bridal, an Assistant Purchasing Manager, believed about 60% of the buyers' time was spent on such clerical activities. He explained that as one moves up in the purchasing hierarchy, less time is spent on such clerical activities, and more on the strategic and managerial. The whole purpose of this. question however, is to centre attention on the buyer in all the organisations examined, so that we have a common standard. After having observed buyers on days spent with the BBC, and talking in depth to them on courses, the general impression is probably 70%+ of their time was spent on these clerical activities. Paul Bennett felt the way to move the buyers away from such clerical activities is through the extensive use of computers which can generate much of the paperwork and information required.

A2 - Purchasing Structure

The structure can be seen in Fig 6.9. It would appear that the purchasing activity operates in a complex centralised structure. The Head of the activity reports to the Head of Design and Equipment, who in turn reports to the deputy Director of Engineering, and then to the Director General. The Head of Purchasing and Supply is therefore reporting several levels down in the structure. This of course weakens Purchasing's ability to get its views across to senior management within the BBC, and influence policy.

The present structure on the whole, mirrors current thinking within the BBC that budget holders decide whether they use 'in house' purchasing activities or not. Purchasing must sell its activities to the rest of the organisation. One of the problems however, with this approach, is that strategic purchasing issues in terms of single sourcing, make in - buy out etc., may not be affected in any meaningful way by the purchasing activity. In terms of the purchasing organisational structure, level 3 would seem to be most appropriate stage of development.

A3 - Back-Up Services To Purchasing

The use of back-up services available to the buyer appears to be some what patchy in terms of both quality and quantity. Whilst such services are available, the decision to use them in most cases rests with the buyer. The technical link however, would appear to be particularly strong. Paul Bennett, whilst recognising the importance of such specialists, appeared to feel the need for greater specialisms within the purchasing activity would be more useful, eg a print buyer. The help given by specialists therefore was of the occasional type.

B1 - Status of the Function

From the organisation charts available from the BBC, Paul Bennett reported to the Deputy Director of Engineering. This is the lowest level indicated in measurement terms. Over the years within the BBC, the importance of the purchasing activity has gradually fallen.

B2 - Title of Purchasing Head

Paul Bennett's title as Head of Purchasing is Purchasing Manager and within the division this is regarded as an important activity. It is seen more as a clerical and administration activity, rather than a proactive strategic management activity.

B3 - Training and Development of Staff

The BBC had spent considerable sums of money with several outside organisations training their buyers. From the evidence obtained, that is manpower and training plans, and interviews with several staff, there was regular training and development at all levels of the purchasing function, and CIPS qualifications were deemed essential for promotion. Some of the newer staff, like Tom Hawk, indicated that he had only been on one "short course" with outside consultants.

B4 - Average Salaries Paid to Buyers

Paul Bennett indicated that if anything, his staff were probably paid slightly less than the average buyers in the area. The title given to 'Buyers' was Senior Purchasing Assistants. A Senior Purchasing Assistant would be likely to be paid around £11,500 - £13,500 (1990/91). It was likely that such salaries would rise in the future.

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B5 - Measurement of Purchasing Performance

They had various ways of measuring it, and had introduced activity statistics, where they are measuring volumes of requisitions orders and spends to get a feel of ratio of work per person, and have recently introduced a value for money reporting system, similar to that introduced by the CUP for Government purchasing. The measurement for most part, was clerically based, and tended to be superficial in nature. This is not surprising in terms of job content essentially being of a clerical or administrative nature at the buyer level. In terms of the conceptual performance model, this would put the BBC at between stages 2 and 3 in terms of development of this variable.

C - Organisational Aggregate - Purchasing Variable

Estimates were given by Paul, and others within the BBC as to how much was spent on bought out materials and supplies throughout the organisation. The figures were difficult to obtain because bills were paid separately by each Directorate. Within Paul Bennett's Directorate, around £50 M was spent on bought out materials and supplies. It was estimated that around £300M was spent across the BBC and if this was about right, it would mean a total income of some £1.2 Billion. The majority of BBC income is spent on salaries. This may explain why purchasing has been relatively slow to develop within the organisation. A similar picture is found at Kent County Council, and Lancashire County Council, where, whilst in absolute terms, bought out materials expenditure is high, in percentage terms, it is relatively small compared with the money spent on salaries.

With the development of ideas that lead to better value for money, and the out sourcing of a whole range of functions traditionally provided in house, the "bought out" expenditure is set to rise significantly in these organisations in the future. From the information obtained for the BBC on this variable, it would appear there are large amounts of expenditure controlled by non specialist purchasing staff, who may not have the expertise to obtain "good value for money" and negotiate more competitive prices.

D - Technology Diffusion

The rate of technological development on much of the equipment was changing rapidly, but in most other areas these were minor changes.

E - Advanced Systems and Computer Technology

The systems and computer technology used to support purchasing was relatively basic and simple, compared with other organisations in the sample. They had a main frame computer which integrated their stock control system, with finance and user departments. Non stock purchasing was still manual, but they were looking towards integrating this into the rest of the system. They did not have a truly integrated computer system. Tom Hawk, in his interviews mentioned that a large chunk of his work, putting enquiries, orders out etc., was still manual. He felt a lot of the buyer's time was spent on unnecessary clerical work that could be more effectively handled by the computer. Although new systems were promised, the existing level of development, for computers put the BBC at about stage 2 for this measurement criteria.

F - Procedures and Systems Development

Paul Bennett produced a comprehensive copy of purchasing and supply procedures covering systems and policy. In addition, there was also a set of audit based instructions in financial procedures that had to be followed. After examining the manual, it appeared to be relatively bureaucratic and restrictive compared with private organisations outside, like Leyland, who are of a similar size. The manual was more concerned with public accountability and fairness than obtaining the best "deal" for the organisation. In terms of this variable, the BBC was relatively advanced, around stage 4.

G - Corporate Culture

According to Paul Bennett, the culture of the BBC is essentially one of encouraging "traditional values", but with a determination to produce quality programmes no matter what they cost. Users often have to be persuaded to be more thoughtful about what they want to buy, this often leads to fighting battles with budget holders. The culture in this instance is retarding the development of an effective purchasing and supply function, and consequently leading the BBC to spend more than it might have to pay for its goods and services.

H1 - Buying Centre Concepts

In terms of major items of expenditure, the purchasing activity was involved to a degree in most aspects of bought out expenditure, but had much more involvement in price and commercial aspects of any deal. They were not however able to veto others involved in the buying centre. Essentially, the BBC would be between stages 3-4 in terms of this development criteria.

H2 - Involvement in the Buying Process

Paul Bennett and others interviewed believed that with the majority of items bought, they would be involved in at least stages 3-10. When asked about his ability to challenge specifications, he commented that changing users' views in terms of value for money can be difficult. "Where we've probably got more technical expertise than the user, then we will challenge. We're not in a position, however, to challenge anyone who is highly qualified technically". In many cases, their advice was ignored.

I1 - Buyer Characteristics and Development

This was an interesting question. Paul Bennett, as far as this area was concerned, wanted staff with experience and would give training in terms of the job, and external courses leading to Chartered Institute of Purchasing and Supply qualifications. He believed that this was not the case in other parts of the BBC for those entering purchasing. In other areas, special requirements were sought. Tom Hawk, who was relatively new to the function, was recruited on the basis of his 6 'O' levels and 'A' level education. Recruiting the right staff, and developing requisite purchasing skills is essential if the activity is to develop.

I2 - Specialisms Within Purchasing

There was specialisation within the activity in relatively broad bands, stationery buyers and three types of engineering buyers. Processing invoices is not seen as a buying job, unless there is a price variance. It was felt that expediting should be carried out by the buyer. From the information gathered from Paul Bennett and other buyers, this would put the area at stage 3, moving towards stage 4. There was little in the way of specialist involvement in purchasing research, product cost analysis and other areas of specialism.

J1 - Buyer/Supplier Relationships

The relationship with suppliers is affected by audit requirements, that is sealed bids. Paul Bennett acknowledged that there had been a tendancy in the past to "get very comfortable". New procedures deemed that items of major expenditure have got to go through the sealed tender process, but he is allowed to enter into post tender negotiations in an attempt to improve the "deal". The tendering process can work against developing long term relationships.

There were problems with Standing Instructions, and a desire to develop more effective long term relationships. He comments: "We've paid lip service to it (Standing Instructions) and developed some of our own thinking which works within the framework of the. instruction". In terms of supplier bondings, it was felt in general the BBC was between stages 2 and 3, although with some major products it could get to stage 4. In an attempt to reduce the cost of supply.

J2 - Buyer/Supplier Ethics

The BBC tended to follow the Chartered Institute of Purchasing and Supply's code of ethics. This would allow buyers to accept lunches and gifts of a small nominal value at Christmas. The code was written and enforced, which is stage 4 in the measurement criteria.

J3 - Hospitality to Seller

In many cases, hospitality outside the BBC is provided at the seller's expense. In the case of managers however, they are allowed to reciprocate such hospitality and have expense accounts. Generally it was held that not enough time was spent between buyer and supplier, if meaningful long term relationships were to be cultivated.

K1 - Open Questions

Paul Bennett was asked the question 'Had, in his opinion, any internal factors increased the status of the function?'. He felt that a factor that had increased its status was bringing together the Purchasing and Supply groups under a Director of Engineering. This, he believed helped forge an identity. When asked the question as to how the function was likely to develop over the next 3-5 years, he thought that within each directorate there could well

be developed a small core function of purchasing expertise. There was now the possibility of a core functional purchasing agency to supply different areas of the BBC. He comments: "The BBC remains committed to the devolution of purchasing allowing the user to buy what he likes, where he likes".

In terms of purchasing development, he believed better information systems and procedures, more qualified staff and involvement in strategic decision making areas is the way ahead. When asked the question 'Which organisation (from a list) is more able to achieve lowest cost of supply?' he felt this to be Marks and Spencer, and Ford. He argued that such organisations were more affected by profit motive and had to be efficient to achieve this. Local Authorities and the BBC, he felt, were less concerned with profit objectives and this had an effect on its attitude to buying. Public accountability rules and regulations sadly, got in the way of getting good value for money.

In terms of problems he saw facing purchasing internally over the next 5 years, he comments: "I think the internal problems will be the internal policies of devolution. There will be each directorate developing its own policy, and how it's going to go about things,, rather than an overall decision that says 'there will be purchasing here, there will be purchasing there, and this is the way it will be done'. Each area will develop its own way of going about it and I think that's going to be the biggest problem, although I don't see it happening in an organised way.

He welcomed moves towards more of a Materials Management approach towards purchasing and supply, but did not believe this would happen within the BBC. He did, however, feel there was a possibility of divorcing negotiation from the contracting of goods, that is one area would negotiate the deal, the other would manage the day to day workings of the contract.

L2 - Inflation
The effects of different levels of inflation and its possible effects on purchasing development were explored. Paul Bennett indicated that as inflation fell, the chances of price management became greater. He believed that higher levels of inflation meant buyers had to spend more time

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developing price management skills, and that rising levels or inflation had a positive effect on the development of the purchasing activity.

In terms of surpluses and shortages, in supply markets, he felt that would have an effect on purchasing development. Surpluses tended to put pressure on the purchasing function to develop, whilst shortages would have the opposite effect. Competition in the markets in which the buyer purchases, according to Paul Bennett, meant that there was a need for the purchasing activity to develop. "Often comparisons are made, that if buyers in our competitors' outfits can get good deals, then so should we".

M - World Class Concepts/Strategies

From a listing of World Class concepts, Paul Bennett was asked to identify which, if any the BBC was involved in, and how their implementation had affected the purchasing function, None of these concepts or strategies were being practised at the BBC. He did, however, feel the development of JIT would have a positive effect on purchasing development.

Interestingly, he commented that he believed purchasing had to be reasonably well developed to introduce the concept in the first place.

He felt that the introduction of such a strategy with an undeveloped purchasing function would lead to the concept "collapsing around their ears". Paul said there was a greater chance of success "if the various fractional activities are brought more together, rather than being treated as separate activities".

Total Quality Control strategies were again not to be found within the BBC, at the moment, although there was a growing need to push suppliers towards BS 5750. The BBC itself has not achieved this quality standard. The very fact that the BBC is not involved in any of these World Class strategies is indicative of the stage of development of the purchasing activity. Those organisations where World Class strategies are practised tend to have more developed purchasing activities. Paul felt that because they were selling a service there was not the same impetus to be as effective as those organisations selling manufactured products. A Materials

Management structure was also seen by Paul Bennett to be the way forward, if purchasing was to become more developed.

N - Computer Developments

All respondents interviewed felt that integrated databases were the way forward if the purchasing activity is to develop. Competition in major markets in which the BBC purchases apparently varied across the range, on "high tech" specifications it fell dramatically, although they did try to encourage in the cable area, other European suppliers. In general, however, there seemed to be a reasonable amount of competition in the bought out areas they were involved in.

N2 - Supplier Development

General analysis showed that the BBC was as developed as most of its major suppliers. Highly developed suppliers often put pressure on buying organisations to move in a similar direction. In terms of the relationship with major suppliers, Paul believed this had moved from "cosy to frosty" but he was trying to move towards a close but business like footing with such suppliers.

P - Government Involvement

From a list of possible Government involvements found in question P1 Paul Bennett was asked how he felt such government controls were likely to affect purchasing development. In general terms, he felt that price controls in the form of fixed prices tended towards development of the activity. With regard to monopolies and restrictive practices, he felt this would depend on whether the legislation was enabling or restrictive in its scope. Practices that limited supply were felt to have varied effects - generally he believed that legislation, whether UK or European that limited competition, had a negative effect, but could well lead to a more efficient and developed purchasing activity, as they would have to work harder to achieve their goals.

6.10.8 Conclusions

The BBC purchasing development has many of the 'hallmarks' of Public Sector organisations. If it is to develop the purchasing function it must adopt more proactive commercial policies. The purchasing development profile for the BBC is found in the next Chapter, Fig. 7.5.

6.11   T.M.L PLASTICS

6.11.1 Introduction

TML is a plastic injection moulding company, essentially trade moulders, making what major customers want but not selling direct to the retail trade. TML has been established for over 30 years supplying technical plastic components to a wide variety of industries, its major customers today being Ford, Austin Rover and Black and Decker.

Originally, it was called Textile Mouldings, due to its involvement in the textile industry.   The company still distributes several million precision components to spinning mills throughout the world, but textile business is now only a small part of its total activity.   The company has grown rapidly, particularly over the last 3 years.   In June 1988 it had a sales turnover of just over £6 million; in 1991 this was £16 million sales turnover.   Of the £16 M, approximately £7.5 M will be spent on bought out materials and services. The major reason for the growth of the organisation has been its move away from textile products and into supplying plastic parts for the Automotive Industry.

6.11.2 Respondents Interviewed

Eddie Thompson (50), Eddie is the Commercial Director at TML. He reported directly to the Managing Director. He was one of the original directors that took part in the Management buyout of TML from the original owners. His background has been sales oriented, with the old Textile Moulding Company that TML replaced.   Prior to that, much of his time had been spent in the textile industry of North East Lancashire.

Dennis Elliot (35).   Dennis is the current Purchasing Manager at TML Plastics and has occupied that position since 1989.   His background is textiles and he was, prior to this appointment, Senior Buyer at Smith and Nephew, based in Nelson. Dennis is a member of the Institute of Purchasing and Supply, and holds a professional qualification in the function.

Wendy Ploughwright (25).   Wendy is a Buyer at TML, and joined the company shortly after Dennis from Smith and Nephew. Her job is basically

clerical, handling routine orders, enquiries and expediting. Wendy joined her last company directly from school and has an HND in Business Studies.

6.11.3 General Development of TML

In 1986 the organisation, then owned jointly by Platt Saco Lowell and Coates Vyella, was sold off to its directors in a management buy out. The strategic plan then formulated, called for a realignment in direction, moving away from textiles, and into automotive supplies. The company grew slowly to the end of 1988, with the manufacture of basic plastic components. From 1988/89 onwards, major suppliers, particularly Austin Rover, were attempting to reduce their supplier bases, and were looking at the possibility of major suppliers producing more of the finished product. TML found if it wanted to grow and develop, it would have to be prepared to produce not simply single parts, but sub-assemblies. In the past, its parts, together with 20-30 others, were sent say to Austin Rover who put the parts together to form a sub assembly. TML took over this role, with the various suppliers involved supplying directly to TML. Instead of 20 or so parts now going to Rover, one completed sub assembly would arrive from TML. The consequences of this development cascaded over the whole of TML. More workers were required, facilities had to be found. Purchasing also became involved with more suppliers and its purchasing expenditure rose quite sharply.

6.11.4 Development of Purchasing Within TML

Up until 1973 there was no plant buyer at TML. Expenditure was controlled by various functional heads under agreed budgets. In 1973 a buyer was appointed who's major job was to establish a proper clerical system on the purchasing side. He was also expected to get involved with stores and stock control. Major negotiations and price determination was still the responsibility of functional heads.

Over the next 10 years or so, as the organisation grew, his role developed and emphasis changed. He began to get involved in negotiations, supplier evaluation, and became more of the management team. In the stores area a stock controller was appointed reporting to the buyer, and one clerical purchasing assistant was employed. This had the effect of releasing the buyer from more clerical activities and enabling more time to be spent on cost reduction exercises. Computer systems were installed in the mid

1980's. However, they presented management with many problem in terms of accuracy and effectiveness. However, by the mid 1980's in terms of purchasing and supply, a structure had developed with purchasing reporting to a Commercial Director.

Fig. 6.11

TML ORGANISATION CHART

M D

SALES DIRECTOR   PRODUCTION DIRECTOR   ACCTS DIRECTOR   COMMERCIAL

DIRECTOR

OTHER FUNCTIONS

TECHNICAL   PURCHASING   SALES

MANAGER   BUYER   MANAGER

STORES SUPERVISOR   ASSISTANT
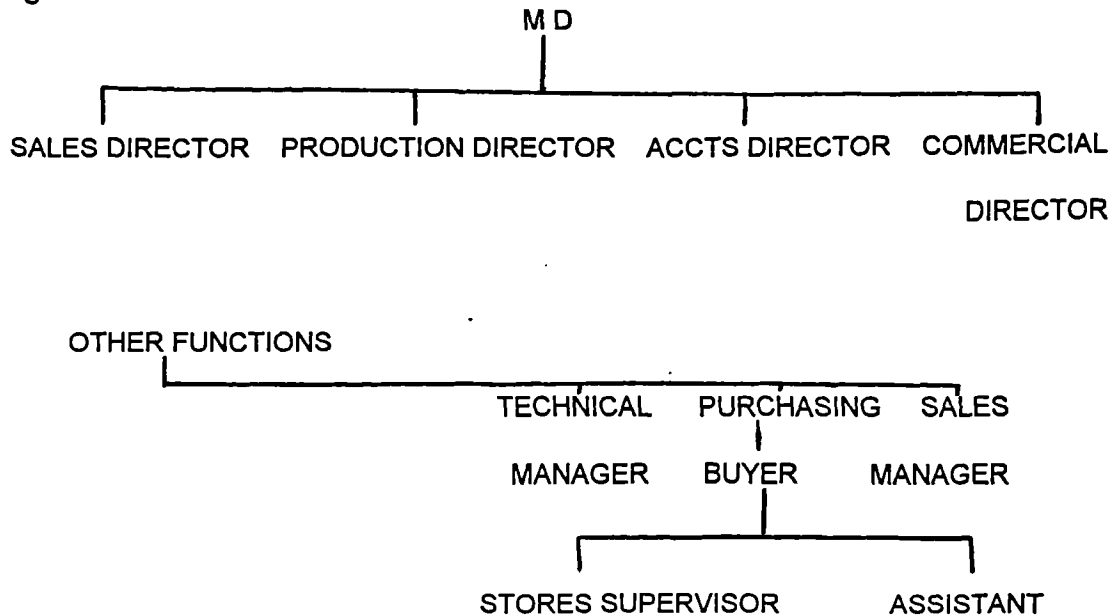
In 1988, the existing buyer left and a major re-think took place over his replacement. It was felt that the job was becoming far more demanding in terms of negotiating major contracts,, client involvement, developmentt of new systems etc. The Directors felt that the purchasing function should be more proactive in its approach, the status of the function had to be raised. As a result of this "new thinking" the buyer's job was advertised as a Purchasing Manager. The new holder of that post from January 1989 was Dennis Elliot. Sales turnover rose from £6 M to £16 M mainly as a result of the growth of sub assembly work for the automotive industry.

TML entered a new phase in, its development from 1988 that required closer involvement with key customers and suppliers. Purchasing as a result grew, as did the number of staff employed in the activity. By August 1990 the new structure shown in Fig. 6.12 was:

Fig. 6.12   TML PURCHASING ORGANISATION STRUCTURE

```
                            M D
                             |
        ┌────────────────────┴──────────────────────┐
 OTHER FUNCTIONAL DIRECTORS                  COMMERCIAL DIRECTOR
                                                     |
                                              EDDIE THOMPSON
                                                     |
                             ┌────────────┬──────────┤
                         TECHNICAL    PURCHASING   SALES ACCTS
                          MANAGER      MANAGER      MANAGER
                                     DENNIS ELLIOT
                                          |
      ┌────────────────┬──────────────────┬─────────────┐
   TYPIST       STORES SUPERVISOR      BUYER 1       BUYER 2
                   STOREMEN         WENDY PLOUGHWRIGHT
```
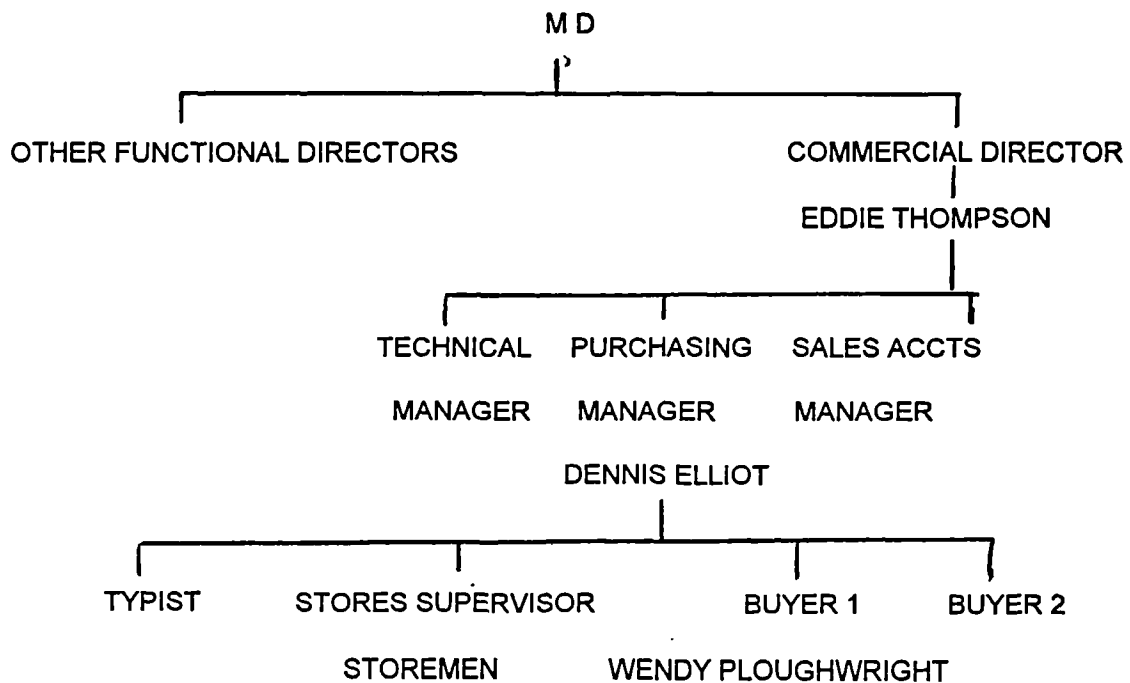
The structure was relatively simple, however, a belief is held by the purchasing manager, that more staff are required.

6.11.5 Purchasing Systems

Both a manual and computer system tend to run along side each other. An MRP system was available, but because of input problems and the way the programme software has been written, it is not used extensively by purchasing. Orders were generated manually after the search process of enquiries and quotations have been completed. It was hoped that in the future a fully computerised purchase order production process would be in place.

6.11.6 Computer Links With Major Customers

Considerable computer EDI links had been established with Austin Rover and Ford, who were major customers. Here one finds daily call offs from these major customers giving details of daily requirements of various plastic parts.

6.11.7 Computer Links With Other Functions

Accounts and Production are both computerised, and their systems worked reasonably well. Unfortunately, different functions within TML have

developed systems to suit their own particular requirements. It would appear there is a need to develop an integrated database.

6.11.8 Contracting

The majority of high value items are on major open ended or blanket orders with suppliers. Prices are negotiated where appropriate, and supplies called off against a schedule. The operation of JIT, TQM and supplier rationalisation from TML's suppliers placed considerable pressure to avoid problems with suppliers. Supplier selection was considerably influenced by major customers, who insisted on dealing with suppliers who could handle JIT deliveries and are moving towards zero defects and EDI.

6.11.9 Organisational Size/Expenditure

TML's sales revenue in 1988/89 was £6.8 M, with a purchasing expenditure of £4.5 M. In 1989/90 this had risen to £16 M sales revenue with a £7.5 M purchasing expenditure, 46% of total revenue is spent on bought out materials and supplies.

6.11.10 Analysis of Responses

A1 - Buyers' Time Clerical/Managerial and Strategic Activities

Of the two buyers employed in the organisation, both according to Dennis Elliot, spent all their time an clerical activities, involving routine ordering, expediting, handling paperwork and generally fire fighting. Wendy Ploughwright, one of the buyers chosen for interviewing, confirmed this fact, she felt about 90% of her job was clerical. He agreed that this was not a satisfactory state of affairs, but was affected by past thinking. Purchasing had tended to be regarded as a clerical function from the top of the organisation, and this thinking was difficult to change. Investments in new computers and systems was seen as one of the solutions open in order to release buyers from clerical activities.

A2 - Purchasing Structure

From the information already presented, it would appear that TML had a relatively simple structure, but was moving towards more of a Materials Management structure. They were between stages 2-3 of development in this area. Pressure to make the structure more streamlined and efficient was coming from their major suppliers. Rover cars, a major customer, had

insisted they develop a more effective integrated structure in order to service them more effectively at a lower cost. Supply Chain Management concepts were becoming of major concern to such large Organisations. TML was going through a period of rapid growth, which in time would require a major re-assessment of existing structures. Purchasing and Supply activities were likely to have much more of a lead profile in the future.

A3 - Back-Up Services to Purchasing

Apart from subscribing to certain Journals for cost information, there seemed to be no real back-up services to help purchasing in its primary role. Dennis Elliot, the Purchasing Manager, was not happy with the situation, and was attempting to remedy it where he could, but did indicate he felt "vulnerable" in this area.

B1 - Status of the Function

From the organisational chart at TML, and other information it can be seen purchasing reports to a Commercial Director. This puts purchasing at stage 2 in terms of this particular variable. When this organisation was visited eight years ago, the purchasing activity consisted of one person who was also responsible for several other non-purchasing activities. The function has developed over the years but is still not seen within the organisation as having a particularly high profile.

B2 - Title of Head of Purchasing

The head of the activity has the title of Purchasing Manager, and spends a large proportion of his time on managerial and strategic activities. One has, however, to treat the title and the scope of the function with a certain amount of scepticism. If any staff are off ill, the Purchasing Manager would be expected to perform their roles if replacements could not be found. Whilst Dennis had the title in name, his position is between stages 3-4 in terms of our measurement criteria.

B3 - Training and Development of Purchasing Staff

Training and development of staff had apparently been neglected due to rapid growth of the organisation. It was felt the only really structured training had been via videos into total quality management and statistics process

control . Dennis Elliot was hoping the situation would improve in the future, but felt that at this particular in time, there was little point.

B4 - Salaries of Buyers

This question was not a popular one, asked at Director level. Eddie Thompson would not comment, and indeed the recorded part of his interview had to be discontinued after asking this question. It would appear that he was particularly sensitive to pay issues, Information was provided however, by the Purchasing Manager. He felt the salaries of £10,000 paid to a buyer like Wendy, with about three years experience was about average, and good for the geographical area. Dennis Elliot, did however, make the point that Wendy Ploughwright, whilst she had the title 'buyer' was essentially clerically oriented, and on that basis £10,000 was not bad. The problem, however, with this argument, is that real buyers can and do save their organisations considerable amounts of money, and that the opportunity cost of having a clerical buyer as opposed to a 'real buyer' could be considerable.

From discussions with their Commercial Manager, major customers like Nissan and Rover are expecting TML to rationalise their supplier base develop partnership sourcing, and negotiate in such a way with suppliers, that unnecessary costs are eliminated from the supply chains. This can hardly be achieved with 'clerically oriented' buyers.

B5 Measurement of Purchasing Performance

Purchasing's performance appeared to be measured in terms of keeping stock levels under control. Purchasing savings through the process of negotiations would appear to be minimal. There was the existence of a very basic vendor rating system that recorded quality and delivery times. Savings are reported more on an exception basis, there is no formalised system. In this organisation, purchasing would be between stages 1 and 2. The inability of purchasing to sell itself on performance could explain its relatively low status as perceived by top management within the organisation.

C - Organisational Aggregate - Purchasing Variables

In the period 1991/92, the company had a sales turnover of £26 M. This had grown from £6 m in 1988. This was indeed phenomenal growth, and explains why there are organisational problems in a number of areas in the

company. Approximately £7.5 M of this is spent on 'bought out' materials and supplies, around 47% of total sales turnover. The 'bought out' cost is likely to rise considerably in the future, to around 60% in order for TML to cope with extra business. The growth in bought out material and service expenditure in both percentage and absolute term is likely to accelerate in the future at TML. This is likely to put additional pressure on senior management to develop the purchasing activity further, as this will be the major area for cost reduction in the future.

D - Technology Diffusion

Moving ahead on the technology front, and absorbing new developments is accepted by TML as the way forward. Major customers expect TML to be developing "state of the art" technology. From the responses that Dennis Elliot and the Commercial Director gave however, their technology was hardly state of the art". What TML was doing in this area however, involved spending more money on word processors, and developing more extensive computer systems. The view was that unless they moved more quickly in a number of areas, they would soon become out of touch with newer developments.

According to Dennis Elliot, he is given no business information of a strategic nature from top management. This unsatisfactory state of affairs also existed for the newly appointed Quality Manager. The lack of clear mission statements and strategies helps to explain why the purchasing activity is developing so slowly. In those organisations where the activity is particularly well developed, it would be involved in the process of strategic decision making.

E1 - Computer Technology System

TML has the capabilities of Materials Requirements Planning, but there is no real confidence in the system and it therefore requires a manual system in parallel with it. Whilst they have a partial computer system that has been installed to handle incoming business from major suppliers such as Ford and Rover. There are however, considerable computer developments in terms of the customer -TML interface, largely driven by the of the motor industry. There is even an EDI link with such major customers. As far as the input activities of the organisation are concerned, they are still using manual

systems to generate orders, enquiries etc. In terms of this variable TML is at the first stage of development.

E2 - Stage of Computer Activity

Plans are being considered to move towards an integrated database, but it would appear to be a long way down the line at the moment. Whilst accounts are on a computer system, other functions within the organisation are not.

F1 - Procedures/Systems Development

This was an interesting variable to measure. The organisation has a stores manual and a purchasing manual, both relatively poorly written. Few other procedures exist to guide the buyer.

G - Corporate Culture

TML is an organisation facing rapid change, largely as a result of major orders from the Car Industry. Dennis Elliot summarised the culture as those who scream the hardest get things done. Purchasing had a low profile and got the blame for things not arriving on time. Purchasing is however becoming more accustomed to dealing with rapid change. The organisation itself is fluid, and is trying to catch up quickly with "best practice".

H1 - Buying Centre Concepts

Whilst it would appear that purchasing is now getting more involved in the buying centre, it is limited involvement, mainly in terms of price.

H2 - Buying Process

Requirements are, for the most part, determined by major customers. TML have limited involvement here. Dennis Elliot believes it would be difficult to change specifications because of the lead times involved in getting new materials accepted. Alternative suppliers are investigated, but it would appear that this is not an easy task. Purchasing at TML get more involved in areas 3-10, but seem to be far less involved in the other stages of the buying process, putting them more at stage 3/4 of development in terms of this variable.

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I1 - Buying Characteristics and Development

No special requirements are asked for from buyers. This is mainly because the purchasing job is seen as a clerical activity.

I2 - Specialisms Within Purchasing

The buyers, whilst having to deal with major customers' demands, were also involved with all other aspects of the purchasing job, this would include such things as expediting, invoice clearing, routine ordering, and ascertain amount of scheduling. It was noticeable however, that they were not involved with stock control, and routine stores activities. Analysis indicated that they are at about stage 2 in terms of development.

J - Buyer/Supplier Relationships

J1 - Bondings

The relationship between buyer and supplier appeared to be strong in terms of the major suppliers. Most of the contact with such suppliers however, tended to be over the 'phone.

Wendy Ploughwright, in her interview, explained that she only had contact with suppliers when they visited the Purchasing Manager in addition to over the 'phone. Dennis felt that he had to spend more time visiting his key suppliers in order to establish good relationships. Most of the contact with suppliers tended to occur when the supplier visits TML. Those buying organisations with particularly strong bondings with their key suppliers spent a considerable amount of time visiting them. TML were between 2 and 3 in terms of this variable.

J2 - Buyer/Supplier Ethics

According to Dennis Elliot, there is no laid down policy in this area. Buyers are not encouraged to go out for lunch with suppliers. Dennis went out with suppliers, but not if there is any current tendering underway with the supplier concerned. General common sense tends to be the method chosen in terms of ethics. Nothing was mentioned concerning other aspects of ethics, eg confidentiality of information, fairness to suppliers, and dutch auctions.

J3 - Hospitality to Seller

Apparently buyers did not have either the time available or could be trusted in this area. The seller paid for hospitality in most instances, including most of the lunches.

J4 .- Visits/Meetings Between the Two Sides

Major suppliers visited every 4-6 weeks, the buyer however, rarely visited suppliers. Clerical work of the buyer made it almost impossible to visit suppliers.

K1 - Development of The Activity

Dennis Elliot felt in the time that he had been there, considerable developments had taken place over a wide range of activities. Prior to his appointment he believed that there had been little development, he comments: "There were no re-order levels, there was no method of advising the buying department what to buy and when, it was very difficult to establish how it was done. I came along and implemented what was necessary for me to do my job, and that stood me in good stead. I believe what I'm doing is right, it may not be quite complete but certainly we're a good way there. On a broad brush, 95% of the time, we don't run out. There is no way, even with 18 years' experience the previous buyer had, he could possibly have coped with what we are currently dealing with, without some sort of system. So really the biggest change in purchasing has been the scale of growth of the company".

He indicated changes within the purchasing activity just prior to phenomenal growth of the company. He does however accept that this growth would have forced change on the purchasing activity to make it more effective. He continues: "The fact that those changes were made, shortly after I came, allowed us to go from £6 M to £16 M turnover, with very little heartache. If I hadn't made those changes, then the growth would have forced change of one sort or another, because you just couldn't cope with the old methods such as they were".

There were questions concerning the previous Purchasing Manager, who was at TML (1973/84) Frank Clayton. Dennis Elliot believed that Frank Clayton did the job, but did not attempt to assess the way it was carried out.

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Dennis Elliot apparently adopted a far more quantitative pragmatic approach. Major customers like Ford, Rover and Nissan were also seen as major players in developing TML's purchasing activity.

When conducting an interview with Eddie Thompson, the Commercial Manager, he commented that Ford, Rover and Nissan require their suppliers to adopt similar practices to themselves, if they operate TQM, JIT, integrated databases etc., then so must their suppliers. This management of the 'supplier chain' therefore imposes disciplines on their suppliers. In many ways, the buying function at TML will have to begin to mirror the buying function at their major customers. Adopting JIT techniques, TQM etc. will in itself push the development of purchasing within TML. Rationalising of the supplier base necessitates more efficient links in the supplier chain, and in turn, a more developed purchasing function. TML had difficulty in keeping up with their customers' requests.

K2 - Development in the Next 3-5 Years

Dennis Elliot indicated that whilst the buyers' functions would stay the same, the Purchasing Manager would take on greater roles spending more time investigating major purchases, using appropriate analytical tools. He believed the status of the function would be enhanced by effectively controlling and reducing bought out material costs. However, he did record that his role was not properly recognised at TML.

He comments: "I don't believe that this function is perceived as anything much greater than the buying function it was in Frank Clayton's day. I say that because I was employed, for instance, without a company car. I was told that not all managers of the company have a company car, so I was prepared to accept that, but again I find I'm the only one that applies to. Very often, if there's a sales meeting I appreciate we don't have salesmen as such, we just have account reps who go into Ford and Rover group but I'm not even invited along to those meetings".

The point made by Dennis Elliot in this instance tends to contradict what Eddie Thompson, the Commercial Director said: "I think purchasing has become more recognised as a management tool, when I say management, I mean that 10 years ago I think purchasing was thought of as buyers who

sent out enquiries to buy things. I think the emphasis now is that the purchasing manager is as much part of the management team as the technical manager, he's part of the function, making sure that the company runs smoothly, and he has to take this part of the responsibilities in doing that. The responsibilities that the any has given to the purchasing manager have increased by a factor of 5 or even more." When asked if he felt that the purchasing manager should be involved in strategy determination, he replied in the affirmative. It could well be that inertia at a higher level is in some way stopping purchasing reaching its true potential.

K4 - Lowest Cost of Supply

There was a belief that Ford, Shell and Marks and Spencer were far further down the road in terms of 'lowest cost of supply' than other organisations. Local Authorities, he felt, were a long way from achieving such a goal.

K5 - Problems Facing Purchasing Over the Next 5 Years

Perhaps the biggest fear was the lack of recognition of purchasing and its true potential would still be a problem in the future.

K6/7 - Restructuring at TML

Moving towards a full Materials Management function was likely to occur at TML. It was hoped there would be a move away from 'fire fighting' towards supplier evaluation and cost investigation.

K8 - Change and Development

In general, change was more concerned with moving the buyer away from clerical type activities, towards 'real buying' negotiation, supplier development and cost reduction. Adding depth to the function was given as an example, that is, good vendor rating systems and improving vendor ratings.

L - General Development Factors
L1 - Inflation

Generally, the feeling was that purchasing had to be more in tune with modern methods of dealing with inflation, although it would appear TML have not had to deal with any major inflation problems for some years. This factor in turn may lead to complacency. Proactive purchasing functions

would be looking for ways of reducing costs, even in periods of zero or low inflation. TML seemed to accept that low levels of inflation were almost acceptable, and if there was no request from a supplier for a price increase, they would not demand a review of prices in a downward direction.

L3 - Surpluses/Shortages

No real conclusions could be drawn here.

L4 - Competition in Buyers' Markets

The question was asked if competition from other buyers, or lack of it for identical goods and services put pressure on purchasing to develop. Answers in this area were inconclusive.

M1 - New Strategic Management Concepts

In most cases, many of the new strategic management concepts such as JIT, TQM, etc., were having a positive effect on purchasing development. At that particular moment in time, TML were not operating such concepts, other than MRP. Dennis Elliot commented that such concepts did not put pressure on purchasing to develop. His answer to this question is somewhat confusing, because he later comments that such concepts are likely to have a positive effect on other purchasing functions, and he gives Total Quality Management as an example. TML have been affected by such World Class Concepts. Major customers Ford, Rover etc., are all heavily involved in those concepts, and in turn are putting pressure on key suppliers to move in similar directions. There was plenty of evidence at TML that the disciplines involved in such strategies were affecting most functions within TML.

N - Supplier Market Variables

TML in most cases, was buying from monopoly suppliers, with limited competition. Lead times were in the order of three months. Provided orders were placed three months in advance, there were no problems. Three months lead time however, is very long, and appears to be dictated by the supplier. Suppliers on the whole, were more developed than TML, but TML had a good relationship with them.

P - Government Controls

Removing restrictive practices was an area that Dennis Elliot believed could lead to purchasing development in that it would be easier to negotiate deals. It was agreed that such legislation as Health and Safety, Sale of Goods Act etc., called for a more knowledgeable buyer. The effects of other aspects of Government controls were not answered in any conclusive way.

6.11.11 Summary

TML was the least developed of all the organisations used in the sample. Its purchasing profile is shown in Fig 7.6, Chapter 7, where further analysis is completed.

6.11.12 Conclusion

Information from the six major case studies, and Pilot Study II gave extremely useful insights into purchasing development and evolution. The information from the main sample has allowed profiles to be produced which in themselves allow comparisons to be made between purchasing functions in different organisations. These profiles are summarised and analysed in depth in the next Chapter, and major conclusions drawn, in terms of development techniques and factors affecting purchasing development.

CHAPTER 7   ANALYSIS OF RESULTS

7.1   Introduction

In this chapter further analysis of the results is undertaken with the objectives of:

- Producing a development profile for each of the organisations, together with a general comparative analysis.
- Commenting on the measurement criteria developed from the Literature Survey used to indicate purchasing development, identifying problems and suggesting other possible measurement criteria where applicable.
- Highlighting specific factors that have had an identifiable affect on purchasing development in the organisation concerned, both internally and externally.
- Refining a conceptual purchasing development framework that could be used by practicioners.
- Identifying a purchasing activity development methodology
- Examining how the purchasing activity might develop in the future

7.2   General Overview and Summary of Results

As indicated in the previous chapter, it was possible to produce purchasing profiles for each of the six organisations used in the main survey. The eighteen measurement criteria developed from the literature survey, and regarded as indicators of development were further refined for survey purposes. Development profiles were then produced. In this chapter observations are made for each of the profiles and general conclusions drawn.

7.3   Leyland Daf

The results of the profiling techniques are shown in Table 7.1. Leyland Daf is the most developed of the organisations chosen. Its profile in Fig 7.1 is for the most part between the mature and advanced stages of development. In terms of its general rating, it would have an overall score of 81 out of a maximum of 90.

TABLE 7.1	LEYLAND DAF PROFILE RATING	
VARIABLES	RATING	TOTAL
1 & 3	of 3	6
4,5,7,8,9	of 4	20
2,6,10 - 18	of 5	55
TOTAL		81

FIG 7.1 - LEYLAND DAF PURCHASING DEVELOPMENT PROFILE

PURCHASING PROFILE ANALYSIS

MEASUREMENT AREA

STAGE OF DEVELOPMENT

		1 INFANT	2 AWAKENING	3 DEVELOPING	4 MATURE	5 ADVANCED
A1	Activity Breakdown Analysis			●		
A2	Purchasing Organisational Structure					●
A3	Purchasing Services			●		
B1&2	Function Position in the Business				●	
B3	Extent of Training /Development of Buyer				●	
B4	Relative Remuneration Levels					●
B5	Measurement of Purchasing Performance				●	
E1	Standard of Information Systems				●	
E2	Computer Technology				●	
F1	Standard of Operating Procedures					●
H1	Interface Development (Buying Centre)					●
H2	Buying Process Involvement					●
I1	Buyer Characteristics/Development					●
I2	Degree of Purchasing Specialism					●
J1	Supplier Inter-face Development					●
J2	Policy on Ethics					●
J3	Hospitality					●
J4	Quality of Buyer/Supplier Relationship					●

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Whilst such a scoring system is very crude, and does not allow for 'weighting', as some variables are more important than others, it does give an overall indication of the development of the purchasing function in terms of these variables. Leyland Daf is an organisation that has had to face considerable change over the last 10-15 years. Sales of trucks (its major product) have fallen substantially. The group has been forced to continually identify ways of rationalising its operations and reducing costs. In 1980/90 it had a sales turnover of £450 Million and a purchasing expenditure of between £300 - 350 Million, around 65-70% of revenue was spent on bought out materials and supplies. It is therefore not surprising that the purchasing area was seen as a major area for cost reduction.

For the most part, research findings were as expected, but there were unexpected results in a few areas. It was believed that buyers would, in an organisation of this size, spend less time on clerical activities such as order processing and routine expediting. This was not the case. Operational buyers were spending 50% or more of their time on clerical activities, the opportunity cost of such use of their time is extremely high. In the literature review, Hakell (1986), Reck and Long (1988) and general comments made from senior executives at Leyland Daf indicated that more of the buyers' time would be spent on cost reduction exercises and negotiations, this was clearly not the case in terms of this measurement criteria. Frequent re-structuring of the company had adversely affected purchasing. Respondents felt the 'head count' had also fallen in the purchase area. Often, the consequences of such policies meant the buyer lost clerical help and had to take on board more clerical work.

Research conducted at Leyland Daf several years prior to this survey, revealed 30-40% of the buyers' activities were clerically oriented. By the late 1980's and early 1990's, it had increased considerably. In terms of this variable, Leyland Daf had regressed. Interviews with buyers in the organisation showed they were unhappy with this state of affairs, and felt it reduced their real buying effectiveness. With growth and development of supplier partnerships, and lowest acquisition cost concepts, their role as buyers' was being undermined. At Director level in the purchasing activity, it was understood that buyers spent less time than they did on clerical

activities. Purchasing services such as value analysis and cost analysis had also been reduced over the years. Again this was in part due to cut backs. Such services assisted the buyer in obtaining better value for money. It was agreed by senior management within the activity, that such cut backs were not desirable, but were necessary under the circumstances.

During the 1980's, all other measurement variables had moved in a positive direction. Key staff within the organisation felt that a developed proactive Purchasing and Supplies activity was of paramount importance, if the company were to survive. The structure mirrored such beliefs, with three Directors of Purchasing, one of whom represented the activity at Board level.

Development of the function at Leyland Daf however was not linear or uniform. During the early 1970's its visibility within the organisation fell. This occurred when it became part of Manufacturing. By the mid 1970's it changed again, when it was taken over by Daf, and a Director of Purchasing and Supply reporting at Board level was introduced. Interviews with Buyers, Managers, and, Directors at Leyland gave a general feeling of professionalism in terms of; the way they conducted their activities, office accommodation, their relationships with internal staff and outside suppliers.

7.3.1 Future Developments at Leyland Daf

There was a general concern within the organisation, over the lack of demand for trucks. Further restructuring was expected, and almost certainly this would lead to fewer staff within the purchasing activity. A comment made by a senior purchasing executive however, held some hope for the future. Referring to future developments, Bill Craig believed that purchasing could still develop with fewer staff because it was now dealing with a smaller number of top rate World Class suppliers. World Class strategies were reducing unnecessary cost activities in the longer term e.g. expediting, order processing etc.. Ten years ago, Leyland Daf had treble the number of suppliers, negotiated deals on a year to year basis, and had major delivery and quality problems with suppliers. The introduction of World Class concepts and a reduced supplier base had significantly reduced such problems. Major developments within the organisation, and of the purchasing activity has lead to the development of strategic acquisition cost concepts and less concern with the lowest price. Strategic suppliers have

now become an accepted part of an integrated supply chain, few purchasing resources are therefore needed to manage them.

Future developments however, needs even closer ties between key strategic suppliers, Leyland Daf, the purchasing activity and other internal functions. Improvements integrated databases are essential in this area. With the development of World Class concepts and a vastly improved supplier base, there has been a corresponding reduction in the level of clerical activities. Using electronic data interchange, less paper is required, better quality and greater detail in terms of delivery means less time is spent by the buyer dealing with such problems. As the supplier base is reduced and becomes more efficient, less of the buyers time will need to be spent on reactive clerical purchasing activities.

7.4   Kent County Council (KCC)

Kent County Council's profile is shown in Fig. 7.2. Kent CC was the second most developed of the organisations sampled. Its profile was more advanced than originally expected, and it was considerably more developed than Lancashire County Council, also profiled in the survey. Historically, Kent CC has always been one of the leading councils in terms of obtaining value for money, and introducing innovative ideas. In many ways it was one of the Conservative Governments success stories.

In terms of the purchasing and supply activity it was quick to recognise the importance of the function and develop it. The head of the purchasing activity, and previous heads, reported directly to the Chief Executive of the Council. The high profile of the purchasing activity was certainly nurtured and developed by the previous head of the function. He was in the unique position of reporting directly to the Chief Executive of the Council and having enshrined into Council financial regulations a clear mandate that all departments purchased their requirements through the Central Purchasing activity. Purchasing at Kent CC was seen as being a major influencer in Council policy and offered good career prospects to new recruits.

PURCHASING PROFILE ANALYSIS

MEASUREMENT AREA

STAGE OF DEVELOPMENT

	1 INFANT	2 AWAKENING	3 DEVELOPING	4 MATURE	5 ADVANCED

Measurement Area	Code	Value
Activity Breakdown Analysis	A1	3
Purchasing Organisational Structure	A2	4
Purchasing Services	A3	4
Function Position in the Business	B1&2	5
Extent of Training /Development of Buyer	B3	4
Relative Remuneration Levels	B4	4
Measurement of Purchasing Performance	B5	4
Standard of Information Systems	E1	4
Computer Technology	E2	3
Standard of Operating Procedures	F1	4
Interface Development (Buying Centre)	H1	3
Buying Process Involvement	H2	4
Buyer Characteristics/Development	I1	4
Degree of Purchasing Specialism	I2	4
Supplier Inter-face Development	J1	3
Policy on Ethics	J2	4
Hospitality	J3	3
Quality of Buyer/Supplier Relationship	J4	3

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The high profile found at Kent County Council was very much the exception. The vast majority of County Councils have a fragmented approach towards purchasing and saw the activity as having a relatively low status and little involvement in policy making. As a result of new legislation in the latter half of the 1980's, the role of purchasing and possibly influence was changing. Major users of Kent CC's Purchasing services particularly schools and colleges can now buy from whom they like, provided they obtain value for money. Kent CC has to be far more proactive in selling its services to what used to be a captive market. If one examines its profile in more detail, its overall numerical score is 67 out of maximum 90.

TABLE 7.2   KENT COUNTY COUNCIL - PROFILE RATING

VARIABLES	RATING	TOTAL
1,9,11,15,17 and 18	3	18
2,3,5-8,10,12,14 and 16	4	44
4,	5	5
TOTAL		67

Kent County Council's profile indicates an organisation that for the most part is developed. However, there are certainly areas that need improvement if it is to perform its function more effectively in the future. It still retains its high profile position within the organisation, but will need to develop more quickly, particularly in terms of its external customer interface, which is not as developed as equivalent Private sector organisations.

Buyers were still spending a large proportion of their time on clerical activities. There was a general feeling from more senior purchasing executives that whilst this was not desirable, it was necessary as a result of cut backs and new activities being undertaken by the function. Similar developments had occurred in other organisations when faced by cutbacks. Computer technology and systems had been reasonably advanced at Kent CC during the early to mid 1980's but had failed to maintain this lead. There was a need to fully integrate their systems with the rest of the organisation, and eventually through EDI, with customers and suppliers. Whilst they were moving in this direction, they still had a considerable way to go. Lack of development in this area meant buyers were involved in more clerical work than would have been the case .

Interface development between purchasing and the rest of the organisation scored lower than other variables. With the development of 'budget holders'

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within major user departments, purchasing's influence had been reduced. Budget holders do not have to consult with purchasing. Both within KCC, and outside, purchasing was having to market its activities and benefits far more effectively. In the past, there were Standing Orders that necessitated purchasing's involvement from users, when undertaking purchasing, this is no longer the case.

In response to Government legislation, transferring greater responsibilities to users of services in the Public Sector, purchasing has employed staff to market its services more effectively. If the purchasing activity within Local Authorities cannot market its services effectively, it will go into terminal decline.

From the profile it can be seen that the variables, supplier interface development, hospitality and the quality of the buyer-supplier interface are developing, but do not show the characteristics of a mature or advanced organisation. Traditionally, Local Authorities have tended to keep suppliers at arms length, mainly due to restrictive operating procedures. Organisational culture demands impartiality in all dealings with suppliers, this in turn often leads to a remoteness in the relationships. Regular visits to suppliers is therefore not encouraged at buyer level for fear of buyers becoming too familiar. Hospitality tends to be basic and infrequent from the buying side. The problem with this distancing and remoteness of approach between buyer and seller is that it causes major problems in developing partnership sourcing and the consequent benefits, of such practices.

Developed organisations in the Private Sector are only effectively able to reduce their supplier base and strategic costs of supply if they put considerable time and resources into managing their supplier base. Local Authorities and those organisations in the Public sector are often not in a position to do this effectively, and therefore fail to realise major strategic savings, due to clearly laid down regulations designed to encourage competition.

Whilst operating procedures are reasonably well developed, such operating procedures tended to be restrictive. Procedures were often written to enhance public accountability and demonstrate fairness of approach. Audits

of such procedures were simply concerned with proving that policies and procedures had been followed. Many of the procedures hampered effective purchasing in terms of lowest cost of supply, for example the tendering process used by Local Authorities.

The position of purchasing within the Kent County Council organisation and its functional development was far more advanced than expected. Its high profile position, compared with many other local authorities comes from a senior management belief in its importance. Training of buyers, salaries and performance criteria are all indicative of the high profile enjoyed by the purchasing function.

7.4.1 Future Developments

Kent County Council, like many other organisations in the Public sector, are going through a period of rapid transition. Budget holders can buy where they wish. KCC should be able to effectively manage changes involved in what has become a period of rapid transition.

A comment made by a senior member of Kent CC purchasing indicated both the way ahead and the need for a change in philosophy, when he said, "It is no longer good enough to have one of the best developed purchasing functions found amongst local authorities, we have to be the best across all organisations". This would involve changing some of the purchasing practices used by Local Authorities, like tendering, and attitudes to suppliers that severely restrict the development of efficient purchasing in the Public Sector.

7.5   T.D.S. PNEUMONICS

The profile for TDS Pneumonics is given in Fig 7.3. The purchasing function is, essentially, at stage 3 (developing), its overall score was given as 54 out of a maximum of 90, see Table 7.3.

TABLE 7.3 - TDS PNEUMONICS PROFILE RATING

VARIABLES	RATING	TOTAL
3 & 4	of 2	6
1,2,5-11,13-15,17,18	of 3	40
12,16	of 4	8
TOTAL		54

TDS Pneumonics was established in 1975, selling VDU'S, then moving into manufacturing of the VDU's and digitisers. It had sales of £6.2 Million in 1990, of which 55-60% was spent on bought out materials and supplies. The purchasing activity has grown from one person in 1977 to a staff of four in 1991. The period 1977 to early 1990's has seen purchasing move from a one man operation, looking after-not only purchasing but stores, stock control, despatch and material control, to a specialist four man unit with its own purchasing manager, involved purely in purchasing activities. It has moved from an infant purchasing activity to a developed purchasing function in some 14 years.

FIG 7.3   TDS   PNEUMONICS   PURCHASING   DEVELOPMENT
PROFILE

PURCHASING PROFILE ANALYSIS

STAGE OF DEVELOPMENT

	1 INFANT	2 AWAKENING	3 DEVELOPING	4 MATURE	5 ADVANCED

MEASUREMENT AREA

Code	Measurement Area
A1	Activity Breakdown Analysis
A2	Purchasing Organisational Structure
A3	Purchasing Services
B1&2	Function Position in the Business
B3	Extent of Training /Development of Buyer
B4	Relative Remuneration Levels
B5	Measurement of Purchasing Performance
E1	Standard of Information Systems
E2	Computer Technology
F1	Standard of Operating Procedures
H1	Interface Development (Buying Centre)
H2	Buying Process Involvement
I1	Buyer Characteristics/Development
I2	Degree of Purchasing Specialism
J1	Supplier Inter-face Development
J2	Policy on Ethics
J3	Hospitality
J4	Quality of Buyer/Supplier Relationship

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Paul Pickup, Manufacturing operations Manager, established a purchasing function and was its first buyer and purchasing manager. He had a strong belief in the importance of a purchasing unit at TDS, and convinced senior management. Being a relatively small organisation, it was not as difficult to demonstrate the importance of a proactive purchasing activity to the rest of the organisation. Effective purchasing by Paul Pickup and his staff lead to cost reductions, fewer delivery problems, and improved quality.

Examining the purchasing profile in more detail, TDS was not as developed in the areas of purchasing services and its function within the business. Services to assist the buyer, such as financial, cost analysis and legal, are not readily available and would have to be sought outside the organisation. This can often lead to the buyer either not performing his job as effectively as he or she could, or spending valuable time on activities unrelated to buying. Whilst the Purchasing Manager, David Smith, reports to the Manufacturing Manager, Paul Pickup believed things are not as they seemed. In most organisations this state of affairs would diminish the role of the purchasing activity, in this case, Paul Pickup is also a purchasing specialist, and reported directly to the Operations Director. Whilst he had access to the Managing Director, the fact that the Purchasing Manager was reporting at two levels below the Managing Director limited purchasing's ability to get involved with strategic issues. This situation would need to change in the future if purchasing was to be a greater influencer in strategic decision making.

Training and development of buyers at TDS was believed by senior management, to be satisfactory. There was however, a need to consider the future requirements in this area if purchasing was to further develop. TDS trained and developed their own staff, qualifications were not necessarily sought in the purchasing areas, although staff were encouraged to develop themselves and obtain Chartered Institute of Purchasing and Supply qualifications.

Although attempts were made to measure purchasing performance, it was limited. It was felt that due to the recession TDS was facing, that resources were not as available to measure performance as extensively as they used to be. The Purchasing Manager believed that because TDS was not paying

suppliers on time, and cutting back on its normal requirement that this had lead to poor service from what would normally be considered good suppliers. In this instance, the measuring of performance was becoming meaningless.

Developing a long term relationship, measuring and improving performance is however, seen by more advanced purchasing organisations, as the strategic way forward. It's no good abandoning the idea when there are problems. Measuring performance in terms of price, vendor ratings and buyers achievements in terms of strategic goals, needs to be continuous. Measurement of performance highlights problem areas, they need to be appraised and improved if the function is to develop.

TDS in 1991 had a bought out material and expenditure of nearly 60% of total turnover. This bought out material expenditure was growing and there was a clear directive from the Managing Director that development of the purchasing activity was required in order to manage this expenditure efficiently. In order to achieve this objective, buyers had to be freed from clerical activities and spend more of their time on such activities as supplier development, negotiations and cost reduction exercises.

It was expected that TDS, being a computer organisation, would have had a more advanced computer system. This was not the case. Whilst they had an integrated computerised system, it was providing relatively superficial information in terms of supplier information, costing data and vendor performance. MRP II was not available. Whilst TDS had procedures and systems covering most aspects of the purchasing function, due to recession and staff shortages, they were not being followed, as in the case of vendor and buyer performance monitoring. Purchasing's involvement in the buying process was high, stage 4, and it was involved to a reasonable level in the buying centre.

There was a strong belief in the organisation that staff should now only be recruited into the function if they really saw it as a career move. Once recruited, TDS trained and developed their buyers and encouraged, where it could, specialisation. Another interesting feature, revealed in the research, was that whilst in normal circumstances buyers did not get involved in non

buying activities, with the recession and trading difficulties, they sometimes had to help out in other non purchasing areas.

Relationships with suppliers were seen as being extremely important if World Class concepts were to develop, and acquisition costs driven down. Ethical considerations with suppliers was at a mature stage of development. Whilst the four measurement criteria that indicated supplier stage of development were at stage 3, it was generally felt that TDS were falling back in these areas, again due to the recession and lack of time to spend with key suppliers. The quality of the relationships also seemed to be suffering because TDS, as a result of falling sales, was not able to pay on time or give key suppliers the normal volume of business.

It would seem that whilst TDS had most of the hallmarks of a stage 3 developing purchasing function, as a result of depressed trading conditions and cutbacks was witnessing a short term regression in a number of the development criteria. Measurement of purchasing performance, training of buyers, operating procedures and several dimensions of the buyer seller relationship had fallen considerably in some cases during the period 1990/91. This could well be an organisation's response to poor trading conditions. Paradoxically however, when trading conditions are bad, this is the time one would expect a well developed purchasing activity to make a much bigger contribution. Falling sales in most cases means reduced profits, a more efficient purchasing could help increase profits. In more enlightened organisations, one might have expected to at least see resources maintained in the function, not reduced. In the case of Leyland Daf , it had been the contribution from a mature, advanced purchasing function that helped the organisation to survive when faced with poor trading conditions.

7.5.1 Future Developments

Purchasing's development will continue if the organisation can manages to ride out the recession. Paul Pickup was at the stage of contemplating using their purchasing expertise to buy for other organisations, that as yet did not have a developed purchasing activity. This could be an interesting development.

7.6 LANCASHIRE COUNTY COUNCIL
CENTRAL PURCHASING UNIT

Lancashire County Council's (LCC) purchasing profile is shown in Fig 7.4. Its overall profile rating is 44 out of 90, shown in Table 7.4.

TABLE 7.4	LANCASHIRE COUNTY COUNCIL - PROFILE RATING	
VARIABLES	RATING	TOTAL
1,3,6,8,9,11 14,15,17 and 18	of 2	20
2,4,5,7	of 3	12
10,13 and 16	of 4	12
TOTAL		44

This profile and rating would indicate that purchasing development at LCC is between stages 2, awakening, and 3 developing. It scores more highly in three of the measurement criteria, standard of operating procedures, buyer development, and ethics, reaching a mature stage of development in these areas.

FIG 7.4   LANCASHIRE COUNTY COUNCIL
PURCHASING DEVELOPMENT PROFILE

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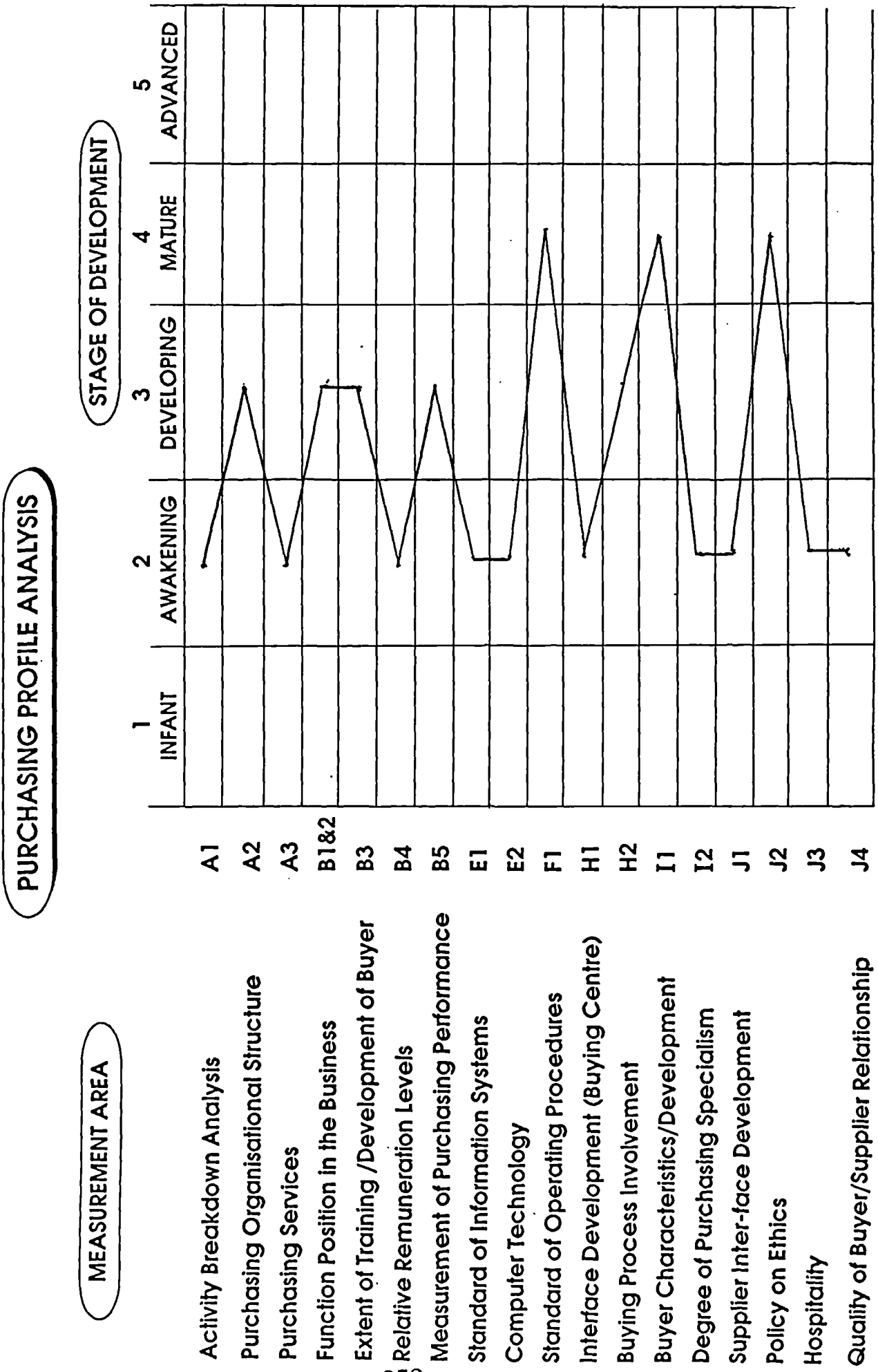
The stage of development reached by LCC purchasing is not surprising as it was only established in November of 1986. From its beginning, it has been staffed by professional buyers, mainly from the Public Sector, with its manager, Tony Bilsborough coming from outside the Authority, and having a background in the automotive industry.

If we examine certain of the measurement criteria in more detail, one finds over half of them at stage 2. Essentially the activity was beginning to develop from a clerical and reactive function, to a more developed activity. Almost 70% of the buyers' time was involved in clerical activities. This situation was due to the general culture found within Local Authorities, to follow and document all laid down procedures. Tendering and post tender negotiations also generated enormous amounts of paperwork. Tony Bilsborough, the Purchasing Manager felt too much of his buyers' time was spent on this activity and not enough on supplier development, negotiations, and interface development within Lancashire County Council. Lack of suitable computer hardware and software limited back up services to help the buyer, also outdated procedures and an outmoded culture towards commercial activities made developments in the purchasing function difficult.

Whilst LCC did score much more highly on standard of operating procedures, buyer development and ethics, in many ways this was expected. More careful examination reveals, like Kent County Council purchasing, operating procedures, whilst covering all aspects of the purchasing function, tend to be commercially restrictive, but are excellent for accountability purposes. Again ethical standards are high but severely limiting in terms of helping to form long term supplier relationships, which is essential if World Class concepts are to succeed.

Local Authorities have always been reasonably advanced in terms of staff training and development, and resources have been made available. Its structure was still developing, essentially, LCC purchasing was moving towards more of a Materials Management structure with buyers beginning to spend more of their time on buying activities. It still however, has a long way to go compared with Kent County Council purchasing, Kent CC has, in most instances, reached the mature stage 4 of development. If one compares the profiles of Lancashire CC and Kent CC, some of the biggest differences are

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to be found in the areas of the availability of purchasing services, computer systems, positioning of the activity in the business, quality of information systems, operating procedures and purchasing involvement in decision making. In these areas Kent CC is more advanced than Lancashire CC.

Good computer systems, back up services and quality of information release the buyer from clerical activities. In the case of Kent CC, the buyers spend more time on "buying activities" and less on clerical ones. Measurement of buyers performance was more advanced at Kent County Council, and there is a higher profile for the function and this helps to explain why higher salaries are paid to the buyers, and their work content is less clerically oriented.

Whilst Kent CC had well developed operating procedures like Lancashire CC, they are more concerned with public accountability than improving the commercial side of the function. Similarly, in the area of supplier relationships, ethics and supplier bondings, at buyer level they tend to be superficial in both organisations. In the case of Kent CC however, senior staff are encouraged to develop supplier relationships more than they are at Lancashire County Council.

Kent County Council purchasing has been established for over thirty years, and over this time has been seen as a high profile, proactive activity. In the case of Lancashire County Council, its purchasing function is comparatively new, with a 5 year history, but it is making its mark and will develop. Both organisations are likely to see major impacts on the development of their purchasing functions as a result of European Community legislation and the Education Reform Act of 1991. At present, both these Acts appear to be having an adverse effect on the development of purchasing.

7.6.1 Future Developments

How the Central Purchasing Unit develops will depend on what budget holders want. If they see the Unit as an activity that offers good value for money, then its future development is safeguarded, if not, then it may cease to exist, or be amalgamated with other similar units elsewhere in the County.

7.7 BBC PURCHASING FUNCTION WITHIN THE ENGINEERING DIRECTORATE

The BBC's major purchasing function lies within the Engineering Directorate. Its profile is identified in Fig 7.5. Its profile rating is shown in Table 7.5. Out of a maximum score of 90, it achieves a score of 42. The profile rating is similar to Lancashire County Council in terms of its overall score, but not in terms of its profile configuration. It is essentially moving from the awakening stage of development into a developing activity.

TABLE 7.5   BBC ENGINEERING PURCHASING PROFILE RATING

VARIABLES	RATING	TOTAL
1,3,6-9,15,17 & 18	of 2	18
2,4,5,10-14	of 3	24
TOTAL		42

The activity at buyer level is essentially clerical and administrative. The Purchasing Manager was of the opinion that purchasing time needed to be dramatically reduced in this area if his buyers were to be more proactive. The lack of various services and computer technology to assist the buyer were also evident. Measurement of performance was limited and often expressed in terms of clerical efficiency, thus perpetuating and reinforcing such activities.

Low remuneration levels tended to deter new recruits into the activity and hindered purchasing development. It is not surprising in view of the buyers' time spent on clerical activities to find little opportunity for buyers to develop and expand their relationships within the organisation, or with outside suppliers. All of those purchasing activities that are developed, around stage 5, involve spending a considerable amount of their resources on internal and external interface development. Buyers at the BBC spent a very limited part of their time with suppliers, thus making it difficult to improve the quality of the relationship. Hospitality was basic and in most cases provided by the supplier. Whilst there was a strong ethical code, this was more due to audit requirements than a recognition that it is necessary in good commercial relationships.

PURCHASING PROFILE ANALYSIS
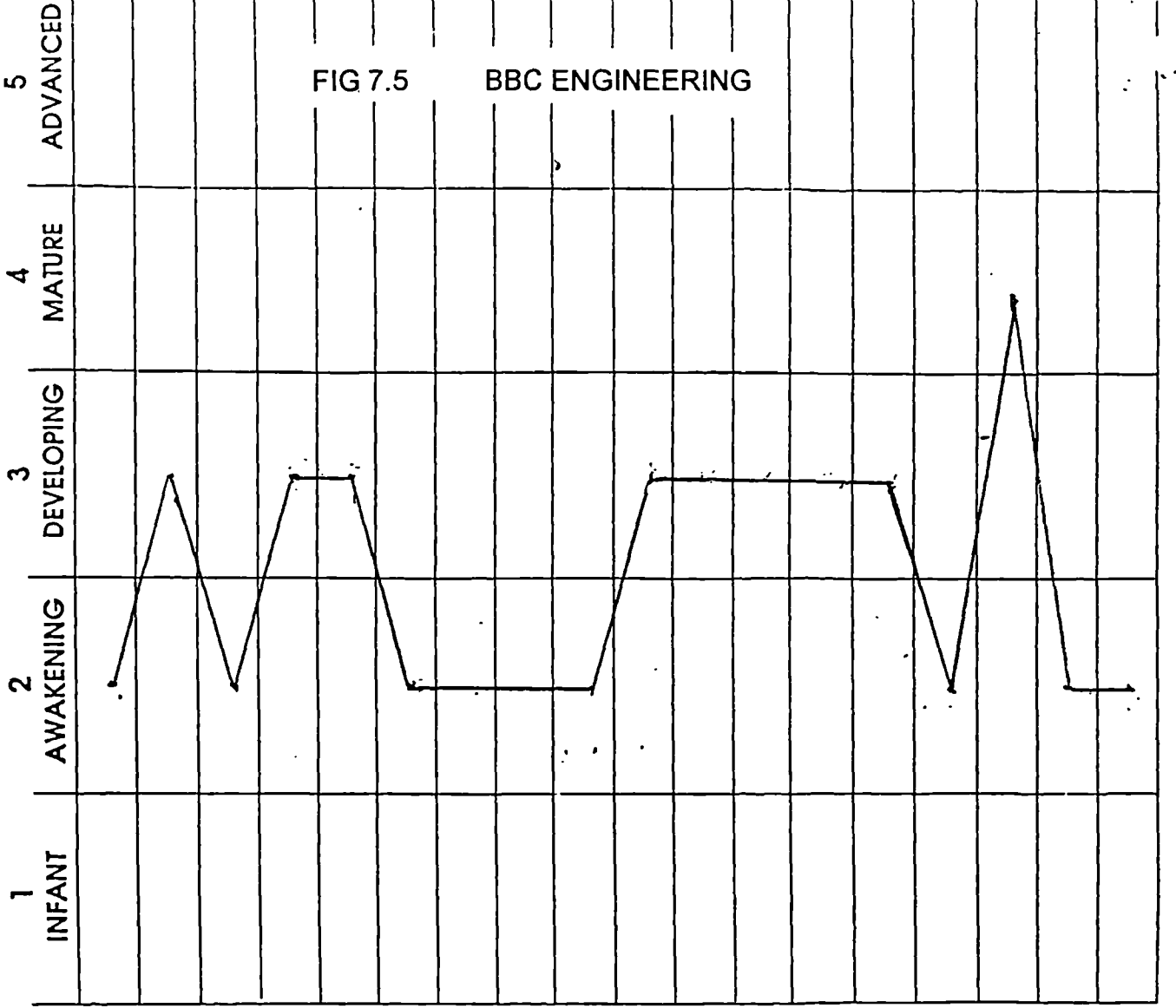
STAGE OF DEVELOPMENT

MEASUREMENT AREA

FIG 7.5   BBC ENGINEERING

		1 INFANT	2 AWAKENING	3 DEVELOPING	4 MATURE	5 ADVANCED

No.	Measurement Area	Code
1	Activity Breakdown Analysis	A1
2	Purchasing Organisational Structure	A2
3	Purchasing Services	A3
4	Function Position in the Business	B1&2
5	Extent of Training /Development of Buyer	B3
6	Relative Remuneration Levels	B4
7	Measurement of Purchasing Performance	B5
8	Standard of Information Systems	E1
9	Computer Technology	E2
10	Standard of Operating Procedures	F1
11	Interface Development (Buying Centre)	H1
12	Buying Process Involvement	H2
13	Buyer Characteristics/Development	I1
14	Degree of Purchasing Specialism	I2
15	Supplier Inter-face Development	J1
16	Policy on Ethics	J2
17	Hospitality	J3
18	Quality of Buyer/Supplier Relationship	J4

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The BBC purchasing activity, like other Public Sector organisations, has been affected by the trend towards decentralisation and devolution. In the 1960's/70's there had been an instruction that all purchasing requirements should go through the various buying departments. This changed in the mid 1970's onwards, with more decentralisation and devolution. Restructuring activities into the 1980's and 90's lead to purchasing power being given to budget holders in various departments, who could buy where and from whom they wanted. There was no longer any requirement they had to use the purchasing department. Like Kent County Council and Lancashire County Council, purchasing in the BBC must now promote itself to the would be users. Unfortunately, like the rest of the Public sector, it is still affected by rules and regulations designed to satisfy audit requirements, rather than encourage sound commercial purchasing practice.

7.7.1 Future Developments

It is likely in the future that the success of the purchasing activity, like many other "pseudo Public Sector" organisations, will depend on the budget holder. If they use the activity, it is likely to expand and develop, if not it could well cease to exist as a separate function.

7.8 T.M.L. Plastics

TML Plastics (TML) is the least developed organisation used in the six case studies. Its profile is shown in Fig. 7.6 and its profile rating in Table 7.6. Its overall score is 36.

TABLE 7.6	TML PLASTICS PURCHASING PROFILE RATING	
VARIABLES	RATING	TOTAL
1	1	1
2-9 and 13-17	2	26
10-12 and 18	3	4
TOTAL		36

TML's profile rating of 36 puts it at awakening stage in terms of purchasing development. Whilst the organisation has been around for some 30 years, until 1973, most of their work was for the textile industry. From around the 1970's more involvement occurred outside the textile business as they started to make plastic components for non textile customers. The non textile business has grown substantially and TML's major business has changed from textile business to producing plastic parts, mainly for the

Automobile and Telecommunications industries. A buyer was appointed in 1973, but purchasing as an activity had been neglected over the years. Whilst the purchasing function has developed, its progress has been slow, much slower than might have been expected for an organisation supplying major users in the Automotive industry.

FIG. 7.6 TML PLASTICS PURCHASING DEVELOPMENT PROFILE

PURCHASING PROFILE ANALYSIS

STAGE OF DEVELOPMENT

MEASUREMENT AREA

A1	Activity Breakdown Analysis		
A2	Purchasing Organisational Structure		
A3	Purchasing Services		
B1&2	Function Position in the Business		
B3	Extent of Training /Development of Buyer		
B4	Relative Remuneration Levels		
B5	Measurement of Purchasing Performance		
E1	Standard of Information Systems		
E2	Computer Technology		
F1	Standard of Operating Procedures		
H1	Interface Development (Buying Centre)		
H2	Buying Process Involvement		
I1	Buyer Characteristics/Development		
I2	Degree of Purchasing Specialism		
J1	Supplier Inter-face Development		
J2	Policy on Ethics		
J3	Hospitality		
J4	Quality of Buyer/Supplier Relationship		

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In 1988, the buyer left and it was decided to raise the profile of the activity and the post was advertised at a Purchasing Manager level. The purchasing activity was restructured, but in essence, remained clerically oriented, with a relatively low status in the organisation. Examining the profile in more detail, one finds that the vast majority of the buyer's job was essentially clerical.

Whilst major changes have occurred affecting the organisation, purchasing still reports below Managing Director level. Lack of senior support, specialisation, training and pay, limit development of the activity. Information systems are basic and lack effective computer integration. Performance of the function is measured in terms of keeping stock levels down, and clerical performance. Buyers tend to be involved with keeping the production line moving, and with little else. Their relationships with key suppliers is strictly limited, although this is changing, mainly as a result of pressure from major customers.

Operating procedures are more developed than other criteria mentioned, but only slightly. Such procedures have been developed to ensure methodologies are followed to avoid major mistakes in the purchasing area. There is also higher development in terms of buying process and buying centre measurement criteria. Perhaps one of the main catalyst in the development of the purchasing activity has come from major customers like Ford and Rover. Major customers have themselves, well developed purchasing activities, and expect their suppliers to maximise the benefits of a proactive purchasing function. Pressure from major customers has meant TML is expected to develop World Class strategies that will improve performance and drive down acquisition costs. This then means TML must develop its purchasing activity more aggressively.

TML has been selected by both Ford and Rover to be a major supplier of automotive plastic parts. In order to satisfy requirements of such major customers effectively, it must rationalise its supplier base and eliminate unnecessary costs. This in turn requires buyers to spend more time with key suppliers, examining ways of improving efficiency of the relationships. At the present time, purchasing at TML is not sufficiently developed for this to be satisfactorily undertaken. The management culture within TML unfortunately does not see purchasing as a proactive cost reduction activity, it is still seen

primarily as a clerical reactive function, with no strategic role. This is clearly demonstrated in terms of its positioning within the business, the status of the Purchasing Manager, and his role in major meetings with customers.

7.9   General Comparative Analysis - Overview

Leyland Daf exhibits the most developed profile, whilst TML Plastics shows the least developed. In the next section, each of the eighteen variables developed from the literature survey and operationalised in the survey will be reviewed in greater detail. The objective of this review is to evaluate the usefulness of the particular measurement criteria chosen, and comment on the spread of measurement criteria chosen.

7.10   Dependent Measurement Criteria

The various dependent measurement criteria are now analysed in depth, under each of the headings chosen and conclusions are drawn. Independent criteria reported as also affecting purchasing development are summarised at the end of each of the criteria investigated and examined in greater detail towards the end of the analysis.

7.11 A1 - Activity Breakdown Analysis

The amount of time a buyer spends on routine reactive clerical activities, compared to managerial and strategic, proactive goals of the job were seen to be indicative of purchasing development. In the literature review, a more detailed list of purchasing activities had been identified, Aljian (1986) Appendix 2:1 indicated a comprehensive list of purchasing activities, using this listing and information from respondents, clerical, managerial and strategic activities were identified and carefully evaluated.

Researchers in this area, Heinritz and Farrell (1984), Dobler Lee and Burt (1986), indicated that as the purchasing function develops, so there is a tendency towards specialisation in the purchasing activity away from non buying activities such as expediting and stock control towards specialised buying. Further research by [Jones (1983), Barnes and McTavish (1983), Reck and Long (1988), Sysons (1990), and Stuart (1996)] all indicated that as the purchasing activity developed, so its focus moved away from clerical routine and reactive activities towards managerial and strategic activities, this in turn affected the breakdown of the buyers' job specification.

The findings from six organisations in the sample have already been given, but are summarised in Table 7.7.

TABLE 7.7 A1 - ORGANISATION AND SCOPE OF FUNCTION ACTIVITY BREAKDOWN ANALYSIS

ORGANISATION	STAGE OF DEVELOPMENT		
TML Plastics	Stage	1	Infant
BBC Engineering	Stage	2	Awakening
Lancashire County Council	Stage	2	Awakening
TDS Pneumonics	Stage	3	Developing
Kent County Council	Stage	3	Developing
Leyland Daf	Stage	3	Developing

Sample findings tended to agree with much of what other writers in this area found. Many of those interviewed felt that their buyers were spending too much of their time on clerical activities, where "real buying" or supply management contribution was minimal. In such instances, buyers were little more than order clerks, and often got paid accordingly. This was particularly true at TML Plastics, where both buyers spent 90% of their time on basic clerical activities. Major customers to TML like Rover and Nissan wanted their suppliers to be moving towards World Class concepts which meant the elimination of unnecessary costs, an improved supply chain and the fostering of supplier partnerships. All of their requirements are extremely difficult to achieve with an organisation where the purchasing function is essentially reactive and clerically oriented.

Leyland Daf, the most advanced organisation in the sample, wanted its buyers to be spending most of their time on what it regarded as "real buying" activities, namely negotiations, cost reduction, offering an effective service to users, and developing a strategically rationalised supplier base with a strong long term partnership between buyer and supplier.

Other organisations in the sample felt that their buyers time involved too much on the clerical activities, and there was an opportunity cost involved here. If buyers could spend more of their time on managerial and strategic

activities, they would have time to reduce prices and real acquisition cost. The value added part of the buyers' job can only effectively be harnessed if they move away from routine reactive clerical activities. Bailey, Farmer, Jessop and Jones (1994) believe that in the average manufacturing organisation, over 50% of its sales revenue is spent on bought in materials and supplies. Savings in this area can lead to increases of profitability. Buyers however, must have the time and training to achieve such savings.

Clerical activities have to be performed, but with modern computer systems, better suppliers and a more integrated approach, they can be reduced considerably.

If we examine in Table 7.8 some of the reasons given for the levels and growth of Clerical activities, some interesting conclusions emerge.

TABLE 7.8   REASONS FOR GROWTH OF CLERICAL ACTIVITIES

ORGANISATION	REASONS
LEYLAND DAF	Model changes, cuts in back up services. Organisational cut backs. Lack of computer developments.
KENT CC	Organisational changes. Lack of computer developments. Restrictive systems. Public accountability, new EEC legislation.
TDS	Recession - cut backs. Computer development negative.
Lancashire CC	Restrictive systems. Antiquated buying methods. European rule on tender. Legislation changes.
BBC	Poor computers. Restrictive systems.
TML	Culture within organisation, poor computer systems.

Common reasons for either increased clerical activities for the buyer or a failure to reduce it seemed to revolve around:

- Organisational cut backs
- Reductions in services to the buyer
- Lack of computer developments
- The recession of 1988-92
- Restrictive purchasing practices
- Cultural attitudes toward purchasing
- New product development or changes

It appeared in all the organisations that as a result of the recession, cut backs in organisational activities affected everyone, including buyers. Staff cut backs in purchasing, particularly clerical ones, meant the buyer was often expected to get involved in more clerical activities. This in turn reduced the effectiveness of the buyer in all of the organisations investigated. One might have expected in recessionary times, when it is difficult to increase profit by selling more, to spend more time improving efficiency at the input end of the business, where savings could be made, thereby increasing corporate profitability.

Savings from a well developed purchasing activity could, according to Aljian (1988), save between 5-10% on bought out supplies. This of course, presupposes they have the time and training. In a keynote address to a Chartered Institute of Purchasing and Supply in November 1993, Athal Grieve, the Vice President of Johnson and Johnson, stated a well developed proactive purchasing activity could be saving the organisation in excess of 15% on bought out materials and supplies.

The problem of restrictive internal purchasing practices and their affects on clerical activities were particularly pronounced in the Public Sector organisations, and the BBC. Tendering in itself was a time consuming process compared with the main buying methods used in the Private Sector of enquiries, quotations and orders. Most of the clerical and administration systems used in the Public Sector were designed for audit and public accountability reasons, and are extremely labour intensive and clerically oriented. Even the process of Post Tender negotiations is time consuming.

If one examines purchasing practices and procedures in the Private Sector, they are far more enlightened and on the whole encourage practices that

enable the buyer to achieve the best buy. Clerical requirements are, particularly in the more advanced organisations, minimised. If one compares an extremely mature organisation such as Kent County Council, with say Leyland Daf, one finds double or treble the clerical work in such activities as order placing, negotiating and source investigation.

Many of those interviewed with the Public Sector believed purchasing development was being restricted by such practices and wanted to adopt more enlightened approaches. It may well be they will find this increasingly difficult in the future. Already, tendering of high value contracts in the Public Sector is open to suppliers outside the UK. European Community Directives require high value contracts to be advertised throughout Europe, this is further complicating and extends the tendering process, and further increases clerical requirements. Such practices are increasing purchasing costs, which in turn leads to higher prices.

New ideas on "value for money" in the Public sector and ex Public sector organisations means budget holders can buy where they like. They no longer have to use contracts set up by their own purchasing departments. If their own purchasing functions do not offer value for money, they can purchase elsewhere. It is unlikely that Public Sector purchasing will be able to offer prices and deals as attractive as Private Sector purchasing organisations, because of the restrictive procedures they follow. Unless they are able to adopt more commercially sound procedures, they could well find their services not required in the future, by the budget holders they serve.

New product development and the requirements involved are also seen as an activity likely to increase purchasing clerical activity and take buyers off more cost effective activities. With the reduction of product life cycles, and the need to react quickly to market changes it is vital organisations develop and implement necessary product changes efficiently. Leyland Daf was particularly affected by new product development.

Prevailing cultures and attitudes towards the purchasing function were often instrumental in either encouraging or reducing clerical work. The less advanced the purchasing, the more one found the belief that purchasing was a clerical activity, its strategic and managerial functions were not

appreciated. This was revealed also in the Pilot Study II sample of 68 buyers from 58 different organisations and 12 from Short Bros., where in almost every case, low stages of development were associated with a cultural belief that purchasing was clerical.

7.11.1 Summary

The measurement criteria, activity breakdown, analysis of managerial and clerical activities, is seen as a particularly important indicator of purchasing development. Indeed, the majority of all those Purchasing executives were well aware of the opportunity cost of using a buyer as an order clerk. Whilst it is important that clerical activities are conducted effectively, such activities must not be seen as the major part of the purchasing function if the activity is to develop. In Fig. 7.7. major external and internal factors affecting clerical content of the buyers' job are detailed.

FIG.7.7   INDEPENDENT FACTORS AFFECTING CLERICAL ACTIVITIES IN PURCHASING

EXTERNAL	INTERNAL
• World Class concepts	organisational changes
• general environmental changes	culture
	specialisation
• general economic activity	computer developments
	internal systems and procedures
	new product development
	public accountability
	reduce backup services
	World class concepts

One of the factors affecting clerical content of the buyers' role has not as yet been discussed, namely World Class Management concepts. This will be evaluated in greater detail under a separate heading later, but it is likely to have a major effect on both the content of clerical activities and development of the purchasing function. Those organisations implementing such World Class concepts as Just in Time, Total Quality Management etc., require both a purchasing activity and buyers spending considerable time on managerial and strategic activities, not reactive paper pushing activities.

7.12 Purchasing's Organisational Structure

If the purchasing activity in an organisation is to function effectively, then it needs to be structured in such a way as to allow it to achieve its objectives. When evaluating the literature, different purchasing structures were described, depending on the size of the activity, and its integration or otherwise with the rest of the organisation. How purchasing is organised is itself revealing, in extremely undeveloped purchasing activities one might find the purchasing function is fragmented with each business activity involved with their own buying and little co-ordination of the activity. As the purchasing function develops and becomes an activity in its own right, buyers would tend to specialise in only buying activities. Heinritz and Farrell (1984) identified ten activities buyers might get involved with from buying to stores and inventory control. A developed purchasing function however, would not be expected to be closely involved in all supply related activities, if it is to handle purchasing effectively. Dobler, Lee and Burt (1986) believed the core purchasing was essentially concerned with negotiation, contract issuing, developing supplier relationships, cost reduction exercises, and was to be a major contributor to policy determination in these areas. Whilst one might expect to find purchasing involved in a wide range of activities, in small less developed organisations specialism of activity and greater role definition is likely as organisations grow and develop. This in turn effects the organisation of the function.

The literature revealed that with low stages of purchasing development with all purchasing and supply activities performed by one or a few staff, there would be a relatively simple structure. As it evolved, there would be greater specialisation of the staff towards purchasing activities and less towards stores, stock control and other typical supply activities, this in turn would show a more developed purchasing structure. Further developments of the activity might see specialist buyers, and moves towards centralisation of certain activities such as the negotiation of major items of expenditure, systems developments and operating procedures,' whilst more routine buying might be left to decentralised units. Developments such as Materials Management also help to enhance the purchasing activity. In a Materials Management set up, purchasing is seen as a separate activity, effectively integrated with other specialist input activities such as stores and stock

control, inventory management, material and production control. Purchasing is interfaced with these other 'input activities' Farmer (1981), but is not responsible for them, purchasing is seen as a separate activity.

Finally, the literature revealed that advanced organisations were more likely to adopt more of a logistics structure in order to more effectively facilitate the flow of materials into and out of the organisation, to the customers as efficiently as possible. The development of Just in Time (JIT), Manufacturing Resource Planning (MRP II) and Total Quality Management, amongst some of the World Class business strategies, has in turn has called for a more streamlined structure and supply chain management.

The development of such concepts has lead to much greater concern with overall acquisition costs, rather than purely price. There has also been far greater concentration on developing the 'input activities' of the organisation, particularly purchasing. If we examine the organisation structures of such companies as IBM, Mars, 3M, Marks and Spencer, Ford, where purchasing is well developed, one finds purchasing is structured probably within a Materials Management and or Logistics structure, there are specialised buyers, with specialists to aid such buyers. Purchasing will be centralised in terms of major negotiations and expenditure, with the head of the activity at Director level.

The literature suggested five major types of purchasing organisational structure, from the simple basic type to the very developed purchasing structures. Whilst categorising purchasing structures is not easy, these five major types of structure did, on the whole, work reasonably well for identifying development in terms of structures. The six organisations in the main sample were categorised as indicated in Table 7.9.

TABLE 7.9 PURCHASING ORGANISATIONAL STRUCTURE PROFILE

ORGANISATION	STAGE OF DEVELOPMENT	
Leyland Daf	Advanced	5
Kent County Council	Mature	4
TDS Pneumonics	Developing	3
Lancashire County Council	Developing	3
BBC Engineering	Developing	3
TML Plastics	Awakening	2

Examples of all but one of the structures were found in the survey sample, with three of the organisations having very similar organisational structures. TDS Pneumonics developed its purchasing function from a one person function into a materials management function of which purchasing was a very big part, over approximately a twelve year period. Thus the research findings do, for the most part, fit the purchasing structural development suggested in the literature review, with purchasing moving essentially from a 'Jack of all trades activity' to a highly specialised proactive strategic activity with the appropriate organisation structure to allow its development.

Movements towards a materials management structure and eventually a full blown logistics structure were cited by all those interviewed as important for the development of the purchasing function. As other activities within the Materials Management structure take over stores, stock control, material control and expediting, this in turn allows purchasing to become more specialised. Leyland Daf firmly believed that with a decentralised purchasing and materials management structure for operational activities, more strategic aspects of the purchasing activity could be centralised, e.g. major negotiations, policy and systems determination. Those organisations where the purchasing activity is particularly well developed adopt both a centralised and decentralised approach to managing the function. In certain cases one can achieve the advantages of a centralised approach, with the flexibility of decentralisation, the 'lead buyer' concept is an example of such an approach.

Pressure to adopt an efficient purchasing and input structure would also be coming from major customers for certain of the organisations involved. In the case of TDS Pneumonics and TML, major customers such as Ford, Rover and British Telecom had insisted that their input activities, particularly purchasing, are working efficiently. Such major customers believe that an efficient purchasing function at their suppliers can keep costs under control and add value to a product, rather than costs. In Table 7.10 there is a summary of comments made by respondents and its effects on development of the activity.

TABLE 7.10   SUMMARY OF COMMENTS MADE CONCERNING HOW
               THE STRUCTURE OF PURCHASING AFFECTS ITS
               DEVELOPMENT

COMMENTS	ORGANISATIONS
Poor organisational development leads to poor purchasing.	All respondents
Materials Management structure assists in the development of the purchasing activity.	All respondents
Pressure from major suppliers to improve purchasing structure.	TML
	TDS Pneumonics
Highly structured purchasing activity leads to a higher profile.	Leyland Daf
	Kent CC
	BBC
Logistical structure leads to a more effective purchasing activity.	Leyland Daf
	Kent CC
Structure must allow for rapid change	Leyland Daf
	Kent CC
Needs both centralised and decentralised approach.	Leyland Daf

7.12.1   Summary

From the general findings reported, there appears to be a number of organisational changes that occur as the purchasing function develops. Simple structures and one man operations within a purchasing function are typical in the early stages of development with the function responsible for all aspects of the job and no specialisation. Further development is likely to see buyers beginning to specialise in purchasing a more limited range of products and moving away from non buying activities such as routine expediting, order processing and involvement in stores, stock control, and material control. Gradually moving eventually towards greater integration of activities.

Still further development could lead to a logistical approach in the flow of materials and may lead to more of a decentralised approach and fewer purchasing activities remaining centralised. The idea of power remaining

with the budget holder has impacts both on the Public and Private Sector. Operations Directors have not been happy seeing their purchasing expenditure centralised away from operational activities when they are the budget holders. This has lead to the resurgence of the lead buyer approach. Whilst it would appear that purchasing structures develop and evolve in one direction, this is not necessarily the case. Structures within organisations are influenced by strategy Porter(1982) and (1993). There are enough examples from the six organisations in this sample to illustrate the point.

Future structural developments, particularly in the Public Sector, could see a small number of core purchasing specialists, retained more on a consultancy basis, to advise smaller decentralised purchasing units on how to get good value for money. There is a possibility of witnessing much larger purchasing structures buying not just what is used by their organisation, but also for a whole range of other organisations, particularly if they can demonstrate effective purchasing skills.

Finally, organisations watch each other and may copy organisation structures that appear to work well. This is a form of bench marking. The difficulty often faced with organisations that do this is that they forget to adopt the strategies that lead to a particular structure being used in the first place. It is therefore virtually useless adopting a Materials Management structure if you are not prepared to take on board the pre conditions required before the new structure is introduced. The structure is wasted without the philosophy and strategy that underpins it.

FIG 7.8   INDEPENDENT FACTORS AFFECTING PURCHASING
              STRATEGY

EXTERNAL	INTERNAL
Customers	Organisational Size
Competition	World Class Concepts
World Class Concepts	Culture
Bench marking	Integration of activities
	Specialisation
	Supplier Chain management
	Bought out material expt.
	Acquisition cost vs price

INTERNAL (CONT).
General organisational
development.
Competition
Pace of change

7.13 Purchasing Services

It was found in the literature survey that as the purchasing function develops, it requires more back up services. Williams (1987) believed that for purchasing professionals to succeed they needed knowledge and assistance in the areas such as cost accounts, legal, marketing and forecasting. Purchasing research, whilst practiced in major multinationals, was organised in a less systematic way in many of the organisations sampled.

If the buyer is to concentrate on more managerial and strategic aspects of the job, and buy more effectively, back up services will be needed. Thus for example, if a supplier's costings cannot be believed, analysis of the figures are required, similarly differences in contract terms may require legal consideration. Once again, if the buyer is getting deeply involved in such areas, he or she cannot devote their time to more pressing commercial aspects of the job.

Gracia (1973) and Sysons (1992) believed that if purchasing is to be effective, it must concentrate more on core purchasing activities. The extent or otherwise of purchasing services was seen therefore as an important element in development of the purchasing activity. In the pilot study II, the majority of those organisations at stage 4 and 5 revealed the existence of services established to assist the buyer. In many cases the buyer had to use the service before a final decision could be made in order to avoid any purchasing complications later.

In the main research survey, it was important to differentiate between help that may be available to buyers on an ad hoc basis and services deliberately established to assist the buyer. It is recognition that such services are required and their extent that is indicative of development. Table 7.11 shows the extent of back up services to purchasing for each of the organisations sampled.

TABLE 7.11   EXTENT OF BACK UP SERVICES TO PURCHASING

ORGANISATION	STAGE OF DEVELOPMENT	
Kent County Council Purchasing	Mature	High
Leyland Daf	Developing	Average
TDS Pneumonics	Developing	Average
Lancashire County Council	Awakening	Low
BBC Engineering	Awakening	Low
TML Plastics	Awakening	Low

From Table 7.11 Kent County Council was the most advanced in terms of this variable and had reached the mature stage. One of the reasons for a Local Authority purchasing function to be advanced in this area, apart from good purchasing practice was to see that buyers avoided making any mistakes, the more staff were therefore involved with a decision, the less chance of a mistake. Leyland Daf and TDS Pneumonics recorded a stage 3 developing rating in terms of this variable. It was expected that Leyland Daf would have had a much higher rating in this area. Further investigation at Leyland revealed they had indeed been at a higher stage of development in terms of this criteria in the 1980's, but cut backs throughout the organisation meant that such services were reduced or withdrawn. It was believed that the buyer, with the training they had received, would be able to conduct some services themselves. The problem with this argument however, is that the buyers' time is not being spent on 'core' purchasing activities and the clerical part of his work will probably rise. An examination of Leyland Daf's buyers clerical activities does show an increase over the 1980's. Whilst such an increase in the clerical activity is caused by many factors, the reduction of back up services to the buyer is certainly a major one.

Some of the organisations sampled believed that the existence of external sources of information they subscribed to would assist the buyer. This was indeed true but often such information was limited, or not relevant or the buyer did not have to use such systems. Comments made by organisations in the sample regarding this variable are given in Table 7.12.

TABLE 7.12   PURCHASING SERVICES - COMMENTS

Leyland Daf	Existence of such services properly integrated increases purchasing effectiveness. Lack of such services increases clerical content.
Kent CC	Important they are used, but may be used on an
TDS	Limited inside, mainly outside sources.
LCC	Available ad hoc, limited in practice.
BBC	Limited to Technical.
TML	Journals only source.

All of those interviewed believed that an increase in such services would lead to more efficient purchasing decisions, but felt that in times of recession, it was a luxury that couldn't be afforded.

7.13.1 Summary

With organisational cutbacks, it would appear that purchasing services are likely to be the first casualty. However, using such services, whilst they may well lead to a more considered purchasing decision and less clerical work for the buyer, also increase the purchasing decision time. In periods of rapid change, many such services may slow down the buying process with all the problems this might entail. On balance, all of those interviewed believed that good back up services, properly integrated into the purchasing decision making process, improved purchasing performance, but it must be integrated and mandatory, not uncoordinated and ad hoc.

In Fig 7.9 factors likely to affect the extent of purchasing services is summarised.

FIG 7.9   FACTORS AFFECTING PURCHASING SERVICES

EXTERNAL	INTERNAL
Recession	Organisational size
Competition	Organisational cutbacks
	Bought out materials expt.
	Pace of change
	Culture
	Type of organisation

7.14 Status of the Function

The status of the purchasing function is likely to vary from organisation to organisation. Hallmarks of status are such factors as the head of the activity and who they report to. From the literature survey, it was concluded by Williams (1987), Shealy (1985) and Borath and Hugstead (1979) that the more strategically proactive the purchasing function was, the higher its reporting level and status within the organisation.

Shealy (1985) observes: "awareness concerning top level managers, regarding the importance of the purchasing function to their respective firms' criteria is likely to grow." At the 1993 CIPS National Conference of twenty or so major organisations, all but one had Directors of purchasing and appeared to have established highly developed purchasing activities.

In the survey sample, four major criteria were used to measure status of the purchasing function. In the sub-section of the findings, two will be examined and the other two dealt with separately in their own separate sections, that is section 7.15 and 7.16. The two areas of interest in this section of the research was what was the title of the head of purchasing and to whom did they report. The results are shown below in Table 7.13.

TABLE 7.13   TITLE OF PURCHASING HEAD AND REPORTING LEVEL

Organisation	Title	Reports to	Stage of Devt.
Leyland Daf	Director	Main Board	Advanced
Kent CC	Director	Chief Exec.	Advanced
Lancashire CC	Purch. Manager	Chief Exec.	Advanced
TDS	Purch. Manager	Director	Developing
BBC Engineering	Purch. Manager	Head of Design	Developing
TML Plastics	Purch. Manager	Commercial Dir.	Awakening

These two criteria of the four used to measure status were often difficult to evaluate. One of the major difficulties is that titles do not truly reflect position in an organisation. There were examples of say a Purchasing Manager at Leyland Daf with the status and authority of the Purchasing Director at Kent County Council. Buyers at Leyland Daf were paid more and had more authority than did the Purchasing Manager at TML Plastics. One

therefore needs to look at the position and functions of the holder of posts to make accurate assessments of status.

Table 7.14 gives a summary of the comments made by respondents.

TABLE 7.14   TITLE OF PURCHASING HEAD AND REPORTING LEVEL

ORGANISATION	COMMENTS
Leyland Daf	Reporting at Board level increases visibility of function. More senior purchasing staff increase effectiveness. Titles must mean something.
Kent County Council Lancs County Council	Reporting to the Chief Executive increases effectiveness. Status seen in terms of reporting levels and titles.
TDS	Reporting to Operations Director reducing status.
TML	Reporting to a Commercial Director reduced purchasing's profile.

From the above comments and general information from all the organisations sampled, there was a belief that if purchasing was to be treated seriously in an organisation, it needed to have a high visibility in terms of the title of the purchasing head, and who he or she reported to. Reporting to other functional managers, for example Finance or Production, lead to conflicts of interest from the managers concerned. It was felt that if the head of purchasing reported to say Finance, then there was pressure to adopt short term tactics that lead to purchasing attempting to push for lower prices rather than lower acquisition costs. It was further felt that reporting at levels below the Managing Director meant that purchasing was not able to effectively influence policy.

7.14.1   Summary

If purchasing is to develop effectively within an organisation, it must report at the highest level. In the view of all those interviewed, this in reality meant its reporting position should be at Board level. Those purchasing functions that did not report at such a level, found that their ability to influence policy and strategies in the organisation limited. This can itself lead to problems. If an organisation for example, is attempting to reduce its supplier base as part of a Just in Time strategy, and finds that its input activities, particularly purchasing, are not capable of implementing such a strategy because of their lack of development, the strategy will be held up. Within the organisation concerned, senior management may not be aware of the strategic role required of the purchasing activity because it is not represented at a sufficiently high level within the organisation.

Fig 7.10 summarises those factors affecting the position of the purchasing function within the organisation.

FIG. 7.10   SUMMARY OF FACTORS AFFECTING PURCHASING POSITION

EXTERNAL	INTERNAL
Customers	Organisational size
World Class concepts	Culture
Suppliers	Bought out material expt.
Competition	Type of organisation
	World Class concepts and strategies.
	History

7.15   Training and Development of Purchasing Staff

Those organisations that are generally accepted as being proactive in their strategies and development also spend time and resources improving functional management areas. Purchasing has traditionally tended to be the poor relation in terms of staff training and development. An indication therefore of purchasing development in this area would be the level and extent of training and development given to the buyer. Certainly as the role purchasing moves from being a reactive clerical activity to a proactive strategic activity, training and development within the activity becomes an extremely important issue.

Training and development of the activity is likely to influence how the buyer perceives his or her role in the buying centre, leading in some cases to role conflict, Mist and Howes (1986). If one examines the results of the survey in Table 7.15, the following profiles emerged:

TABLE 7.15 SUMMARY OF TRAINING AND DEVELOPMENT PROFILES

ORGANISATION	STAGE	STAGE OF DEVELOPMENT
Leyland Daf	4	Mature
Kent County Council	4	Mature
TDS	3	Developing
Lancs County Council	3	Developing
BBC Engineering	3	Developing
TML	2	Awakening

Both Leyland Daf and Kent County Council adopted very proactive training and development programmes. Whilst TDS, Lancashire County Council and the BBC were only average. TML Plastics, whilst paying lip service to training needs was far less inclined to spend money on training and developing its buyers.

Leyland Daf had training and development profiles for all its purchasing staff. The portfolio was impressive, consisting of training for the Chartered Institute of Purchasing examinations, external and internal work development programmes. Similar, though less advanced training and development programmes were found at Kent County Council. Other organisations in the sample varied in the training and development they gave to their buyers.

Training and development was seen as being of strategic importance by those of the more developed purchasing functions. Leyland Daf and Kent County Council believed it involved giving their buyers the tools to do the job effectively. It is also a powerful factor in moving the buyer from a reactive clerical role to a proactive strategic one. Those buyers who attended courses outside the organisation believed they were made aware of different view points, new techniques and fresh perspectives. Table 7.16 gives a summary of organisations' views regarding training and development. If one

examines the comments of staff for the development and training measurement criteria, one discovers far more positive and enlightened comments from those organisations where purchasing is well developed, to negative comments where the activity is particularly poorly developed.

TABLE 7.16   COMMENTS - TRAINING AND DEVELOPMENT

ORGANISATION	COMMENTS
Leyland Daf + Kent CC	Regular training and development required for all staff. Improved purchasing development. CIPS qualifications encouraged. Required for strategic development of the activity. Recession was reducing resources devoted to training. Assist career development of staff
TDS, BBC & LCC	Training important but limited by recession. CIPS qualifications useful. more training required. Losing staff after training a problem.
TML	Generally believed to be wasteful if staff left the job. Limited by resources. If buyers on courses, purchasing manager would have to do their job. Loss of staff after training a problem.

7.15.1   Summary

Those organisations with well developed purchasing activities are also proactive trainers and developers of staff. There are however problems even here, in that recessions and lack of demand for their product leads to budget cuts and less money available for such training and development. One of the factors that particularly struck the researcher in respect of developed purchasing functions, was the long history of staff development

and training in such organisations. There was also a deeply held belief, both at Leyland Daf and Kent County Council by senior executives within the purchasing activity, and throughout the organisation, as to the importance of those activities.

Training and development of the purchasing activity must be looked at in terms of its breadth and depth, how long it's being going on and the general culture in the organisation when it comes to the training of buyers. If buying is seen as a clerical activity, little training and development would be required. If it is seen as being of strategic importance and a major area for cost reductions, it will attract the appropriate resources. Fig 7.11 summarises those major internal and external factors seen as affecting training and development.

FIG 7.11   FACTORS AFFECTING TRAINING AND DEVELOPMENT

EXTERNAL	INTERNAL
Strategic development	Organisational size
World Class concepts	Culture
Customers	Strategic/Clerical role
Market conditions	Years purchasing
Boom/Slump	function established
	Belief in role of purch.
	Contribution of activity
	General approach to
	training and development
	in rest of organisation.

7.16   Relative Buyer Remuneration Levels

In almost every interview conducted in the survey, there were particularly strong feelings concerning buyers' remuneration. In general, the more advanced the purchasing function, the higher were the salaries paid to those involved in the purchasing activity. Table 7.17 summarises buyer remuneration by organisations sampled.

TABLE 7.17   BUYERS' RELATIVE REMUNERATION LEVELS

Organisation	Stage of Devt.	Salary of Buyer 3 years' Experience(90/91)
Leyland Daf	Advanced	£14-15,000
Kent County Council	Mature	£12,500-13,000
TDS Pneumonics	Developing	£11-12,500
Lancashire CC	Awakening	£10-11,000
BBC	Awakening	£10-11,000
TML	Awakening	£9000-10,000

In the third column of Table 7.17 is an appropriate range of the salary a buyer with 3 years experience is likely to receive.   The calculations themselves are often difficult to make because of slightly different time scales or other fringe benefits that were not taken into account. From the figures however, it is reasonably clear that the more advanced the organisation, the higher the salary paid to the buyer. In all the organisations involved in the sample, views were expressed that lead the researcher to the conclusion that purchasing, even in organisations where it was well developed, was still not a well paid activity. For example, in Leyland Daf, Finance graduates were paid over £2,000 more after 3 years in the organisation than were purchasing graduates. Similar cases occurred in other organisations in the sample.   In the case of nearly all those interviewed, views were expressed that essentially can be summarised in the phrase "you get what you pay for." TML Plastics Purchasing Manager felt that because his buyers were acting as order clerks, they were paid the appropriate salary.   The problem with this argument is that purchasing cannot afford to be clerically reactive if it needs to attract the best buyers it must pay the appropriate salaries.   In the case of TML, major customers were demanding a proactive purchasing activity in order to reduce costs throughout the supply chain.

The low status and remuneration for those involved in the activity is well documented in the literature, Saunders (1971), Courtney and Thomas (1974), Williams (1987), Burt (1985), Lancaster (1984) and Gracia (1993), the gap is however closing. It still appears that perhaps the single most difficult hurdle to overcome is that of organisational strategic perception of

the purchasing activity. As long as those at the top of the organisation feel purchasing is relatively unimportant, salaries will remain low.

TABLE 7.18 SUMMARY OF COMMENTS ON BUYERS' REMUNERATION

ORGANISATION	COMMENTS
Leyland Daf	"You get what you pay for" low salaries lead to order clerks.
Kent County Council	"Salaries need to improve. We need to pay the going rate to get good buyers".
TDS & BBC	The recession has meant no pay rises for buyers. I fear we'll lose good staff.
Lancs County Council	We are a young department and salaries are too low.
TML	Not a popular question at Director level. Purchasing Manager felt that salaries were too low to attract and retain good buyers.

From the comments in Table 7.18 and other general comments made in Pilot Study II, there is now a growing belief that real buyers know their worth and will move to those organisations who value their services accordingly. The retention and development of purchasing expertise within an organisation is dependent on a number of factors of which training and development and salaries are likely to be high on any agenda, It is interesting to note that TML Plastics, a year after the survey in 1992, had lost both their Purchasing Manager and one of the two buyers. The reason given by both was the lack of development of the activity and low levels of remuneration. Both the purchasing manager and the buyer had CIPS qualifications.

7.16.1 Summary
Whilst paying high salaries is not the only factor that would affect buyers in their search for another job, low salaries are associated with clerical reactive buying activities, and it may be a combination of all these factors that causes enough dissatisfaction to persuade the buyer to look elsewhere. The existence of a recession can provide both limitations; in career prospects,

but also opportunities. Those organisations that realise there is cost reduction and profit potential in purchasing may well be prepared to raise its status and profile within the organisation. In other cases a recession could well result in reductions and lower salaries throughout the organisation. In boom conditions higher salaries may have to be paid to retain staff. A summary of some of the major factors affecting buyers remuneration levels is shown in Fig 7.12.

FIG 7.12 FACTORS AFFECTING BUYERS' REMUNERATION LEVELS

EXTERNAL	INTERNAL
Competition's remuneration	Strategic/Clerical role
Market conditions	Culture
Boom/Slump	Purchasing's role
Organisational sector	Salaries of other functional activities
World Class strategies	
Implementation	Profit Potential in Purchasing

7.17 Measurement of Purchasing Performance

Measurement of purchasing performance was seen as a useful indicator of purchasing development in that both the depth and breadth of purchasing performance of variables being measured give useful clues as to its importance to the organisation. Adams and Neibuhr (1985), William (1987), recorded that as the function develops, so it becomes more involved with strategic issues of the organisation. Fearon (1975) and Farmer (1992) recorded that in larger organisations, purchasing was involved through purchasing research in advising management on future supply problems. The widespread adoption by many organisations of World Class concepts such as Just in Time and Total Quality Management, required the purchasing function to become more proactive and strategic, Sysons (1989), Barnes and McTavish (1983), more strategically integrated, Reck and Long (1988). Pearson and Grubmoder (1990) and Gracia (1993) call for the "upstreaming" of purchasing so that it might more effectively fulfil its strategic role.

Dale and Powley (1985) had reported that UK organisations, when measuring purchasing performance, tended to use often very basic measures of purchasing performance, for example clerical and basic price or

budget performance. Bilsborough and Dale (1983) found little direct measurement of purchasing performance. However, there were reports from Stevens (1990) that large organisations used a wide range of criteria to measure purchasing performance.

One of the problems with measurement criteria suggested by Evans and McKenzie (1988), was that buyers would tend to excel in the areas in which their performance was measured. Thus if price management or clerical performance are being measured, buyers will excel in these areas, rather than "lowest cost of supply" concepts, involving the need to think more about achieving strategic goals than short term ones. Using a conceptual purchasing performance framework, developed by Van Weele (1985) and further refined from three to five stages of criteria for measuring purchasing performance at five stages of criteria was established. In Table 7.19 there is a summary of the profile analysis for this measurement criteria.

TABLE 7.19   SUMMARY OF PERFORMANCE CRITERIA PROFILE

ORGANISATION	STAGE	STAGE OF DEVELOPMENT
Leyland Daf	4	Mature
Kent County Council	4	Mature
TDS Pneumonics	3	Developing
Lancashire County Council	3	Developing
BBC Engineering	2	Awakening
TML Plastics	2	Awakening

Of the organisations in the sample, both Leyland Daf and Kent County Council had reached the highest stages of maturity in terms of this variable. Indeed, Leyland Daf would have been in stage 5, if it had not been for large cutbacks in staff over a three year period. Leyland Daf was highly developed in terms of Just in Time, Logistics, and Total Quality Management, it was particularly concerned with strategic acquisition cost, rather than short term cost savings. Products and services were looked at more in terms of whole life costs, that is, what is the true cost of buying an item over its use period.

In the literature reviewed, it had been suggested by Van Weele (1985), Adams and Niebuhr (1985) and Wagner (1987), that with the development of

strategic World Class concepts, measurement criteria would involve greater depth and breadth of analysis, this indeed proved to be the case with those two organisations. As one moves down the list to TML Plastics, measurement of the buyers' performance becomes more concerned with short term cost savings and general clerical efficiency. There is no suggestion that measuring such variables is unimportant, an efficient clerical activity makes for better services. The problem with over reliance on these measurements can lead to a misunderstanding of the buyer's major role in the purchasing activity.

If the buyer's efficiency is judged on his or her clerical efficiency then there is a good chance they will excel in this area and not be particularly concerned with the price or cost of items. Those criteria that are not measured often get ignored. However, it would be equally wrong to suggest judging buyers' performance solely in terms of cost and price reductions. More advanced purchasing functions are well aware that the lowest price may well be achieved by a supplier who gives quality and delivery problems, which in turn pushes up the cost of a bought out item. Acquisition costs are probably more important measures of true purchasing effectiveness. Moreover, it is not just short term acquisition cost that needs to be measured but long term strategic acquisition cost. Thus a buyer who can effectively rationalise his supplier base, and persuade key suppliers to adopt strategies that will reduce adding unnecessary costs into their product, whilst maximising value added concepts, is making the biggest contribution from the purchasing activity. Leyland Daf was clearly into such concepts, whilst Kent County Council was beginning to move into this way of thinking.

In the case of both Kent CC and Lancashire CC, purchasing performance was still measured in terms of clerical efficiency and its ability to keep within laid down procedures. Whilst Kent CC had developed more extensive measurement methods, public accountability criteria were considered to be more important than making real strategic savings in the view of the researcher. This concern with clerical and audit efficiency was hindering the development of the purchasing activity, and forcing the buyers to focus on short term issues.

With the exception of TML Plastics, all the organisations in the sample had indicated that performance reports to senior management did help to sell the purchasing activity and raise its profile. Evidence however, to substantiate this claim is largely opinionated, and difficult to prove. It does however ring true in that if senior management can make the connection between purchasing development and improved purchasing performance, as in lower acquisition costs, then reports of such information should help to further develop the activity.

A summary of some of the comments made concerning the measurement of purchasing performance is given in Table 7.20.

TABLE 7.20   MEASUREMENT OF PURCHASING PERFORMANCE

ORGANISATION	COMMENTS
Leyland Daf	Comprehensive measurement system covering all aspects of purchasing/ buyers' job - concern with strategic acquisition costs, with major items of expenditure. Less concern with purely price.
Kent CC	Concern with certain strategic issues but cost reductions, clerical efficiency important. Customer service interface and developed measurement criteria. Felt more comprehensive system needed.
TDS Pneumonics	Buyer/Purchasing performance and vendor criteria. Due to recession such measurement has been severely curtailed.
Lancs CC	Superficial measurement of savings greater interest in customer service satisfaction. Need to be more comprehensive.

BBC	Superficial measurement, but savings were considered and reported upon. Audit criteria measurement.
TML Plastics	Essential clerical only superficial. Stock control measurements high.

7.17.1 Summary

From Table 7.20 and other information contained in this section, it would appear that those organisations at low stages of purchasing development are often spending too much time measuring rather superficial aspects of buying performance. Further, they often do not see the need to report performance of the activity and have great difficulty in coming to terms with such concepts as acquisition cost, as opposed to price, and short term savings compared with strategic savings. Often, within such organisations, senior management are not aware of the contribution a proactive purchasing and supply activity can make, and therefore do not feel there is a need to measure its performance.

With the exception of TML Plastics, all the other organisations in the sample believed they needed to measure purchasing performance more extensively and on a more regular basis. It is interesting to note that those organisations in this sample and Pilot Study II who did effectively measure purchasing performance and sell its contribution to senior management, also found that purchasing attracted more corporate resources and higher salaries and status. Finally, Fig 7.13 identifies some of the major factors likely to affect this measurement criteria internally and externally.

FIG 7.13 FACTORS AFFECTING MEASUREMENT CRITERIA

EXTERNAL	INTERNAL
• Marketing of customer requirements	Bought out material expenditure/profitability
• Recession	Senior management desire for info.
• Competition	World Class concepts
• World Class concepts	Culture
	Purchasing status

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7.18   Standard of Information Systems/Technology

The literature survey in this area had suggested that the quality and extent of information systems was an important indicator of organisational and functional development, Fearon (1974) and Parasurman (1981) had found that purchasing generally had been slow developing in this area. Production, Finance and Marketing had developed their own information systems in a typical organisation, well before purchasing had. As the purchasing function develops and integrates more with other functions, so there is a need for purchasing to have an effective database, capable of supporting requirements demanded of it. Often, purchasing in its early stages of development has only basic, manually provided information systems, indeed many purchasing functions still see purchasing information systems in terms of transaction processing used for registration purposes, Bailey (1990), Handley (1988), Munkena (1992).

As purchasing becomes more integrated into an organisation and is involved in strategic issues, it needs far more extensive and integrated databases. MRP II, Just in Time, Logistical Management decision making and strategic vendor appraisal need extremely powerful integrated databases that only a well developed purchasing would have, and be able to use effectively. Kraljic (1983), Burt (1985) and Eloranta (1991) call for a change in perspective away from purchasing to supply management, with it, they argue, is the need to develop supportive information systems for purchasing. Van Weele (1993) suggests that the development of purchasing is limited by its ability to develop and integrate its information technology.

In the sample, it became clear that those organisations where purchasing was not particularly well developed also had a poor history in terms of information technology development. Even those organisations that were relatively advanced in the area believed they needed better, more integrated systems. Purchasing development relating to this variable was measured in terms of the extent and integration of the IT systems available to purchasing. The analysis summary is given in Table 7.21.

TABLE 7.21 SUMMARY OF INFORMATION SYSTEMS/TECHNOLOGY PROFILES

ORGANISATION	STAGE OF DEVELOPMENT
Leyland Daf	Mature
Kent County Council	Mature
TDS Pneumonics	Developing
Lancs County Council	Awakening
BBC Engineering	Awakening
TML Plastics	Awakening

The most advanced organisations in the sample were Leyland Daf and Kent County Council. Both organisations had a long history in terms of good information systems and IT generally. Again, both organisations believed they were not developing quickly enough in this area. For example, Leyland Daf did not have a completely computerised purchasing system, vendor rating was manually operated and selective. They were not able to access all the information they believed would assist in really effective purchasing, and links with suppliers was limited. Similar comments were made by Kent County Council, although they were far more advanced in having EDI links with their customers that purchasing had direct access to.

TDS had a reasonably effective computer system, but lack of funds were not developing it effectively. The other three organisations in the sample still generated a considerable amount of information manually and computer systems they had were often not operating in "real time". A summary of the comments made by the organisations in the sample is given in Table 7.22.

7.18.1   Summary

If purchasing is to make a strategic contribution and effectively measure its performance, it needs to have a comprehensive database, operating in real time, and linked with the rest of the organisation and with its key suppliers. World Class concepts demand integrated databases that buyers know how to use. Order clerk buyers would not be able to deal with modern integrated databases effectively, therefore there is a need to select and develop buyers involved in driving IT systems.

TABLE 7.22   SUMMARY OF COMMENTS - INFORMATION
                SYSTEMS/TECHNOLOGY

ORGANISATION	COMMENTS
Leyland Daf	Development of World Class techniques such as JIT, TQM, Logistics and MRPII require total purchasing involvement and development. Need for greater EDI with suppliers. Purchasing not developing its systems and interfaces in this area quickly enough.
Kent CC	Purchasing systems need greater development. Good EDI development with customers, limited EDI development with suppliers.
TDS	Systems not being developed quickly enough because of recession.
Lancs CC	Limited development, purchasing needs to be properly integrated with rest of organisation. Too much work handled manually.
BBC	Good systems but manually operated, more concern with audit and policy.
TML	Buyers essentially clerical. Limited application of IT. Major customers not happy with IT developments, installed their own EDI systems with TML.

The less developed, and the more clerically oriented buyers are, the less time they are likely to have to develop IT systems that could in the longer term reduce their clerical work. In every organisation in the sample, there was a clear message from purchasing managers that the growth of IT and associated systems would reduce the clerical content of their buying job, and allow buyers to become more proactive and spend more of their efforts on "real buying activities" such as negotiations, supplier development etc. Often the difficulty was the resources that needed to be invested. Those organisations with advanced information technology and systems had considerably reduced the time spent by the buyer on clerical activities. Additionally, such organisations were able to indicate purchasing practices and longer term strategies that identified more clearly acquisition costs as compared to price. As a result of having integrated databases, supplier

performance could be measured and the costs that were often added in the supply and logistics activities were more clearly identified and reduced. Thus for example, Leyland Daf could identify those suppliers whose price was low but added costs later as a result of poor delivery or quality, and had inefficient logistics systems. Such problem areas could be highlighted and become the focus of increased attention from trained buyers, who would work more closely with the supplier to reduce them.

Within the buyer's organisation, integrated systems allowed information to pass through the organisation quickly and lead to more accurate assessments of possible problem areas. The introduction of such systems into the purchasing activity required buyers who had the appropriate training and development to make such systems work. TML claimed to have an MRP system, but because of the lack of training throughout the organisation in such systems, and a lack of discipline, the system did not work and most of the information was arrived at manually. Training was therefore seen as being an essential prerequisite for any IT exercise.

It became clear from the literature and information derived from the sample, that those companies that would stay ahead in the future would be those that had truly integrated databases within their own organisations, and would have linked their databases with both suppliers and customers' databases through electronic data interchange (EDI). This would allow rapid transfer of such information to be transmitted through the supply chain, reducing lead times and costs.

The lack of funds to develop such integrated databases was seen clearly as an impediment to the development of the purchasing activity, TDS, the BBC and Lancashire County Council were all very clear on this issue. Unlike Leyland Daf and Kent County Council, they felt it would be difficult to obtain such funding for the development in the future. In the case of both Leyland Daf and TDS, cutbacks and the recession made it extremely difficult to attract funds from the rest of the organisation for such developments. TML Plastics was the least developed of all of the organisations in the sample. Interestingly, major customers who were pursuing JIT and other World Class strategies were putting pressure on TML to develop in similar directions. They were insisting that if TML wished to continue doing business with

organisations like Rover, Ford etc., they had to improve their computer and information systems accordingly. Rover had already installed an EDI link with TML.

Fig 7.14 examines some of the major factors affecting the criteria standard of information systems and technology.

Fig.7.14   FACTORS AFFECTING INFORMATION SYSTEMS AND
            TECHNOLOGY

EXTERNAL		INTERNAL
World Class concepts		World Class concepts
Customer requirements	PURCHASING DEVELOPMENT	Culture
Competition		Integration with other systems
Environmental factors	INFORMATION SYSTEMS AND TECHNOLOGY	Strategic control
		Need to integrate such systems with supplier databases.

7.19   Computer Technology

This measurement criteria was concerned with evaluating in more detail the extent of computer hardware available in the purchasing organisation. One computer integrated within a purchasing department of say ten buyers would not these days be considered as being particularly developed. As purchasing develops, so the extent of computer hardware, as well as its integration, becomes of interest. Whilst it was possible in the early stages of computer and strategic systems development, either to minimise purchasing's involvement, all the new strategic thinking requires "high levels of functional interface development," Gunther (1986).

Bernhard, Londe and Emelhienz (1985) observed: "an approach that appears to aid purchasing in attaining its objectives (reducing overall costs and viewing the supplier as an extension of the buying firm) is computerised purchasing".

TABLE 7.23 SUMMARY OF COMPUTER TECHNOLOGY - PROFILES

ORGANISATION	STAGE	STAGE OF DEVELOPMENT
Leyland Daf	4	Mature
Kent County Council	4	Mature
TDS Pneumonics	3	Developing
BBC Engineering	2	Awakening
Lancs County Council	2	Awakening
TML Plastics	2	Awakening

Leyland Daf and Kent County Council, as with information systems, were reasonably well developed and all buyers had a computer, each linked into the main organisation database. Both organisations felt they needed to become more integrated with their major suppliers. Leyland Daf was probably more advanced in this area. Purchasing within Kent CC had deliberately encouraged its major customers to invest in computers or had given them free. This tied, particularly schools (their major requisitioner) into buying from them. Both organisations believed that they were developing fast enough in this area, they needed more powerful computers and software for a whole range of purchasing work.

The BBC and Lancashire CC were relatively large organisations with low levels of development in terms of computer application. This was surprising, and lead to a particularly high level of clerical work amongst buyers. They are however, non-production organisations providing services, and perhaps there is less need to be as efficient as production organisations. Computers in purchasing were not linked with the rest of the organisation, and buyers shared their computers. At the BBC it was one computer between five buyers. In both instances, the computers used were relatively old and subject to frequent repairs.

Finally, TML Plastics, whilst it had a computer, it was seldom used by the buyers. Much of the information it had provided was inaccurate and therefore purchasing resorted to extensive manual systems. Major suppliers had linked TML Plastics with their systems and transmitted information via EDI.

7.19.1 Summary

The development of computer technology and its links with the rest of the organisation and key suppliers or customers is essential.

Poorly developed hardware and limited access reduces purchasing's efficiency and effectiveness. It should however be remembered that the existence of computers alone does not guarantee purchasing development. Lack of training of staff, failure to produce the correct information, and a whole range of other factors would also need to be developed. All the organisations believed they needed to spend more resources developing their systems if the purchasing function was to advance in the future. A summary of comments concerning computer developments is given in Table 7.24.

TABLE 7.24 SUMMARY OF COMMENTS ON COMPUTER DEVELOPMENTS

ORGANISATION	COMMENTS
Leyland Daf	More development required a greater integration with suppliers.
Kent County Council	Recession had reduced developments in this area.
TDS Pneumonics	Need for more development, particularly
BBC Engineering	in terms of computers available to buyers
Lancashire County Council	for routine work.
TML Plastics	Computer developments neglected only one computer for whole purchasing department. System did not work effectively, most information was manually generated.

In Fig 7.15 is an outline of major factors likely to affect computer developments within the purchasing function.

FIG. 7.15 FACTORS AFFECTING PURCHASING COMPUTER TECHNOLOGY

EXTERNAL	INTERNAL
World Class concepts	World Class concepts
Competition	Culture
Customer requirement	Other functions requirements.
Environmental	
Factors	Resources
	Need to integrate with other databases,
	i.e. supplier
	Logistics approach
	Existence of internal
	integral database.
	Organisational cutbacks.

7.20 Standard of Operating Procedures

As organisations increase in size in order to maintain control in certain critical areas, established operating procedures are established by functions that must be followed. Often these procedures are written and contained in various functional manuals. Such operating procedures are intended to improve efficiency or accountability, and in purchasing may cover such areas as:

- General systems documentation, how to raise an order or deal with a price query.
- Policy statements - this could cover such things as ethics, dealing with suppliers or codes of practice.
- Methods of measuring purchasing performance and so on.

Aljian (1983), Dobler Lee and Burt (1990) give other examples. The existence, scope and depth of such standard operating procedures is in itself indicative of purchasing development. One would expect that as purchasing develops, such procedures would increase and buyers would use them to improve their buying skills.

The findings of the research survey did indeed reveal the existence of standard operating procedures in purchasing that both aided good

purchasing, but also in certain instances reinforced poor practices within the activity. In the Public sector, whilst such operating procedures did encourage good practices, in others they simply perpetuated outmoded purchasing practices that were demanded as an audit requirement. Examples of this in the Public sector were such practices as the Tendering process, post tender negotiations and practices that essentially stopped the development of close contact between buyer and supplier to avoid the chance of the accusation of favouritism. In Table 7.25 the profile ratings for this measurement criteria are summarised. This table however, could be misleading, particularly with reference to those organisations that are in the Public sector, such as Kent County Council, and Lancashire County Council, and the BBC, which has the Public sector background in terms of public accountability. These organisations had and followed laid down procedures, however, the main reason for such procedures was to avoid any member of staff stepping out of line in areas of public accountability.

TABLE 7.25 STANDARD OF OPERATING PROCEDURES - PROFILES

ORGANISATION	STAGE OF DEVELOPMENT
Leyland Daf	Advanced
Kent County Council	Mature
Lancs County Council	Mature
TDS Pneumonics	Developing
BBC Engineering	Developing
TML Plastics	Developing

In the Private sector, practices that inhibited good purchasing practice would not be followed for very long. In terms of operating procedures, Leyland Daf was continually reviewing and developing efficient operating procedures. All those involved in applying them were expected to comment on how they could be improved in the future. This was certainly not the case in the Public sector buyers followed procedures, no matter what the outcome, and if they were not followed, buyers could be disciplined. A summary of the comments relating to standard operating procedures is given in Table 7.26.

TABLE 7.26 STANDARDS OF OPERATING PROCEDURES

ORGANISATION	COMMENTS
Leyland Daf	Operating procedures were well developed and were based on encouraging good practices, avoiding costly mistakes.
Kent County Council	Great concern with avoiding mistakes and following practices demanded in
Lancs County Council	audit regulations.
BBC Engineering	"We are following outmoded practices that force us to keep suppliers at arms length and building strategic alliances." Mistakes are punished. Success is measured in terms of following restrictive purchasing practices.
TDS Pneumonics	Standards of operating procedures are designed to encourage good purchasing.
TML Plastics	The recession has lead to TDS having to restrict certain good practices to survive short term.

7.20.1 Summary

Whilst with some organisations like Leyland Daf and TDS, standards of operating procedures are designed to encourage good practices, this is not necessarily the case in the Public sector. Practices in the Public sector are designed in order to satisfy nineteenth century demands for public accountability and burdening themselves with a substantial number of restrictive purchasing practices and procedures.

It would seem that with the coming of independent budget holders within the Public sector and their desire for good value for money, the Public sector will not be able to deliver, burdened with these restrictive purchasing operating procedures. Purchasing managers in the Public sectors believed that they have to be allowed to operate more in line with the Private sector.

Fig 7.16 identifies major factors affecting standards of operating procedures.

FIG 7.16 - FACTORS AFFECTING STANDARDS OF OPERATING PROCEDURES

EXTERNAL	INTERNAL
Sector Type Public/Private	Culture
Economic conditions	Organisational size
Competition	Purchasing involvement at strategic level.
Customers	Function's development View of purchasing contribution World Class concepts

7.21 Interface Development (Buying Centre)

The Buying Centre or DMU is said to comprise all those major functions involved in the purchasing decision, Robinson and Faris (1967) Wind (1978) noted the composition of the buying centre changed, depending on the organisation. In many organisations, it had been revealed that non purchasing personnel had more influence on buying decisions than buyers, Cooley, Jackson and Ostron (1978). Thomas (1980) had found that the greater the expertise of individuals in the organisation, the more likely they are to affect the decision making process. Wind (1979) observed that as purchasing became more trusted, so it may become more involved in the decision making process.

Interestingly, there has been little reference to the stage of purchasing influence of the buying centre. When Pilot Study II was completed it was encouraging to see that those organisations in the sample that were well developed had a much greater involvement in the buying centre. Indeed, because of their knowledge, they could even overrule others if they felt the decision to buy from a certain supplier would lead to commercial problems. In the main research findings it was reasonably clear that the more advanced the purchasing function, the greater its influence in the buying centre. Full details of the profile rating for this measurement criteria is given in Table 7.27. In terms of this measurement criteria, Leyland Daf were

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particularly advanced. It was involved in all aspects of the purchasing decision and had a structure that allowed this degree of involvement, with buyer, purchasing managers and directors all involved at different levels with buying decisions. Purchasing was seen within the organisation as the expert on any matters concerning bought out materials and services. Its proactive strategic role meant that within the buying centre, its views were of major consequence, indeed, without purchasing's approval, decisions had to be referred to levels as high as the Managing Director in the event of any disputes. This was not always the case, twenty years ago it was told by Engineers what to buy it had little choice but to obey. Things have changed dramatically over the years as the status and development of the activity have risen. With huge amounts of an organisation's expenditure being spent by the purchasing activity, any commercial mistakes in this area could have serious knock on effects in the company.

TABLE 7.27 INTERFACE DEVELOPMENT - BUYING CENTRE

ORGANISATION	STAGE OF DEVELOPMENT
Leyland Daf	Advanced
Kent County Council	Developing
TDS Pneumonics	Developing
BBC Engineering	Developing
TML Plastics	Developing
Lancs County Council	Awakening

Purchasing was also expected to send representatives to meetings with other functions when commercial expertise was required. Other organisations in the sample were far less involved in the buying process, but all had purchasing departments with histories of no more than ten years. It takes a long time for the purchasing activity to effectively make its mark within an organisation, and for respect, in terms of its activities, to be won.

In the case of Kent County Council and Lancashire County Council, with the growth of independent budget holders, they are now less developed in terms of this measurement criteria than before. Prior to the establishment of independent budget holders, standing orders made it mandatory for would be users to consult with purchasing over their requirements, this is no longer the case. Purchasing activities in Local Authorities must sell their expertise

to users, who can now buy where they like without having to consult with purchasing. Some of the major comments relating to this measurement criteria are given in Table 7.28.

TABLE 7.28 SUMMARY OF COMMENTS-INTERFACE DEVT (BUYING CENTRE)

Leyland Daf	Total involvement in all purchasing decisions with the right to veto.
Kent County Council	In the past good interfaces enshrined
Lancs County Council	in standing orders with the introduction of independent budget holders. All this has changed, purchasing must market itself to the budget holders.
TDS	Involved in nearly all stages of purchasing decision making but can only persuade. Experts have the right to ignore their recommendations.
BBC & TML	Involved in many aspects of commercial deals especially where price is concerned, but rarely challenge engineering specifications.

7.21.1 Summary

If purchasing is to develop, its profile within the buying centre must be raised, This cannot happen overnight, other functions will give respect and trust to those activities they feel they are able to. Thus if purchasing is not particularly well developed with buyers essentially order clerks with little commercial expertise, it is unlikely it will be consulted in major purchasing decisions. If however, it has a high strategic profile and has demonstrated a clear commercial expertise over a number of years, then it is likely to be an active, if not the leading member of the buying centre. The degree of involvement in the buying centre and purchasing's relations with other functions is seen as a key indicator of the stage of development purchasing has reached within the organisation. Finally, in Fig 7.17, major factors affecting this measurement criteria are illustrated.

FIG 7.17   FACTORS AFFECTING INTERFACE DEVT. - BUYING CENTRE

EXTERNAL	INTERNAL
Competition	Purchasing History
World Class concepts	Other functions attitude
Customer	Clerical/Strategic
Involvement	Commercial involvement
	Strategic issues
	Purchasing Expertise

7.22   Buying Process Involvement

As with Buying Centre involvement, buying process involvement is seen as being clearly indicative of purchasing development. Various models were identified in the literature survey to explain the buying process, Ozanne and Churchill (1971, Wind (1978) and perhaps that of Robinson with its eight stages.

In the survey there were generally mixed feelings about purchasing's involvement in all the stages of the purchasing process. It was the general feeling in the research sample that whilst purchasing should have the right to be involved with all the stages in the buying process, this did not need to happen in every case and for every item of expenditure, there was a need for purchasing to focus its attention on major items of expenditure and 'critical' aspects of the buying process, which could vary. Thus for example, it would not make sense to be involved at the identification of needs, in terms of low value, relatively unimportant products, whilst it was essential that purchasing was involved in high value or high priority items at this stage.

Purchasing executives at Leyland Daf, BBC, Kent CC and TDS, were all concerned that purchasing did not get too involved in routine buying of low value items and establishing specifications in areas where the cost of the buyer's time was high and the pay back was small. This practice in itself is indicative of development of the activity. It was believed by certain key purchasing executives that the buyer did not need to get involved in routine selecting and buying, once contracts had been established with suppliers.

Scheduling and routine ordering could be conducted by other functions, unless there was a major reason for the purchasing function to become involved. The critical and effective use of purchasing's time and effort was discussed in the literature survey and was certainly emphasised by those interviewed in the sample. Table 7.29 indicates stages of development reached in terms of this measurement criteria.

TABLE 7.29

ORGANISATION	STAGE	STAGE OF DEVELOPMENT
Leyland Daf	5	Advanced
Kent County Council	4	Mature
TDS Pneumonics	4	Mature
BBC Engineering	3	Developing
Lancs County Council	3	Developing
TML Plastics	3	Developing

Whilst Leyland Daf was advanced in terms of this measurement criteria, it had over a thirty year time period been involved with very little in terms of the buying process at one extreme, to too much at the other. It had to be selective in terms of involvement in aspects of the buying process and felt it now had this about right. In the case of Kent County Council and Lancashire County Council purchasing activities, they used to be far more involved than they are now in the purchasing of all products. With the introduction of the budget holder's right to buy what they wanted and from where they wanted, the involvement of purchasing has shrunk in these areas. There was however, a belief that they were getting too involved and restricting choices to the user. It is likely in the future, purchasing in these organisations will become more involved in offering advice more for strategic and high value items. Both TDS and the BBC were concerned that whilst they should have the right to consult, they did not want buyers tied up with routine low value purchasing, where little money could be saved, this was not effectively using purchasing expertise.

In Table 7.30 is a summary of comments taken from the main sample relating to this particular measurement criteria.

TABLE 7.30 SUMMARY OF COMMENTS - BUYING PROCESS INVOLVEMENT

ORGANISATION	COMMENTS
Leyland Daf	Purchasing has the right to be involved/consult at all levels but is selective, based normally on critical areas/high value areas.
Kent CC, BBC Engineering Lancashire CC	Involved in most stages in the past, this is likely to change in the future as independent budget holders decide where and when they want help. Belief they should concentrate on higher value items, involvement with low value items reduces purchasing's effectiveness.
TDS Pneumonics	Involved in most of the stages but does not want to get involved unless cost effective.
TML Plastics	Not as involved as they should be in a whole range of purchases.

7.22.1 Summary

From the comments both in the main sample and Pilot Study II, together with research findings in terms of involvement in the buying centre and process, it was found that as purchasing develops, whilst it must have the right to become involved fully in all issues regarding purchasing, it must be selective, otherwise its effectiveness will be seriously diminished. Selective involvement would seem to be organised on the basis of:

- Value of expenditure concentrate on the higher values.
- Degree of importance greater attention say on production items rather than non production.
- More involvement in critical areas, e.g. new product development, major client requirements.
- Items bought on a Just in Time basis.
- Items/Services critical to effective operations.

As purchasing develops it is likely, as a matter of deliberate policy, to avoid becoming too involved with low value C class items. There is a need for it to devolve such buying to other areas for it to evolve.

If purchasing cannot discriminate between areas where it should effectively be involved, and those it should not, then its overall efficiency and contribution to the organisation will be reduced.

Finally, major factors affecting purchasing's involvement in the buying process are shown in Fig 7.18.

FIG 7.18 FACTORS AFFECTING BUYING PROCESS INVOLVEMENT

EXTERNAL	INTERNAL
Competition	Culture
Customer requirements	History
General Environmental	Purchasing expenditure
factors	Value of items
	Strategic importance
	Criticality
	Buyer's availability
	Buying methods
	Degree if autonomy of requisitioner/budget holder

7.23 Buying Characteristics/Development

The characteristics or qualities required in a buyer, and their subsequent development is an extremely useful indicator of how the organisation concerned feels about the purchasing staff, and the activity generally. One would have expected that as the purchasing function develops, so the requirements of a buyer and future training would also become more critical. Ammer (1974) commented there was often a considerable gap between top management's perception of the buyer, and their perceived roles. One can, for example, find organisations recruiting order clerks, when top managers expect more managerial or strategic roles from buyers.

Williams (1987) records the qualities required of a buyer are affected by whether or not top management have a "realisation of the potential contributions of purchasing to overall performance". He comments that small and medium size organisations often have a 'myopic' view of the activity that is reflected in pay, conditions and place in the organisation. Results from the sample clearly demonstrated that purchasing in small and medium size organisations was not particularly well developed. Shealey (1985) also noted that the requirements from purchasing and buyers was far more demanding in larger organisations.

Perceptions of the buyer's role clearly affected its functions and salaries paid. Low salaries, according to Baily (1990) are often associated with clerical type jobs. As the requirements from purchasing increase within the organisation, so you will need a more able and better educated buyer to meet newer and more demanding roles. When one examines the measurement criteria activity breakdown analysis, it can be clearly seen that as the clerical requirements of the buying job change to more managerial and strategic areas of involvement, so a better educated and experienced buyer is required.

In some of the job specifications identified in the literature survey and the sample, organisations were asking for 'real buyers', that is proactive, managerial, competent staff, but offering the salaries commensurate with order clerks. Indeed, the title 'Buyer' can mean anything from an order clerk to a purchasing manager. If the prevailing organisational culture holds the purchasing activity to be relatively unimportant, then there is likely to be problems of role conflict and stress, Bonfield and Speh (1977), Kahn, Wolfe Quim and Snoek (1964), Bonoma and Johnston (1978). This role conflict and stress is likely to be considerably higher where purchasing is at low stages of purchasing evaluation and trying to 'break out' from the traditional cultural conception.

There were examples in the research sample of buyers moving for promotion from organisations where the purchasing activity had a relatively high status to one where it was not taken particularly seriously by senior management. This lead to considerable role conflict and buyers left the organisations concerned as soon as other job opportunities allowed. In the sample, this

occurred at TML, where both the Purchasing Manager and the Buyer left within two years of joining the organisation. It did not happen in any of the other organisations in the sample, although there were several examples of this occurring in Pilot Study II, and in every case, it was the low status of the purchasing activity and the buyer's role that was cited as the main reason for this. From the results in this survey concerning this measurement criteria, and Table 7.31, it can be seen that the larger organisations tend to have higher stages of development.

TABLE 7.31 SUMMARY OF BUYING CHARACTERISTICS/DEVELOPMENT PROFILES

ORGANISATION	STAGE OF DEVELOPMENT
Leyland Daf	Advanced
Kent County Council	Mature
Lancs County Council	Mature
TDS Pneumonics	Developing
BBC Engineering	Developing
TML Plastics	Awakening

Leyland Daf was particularly advanced in terms of this criteria, and tended to recruit graduates or equivalent into the function. Once recruited, further training and development was given, new buyers were encouraged to gain professional qualifications of the Chartered Institute of Purchasing and Supply. Training and development was seen as an ongoing activity for all those involved in the purchasing function. There were also regular staff appraisal interviews and appraisals, to highlight any deficiencies. Even during the recession with cutbacks, training and development was still seen as being an activity that could not be neglected. In the case of one of the other organisations in the sample, TDS Pneumonics, training and development of buyers almost ceased when the company was faced with difficult trading conditions.

TABLE 7.32 SUMMARY OF COMMENTS - BUYING CHARACTERISTICS DEVELOPMENT PROFILES

ORGANISATION	COMMENTS
Leyland Daf	Generally believed the buyer should have degrees or equivalent and be prepared to train and develop their skills. Positive attitude. Non clerical activity - proactive, CIPS qualifications encouraged.
Kent County Council	Positive attitude required. Proactive
Lancs County Council	function. OND/C qualifications encouraged,
TDS Pneumonics	'A' levels, CIPS qualifications encouraged, Wanted aggressive buyers who were prepared to fight their corner.
BBC Engineering	'A' level entry, training given. Job should not be clerical.
TML Plastics	No specific qualifications, training minimal.

7.23.1 Summary

In many ways the results concerning this variable are expected. The more developed purchasing functions need qualified staff, and spend time training and developing them. In those organisations where the activity is relatively undeveloped, there is not the same urgency to train, as the job is essentially clerical. If purchasing is seen as a proactive managerially important activity, then both attitudes to training and development are likely to change. As the purchasing activity becomes more strategically oriented, and it is recognised as an important contributor to corporate profitability and achiever of organisational strategies, so the calibre of its staff must change.

Those organisations where the activity is well developed recognise the importance of developing human resources in this area. Major factors affecting buying characteristics and development are shown in Fig 7.19.

FIG 7.19 - FACTORS AFFECTING BUYING CHARACTERISTICS AND DEVELOPMENT

EXTERNAL	INTERNAL
Customers	Purchasing position in organisation
Competition	Role, clerical/strategic
	Culture
	History of development
	Salaries
	Educational requirements
	Short/long term goals
	Interface

7.24 Degree of Purchasing Specialism

In larger organisations it was noted in the literature that specialisms began to appear within the purchasing activity. Specialism may be originally concerned with freeing the buyer from routine clerical or non buying activities, e.g. routine expediting, passing invoices, or even involvement in stock control. As the organisation grows and develops, there is also likely to be specialisation in terms of pure buying and then further specialisation is likely in terms of specialisation within a group of products or suppliers. In certain instances, negotiations of particularly high values of purchasing expenditure may be left to the higher levels of purchasing management, Jud (1983), Farrington (1978). Spekman (1979) and Weele (1985), found that as well as buyers specialising in the purchasing of certain products or services they also found specialisation within the purchasing structure, with more senior managers involved with higher value complex strategic negotiations.

The idea behind such specialists would appear to be to maximise the effectiveness of purchasing expertise. As the function develops and grows, specialists in the field of negotiations, systems and commodities is also likely to increase.

The research samples showed, as organisations grew, there was indeed specialisations within the purchasing activity, both of a functional and service nature. The reasoning given by buyers and other executives for this was to get greater control over purchasing and to be more effective in the

use of buyers' time.   Table 7.33 gives a summary of the degree of purchasing specialisation for those organisations in the main sample.

TABLE 7.33   SUMMARY OF THE DEGREE OF PURCHASING
              SPECIALISATION

ORGANISATION	STAGE OF DEVELOPMENT
Leyland Daf	Advanced
Kent County Council	Mature
TDS Pneumonics	Developing
BBC Engineering	Developing
Lancs County Council	Awakening
TML Plastics	Awakening

Leyland Daf and Kent County Council were particularly advanced in terms of this variable, with most of the non buying activities performed by other functions.   Specialisation occurred by products or services and further specialisation in terms of experienced buyers and managers negotiating and managing high values of expenditure and strategic issues. Leyland Daf had a purchasing planning manager whose job it was to make sure systems and procedures throughout Leyland Daf were followed to maximise purchasing efficiency. He was also responsible for evaluating purchasing performance and felt that such specialisation maximised the effectiveness of the purchasing activity.

TDS Pneumonics believed in allowing the buyers to specialise in buying activities, non buying activities had, over the years, been delegated to other staff within a materials management structure. Due to the recession, and a shortage of staff however, buyers were getting dragged into the non buying activities once more. This development tended to reduce their effectiveness. The BBC and LCC purchasing activities had relatively young purchasing functions, both purchasing managers could remember when they first started to develop the purchasing function, and the desire to avoid wasting buyers' time on non purchasing activities. As their functions grew and developed, so the role of the buyers became more concentrated on main line purchasing activities.

An interesting development within the Public sector has been the development of a marketing specialist within the purchasing activity to sell the importance of purchasing to would be users. With the development of the "budget holder concept" both Kent and Lancashire County Council purchasing activities have had to really sell their services far more effectively. This is an unusual specialist to find within a purchasing function, but is likely to grow in the future.

TABLE 7.34   DEGREE OF PURCHASING SPECIALISM

ORGANISATION	COMMENTS
Leyland Daf	Specialisation leads to greater focus on items of expenditure and lower cost of supply. Buyers need to be involved with buying.
Kent County Council Lancs County Council	We must encourage specialists, best use of scarce purchasing resources occurs through the process of specialisation. Marketing our services is new area of specialisation.
BBC Engineering	Limited specialisation needs to be extended to get best use of buyers.
TDS Pneumonics	Encouraged but recession and down turn in markets means in a small organisation buyers may have to get involved in more clerical/non buying activities.
TML Plastics	Top management view of purchasing is that it is a Jack of all trades, our effectiveness is reduced.

From the general comments, there was a strong feeling that if the purchasing activity was to develop, it must focus its attention on main stream purchasing activities - specialisation was seen as being essential to this process.

7.24.1 Summary

A key element in purchasing development is its ability to concentrate its attention on core buying activities. Whether or not the activity can do this appears to be affected by the prevailing senior management attitudes

towards the function and its development. In larger organisations, there appears to be far greater specialisation, this is probably due to the recognition of purchasing as a potential contributor to profitability and its ability to help in achieving strategic goals. Finally, Fig 7.20 sets out major internal and external factors affecting the specialisation of the purchasing function.

FIG 7.20 FACTORS AFFECTING DEGREE OF SPECIALISATION

EXTERNAL	INTERNAL
Economic conditions (slump/boom)	Extent of bought out materials expdt.
Customer requirements	Culture
Competition	Existence of World Class Concepts
	Profit potential in purchasing
	Purchasing existence time

7.25 Buyer - Supplier Relationships

The final four measurement criteria all evaluate different aspects of the buyer supplier relationships. It was believed, and research findings support the idea, that strong bondings with suppliers in turn reflect development of the purchasing activity. The more superficial the relationship is, particularly with major suppliers, the less developed one would have expected purchasing to be.

With the growth of strategic concepts such as Just in Time (JIT), Total Quality Management (TQM), and other World Class concepts, there has been a growing realisation that considerable reductions in costs can be achieved if the buying and supplying organisations can work more closely together. Rationalisation of the supplier base has been undertaken by many organisations attempting to improve efficiency and reduce costs [Macbeth, Murphy, Ferguson and Neil (1993), Hobson (1993), Powers (1991), Groom Morgan and Wilson (1993)].

Rationalising and improving the supplier base and reducing input costs however cannot be achieved effectively by a purchasing function that is essentially undeveloped, reactive, and clerically oriented. As the quantity of suppliers is reduced, so there is a need to improve the qualitative nature of

the relationship. In November 1993, the Chartered Institute of Purchasing and Supply held its National Conference, the theme of the conference was the business of supply chain management. Without exception, the thirty or so key speakers, most of whom were from larger organisations, spoke of the tremendous reduction in costs and improvements in efficiency brought about by developing stronger strategic alliances with key suppliers. By working closely together in a long term relationship, major benefits could be achieved by both sides.

Those purchasing organisations that appeared to be moving in this direction were in nearly all cases part of large organisations who appeared to be reasonably well developed. The findings from both the main sample of six organisations, and Pilot Study II, in all instances, demonstrated that where the purchasing activity was well developed, so was the bonding with suppliers, certainly major suppliers. If one examines the findings of the main sample of six organisations in Table 7.35, this relationship between development of purchasing generally and supplier bonding can be seen.

TABLE 7.35   BUYER-SUPPLIER BONDINGS

ORGANISATION	STAGE OF DEVELOPMENT
Leyland Daf	Advanced
Kent County Council	Developing
TDS Pneumonics	Developing
BBC Engineering	Awakening
Lancs County Council	Awakening

Leyland Daf was the most advanced organisation in terms of this and other measurement criteria under this heading. Leyland Daf had invested considerable resources over the years into supplier evaluation and development. All aspects of products or services required by Leyland are discussed with a rationalised supplier base, in an effort to eliminate unnecessary costs generated at the input end of the business. Buyers traditionally have been encouraged to spend the major part of their time with suppliers, either on their premises or at Leyland, looking at ways of maximising value. Buyers, it was believed at Leyland, were becoming more consultants, and working as part of a team to help key suppliers develop the type of profiles required by Leyland Daf. Such suppliers were expected to

be moving in a similar direction to themselves in terms of World Class concepts. It was expected that suppliers would be moving towards zero defects, be totally involved with Leyland in new product design, deliver in a JIT basis and invest in integrated computer systems and especially in EDI.

In the case of Local Authorities in the sample, Kent County Council and Lancashire County Council, there was a complete contrast as far as supplier bondings were concerned. Standing orders and previous practice, if anything, were designed to limit any close relationship between buyer and supplier organisations. It was believed that too close a relationship might give the impression of favouritism, buyers were therefore not encouraged to get too involved with suppliers. The tendering process, recent European Community legislation, and standing orders, all tended to encourage buyers towards a short term relationship, based on price. This culture difference was causing problems in that higher prices of products and services in the Public sector were likely to become a major problem in the future. If budget holders can buy from where they like, it is likely in the future that less will be bought through Local Authority purchasing units, where prices are likely to remain higher than those offering such services in the Private sector, where close involvement with suppliers is likely to see falling costs and prices.

In the case of the BBC being a partial Public sector organisation, it too had not really developed its supplier base. Where it had got close to suppliers, a "cosy" relationship existed, not a close one. In other words, the relationship was not based on continuous improvement from both sides, and did not lead to any significant improvement in terms of costs or efficiency between buyer and supplier in most instances. As a result of a considerable part of the buyers' time in these three organisations being involved with clerical activities, there would have been little time available in any case to forge stronger links.

TDS had, over a period of time, established reasonable links with its suppliers. It appeared however, that such relationships were being overlooked or discarded when times became difficult.

Finally, TML Plastics was the least developed of all the organisations in terms of this variable and only just managed to be rated at the awakening

stage. Being smaller than most of its major suppliers lead to difficulties in this area, although from time to time, its major customers persuaded TML suppliers to be more co-operative. The whole purchasing function at TML was reactive and clerical. Buyers tended to buy where they were told, and were more interested in achieving short term objectives like keeping the materials flowing in. A summary is given in Table 7.36 of comments on supplier bondings from those interviewed in the main sample.

TABLE 7.36 SUPPLIER BONDINGS - COMMENTS

ORGANISATION	COMMENTS
Leyland Daf	A rationalised supplier base is necessary for World Class concepts such as JIT, TQM etc. This requires much closer relationships based on mutual respect. Benefits to both sides are reduced costs of supply not by reducing profit but by a more efficient supply chain. Joint product development required to avoid building in unnecessary costs. Lower strategic acquisition cost is possible with closer strategic relationships. Buyer must spend more time with key suppliers. Relationship should be close but not cosy.
Kent County Council Lancs County Council	Need to get a much closer relationship with key suppliers but audit and public accountability measures make this extremely difficult if not impossible. You need to copy best purchasing practice by organisations like IBM, Ford, Marks and Spencer.
TDS Pneumonics	Extremely important to have good long term relationships unfortunately the relationship was being soured because of the recession - TDS not paying supplier on time and pushing prices down. Good bondings should help explaining problems you have to suppliers.

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BBC Engineering	Where bondings have been strong this has lead to cosy relationships, little has been done to become more efficient. Sealed bids limits ability to develop long term relationship. On the whole limited bonding.
TML Plastics	Relationships limited because of clerical content of buying job. Not strong, little benefit seen.

7.25.1 Summary

From the literature review and the survey, the message that is coming across is one of major benefits to both buyer and selling organisations from strong supplier bondings and business relationships. Such bondings however, should be based on strategies where both sides can clearly see the benefits of having an efficient relationship. Benefits to both sides from a stable relationship are lower costs and the ability to plan strategically. World Class concepts require both sides to invest heavily in the relationship, this means joint product development, joint development of World Class strategies, and through EDI, integrated databases. Information flows need to be open and honest, particularly in terms of costings. Both sides working towards reducing acquisition costs of products or services will eliminate unnecessary cost and maximise added value, thus making both organisations more competitive.

Finally in Fig 7.21 is an outline of the major factors likely to affect supplier interface, bondings and development.

FIG 7.21   BUYER-SUPPLIER BONDINGS - INTERFACE

EXTERNAL	INTERNAL
Prevailing Economic conditions.	Desire to reduce costs
World Class concepts	World Class Concepts Culture
Requirements of major customers	Buyer's role clerical or strategic
Competition	Time available to Buyer Existing relationship with suppliers.

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7.26 Policy on Ethics

The existence of ethical standards followed by purchasing functions is also a useful indicator of the development of the purchasing function. A large proportion of any purchasing code of practice is likely to cover relationships with suppliers. The areas of interest would cover such things as:

- Supplier selection criteria.
- Treatment of suppliers as the contract continues.
- How much of a supplier's business a buying organisation should take.
- Policy on acceptance of gifts, lunches.
- Issues would be addressed such as reciprocity, buying within the group.
- Visits and how they should be handled.
- Confidentiality of information between the two sides.

Many other issues could also be addressed, but an examination of the above issues by purchasing organisations gives a good idea as to their ethical perceptions. As purchasing grows and develops, one would expect to see a code of ethics developing to guide buyers in certain areas. The majority of larger organisations have laid down procedures on such ethical conduct, a code of conduct. In the early stages of purchasing development, it is unlikely to see much activity in this area. As purchasing grows and develops however, so one would expect greater involvement in such areas, Hakell (1986), Dwyer and Schurr (1987), Calder and Schurr (1986). The results of the main survey in terms of this measurement criteria are shown in Table 7.37.

TABLE 7.37	BUYER-SUPPLIER ETHICS
ORGANISATION	STAGE OF DEVELOPMENT
Leyland Daf	Advanced
Kent County Council	Mature
Lancs County Council	Mature
TDS Pneumonics	Mature
BBC Engineering	Mature
TML Plastics	Awakening

With the exception of TML Plastics, all five organisations were quite advanced in terms of this variable. If however, one examines Kent and Lancashire County Councils and the BBC, attitudes to ethics and their reasoning, is often in contrast to that used by Leyland Daf and TDS, Kent and Lancashire County councils, together with the BBC tend to see ethics and methods of achieving them in terms of audit procedures and "covering their tracks", demonstrating that they are behaving at all times in an impartial way. They did not see ethics as a way of improving purchasing and supply's performance, as did Leyland Daf and TDS.

Ethics within the Public sector are seen in terms of public accountability and restrictiveness in those advanced purchasing organisations in the Private sector it is seen as an opportunity for improving efficiency and operational standards. In Table 7.38 a summary of the observations relating to ethics is shown.

TABLE 7.38 SUMMARY OF COMMENTS - BUYER/SUPPLIER ETHICS

ORGANISATION	COMMENTS
Leyland Daf	Ethical code covering all areas of buyer/supplier conduct and other internal areas contained in a manual. Regularly updated and enforced.
Kent County Council	Strong code of ethics contained in
Lancashire County Council	Standing Orders and purchasing manual Must be followed. Such practices restrict the relationship between buyer and supplier.
BBC Engineering	As above but not as strongly enforced. Follow CIPS ethical code as guide.
TDS Pneumonics	Follow code but not seen as restrictive. Particularly softer on buyer/supplier relationships. Difficult to follow in recession.
TML Plastics	Nothing laid down. Common sense approach.

7.26.1 Summary

From the information contained in Table 7.38, it would appear that whilst in the Private sector, ethical codes of practice, particularly in relation to suppliers, should be clearly stipulated but not applied in such a way that restricts the development of a meaningful relationship between buyer and supplier. If strategic alliances are demanded to reduce acquisition costs and improve overall efficiency, then there is a need for closer co-operation between the two sides. If suppliers are treated badly, then it would become impossible to develop close relationship.

If a closer relationship is to develop between buying and supplying organisations, an enlightened code of ethics is necessary, one that allows the relationship to satisfactorily develop, but still controls the development of major unethical practices.

Fig 7.22 identifies those major factors affecting buyer-supplier ethics.

FIG 7.22   FACTORS AFFECTING BUYER-SUPPLIER ETHICS

EXTERNAL	INTERNAL
Customers	Culture
CIPS	Public/Private Sector
Economic condition	Size of organisation
Boom/Slump	Existence of other
	ethical codes
	World Class concepts

7.27   Hospitality to the Seller

Hospitality to the seller was believed to be a good indicator of the maturity of relationships between the two sides. Certainly from the main sample, more advanced purchasing functions recognised this as an important part of the relationship. It was often over lunches or more informal occasions where hospitality was offered that the two sides got to know each other better. Information given informally was often quite useful to both sides. If however, it was made impossible or difficult to provide hospitality, then such informal meetings were limited. Information concerning this variable is given in Table 7.39.

TABLE 7.39

ORGANISATION	STAGE OF DEVELOPMENT
Leyland Daf	Advanced
Kent County Council	Developing
TDS Pneumonics	Developing
Lancs County Council	Awakening
BBC Engineering	Awakening
TML Plastics	Awakening

One of the hallmarks in terms of the development of this measurement criteria, is that as the purchasing activity develops, so it becomes expected that purchasing staff should not have to depend totally on suppliers to provide hospitality. This measurement criteria was looking at hospitality the buyer could provide to the seller. This might take the form of a lunch in the buyer's organisation's dining room, or the buyer taking the supplier out to lunch. In this was a statement is made to the other side, that the buyer will reciprocate hospitality because of the importance of the relationship. In the case of the main sample, this was only offered by Leyland Daf, in all other instances, the supplier was expected to provide hospitality, mainly in the form of paying for lunch. One of the problems here is that if the buyer and seller are to view each other as equal, the buyer relying on the supplier to pay for basic hospitality is demeaning. Examining some of the general comments relating to this criteria, in Table 7.40, one finds their comments.

TABLE 7.40 HOSPITALITY TO SELLER

ORGANISATION	COMMENTS
Leyland Daf	Important to reciprocate, buyers should be seen as equals.
Kent County Council	Limited - problems of public accountability.
TDS	Could be reciprocated, but often difficult.
BBC & TML	Seller provides.

This is indeed a mixture of views. The least developed purchasing organisations expect hospitality to be provided by the seller, certainly at buyer level.

7.27.1 Summary

Something as simple as basic hospitality is seen as being important in the buyer-supplier relationship. It allows the two sides to meet informally over lunch, or at the bar, to discuss, many issues that would probably not have been discussed at a more formal level. If a long term relationship needs to be developed with a supplier, it is often at these levels that the two sides get to understand each other's wants at a more informal level. Any statements or procedures that discourage this type of intercourse between the two sides is therefore seen as having a negative effect on the overall relationship. Finally, in Fig 7.23, major factors affecting this measurement criteria are indicated.

FIG 7.23 FACTORS AFFECTING HOSPITALITY

EXTERNAL	INTERNAL
Supplier size	Organisation size
Value of business	Culture
Current practice	Amount of business
Competition	Private/Public sector
	History of purchasing
	World Class strategies
	Major/Minor item

7.28 Visits/Meetings Between Buyer & Seller, Quality of Relationship

This measurement criteria attempted to identify the number of visits or meetings that took place between the two sides, and the qualitative nature of the relationships. A purchasing function relatively poorly developed, according to the literature, Farmer and MacMillan (1976) (1978) and Hardwick and Ford (1986), would tend to have fewer meetings with key suppliers and the qualitative nature of them would tend to be low. Thus, for example, at early stages of development one would tend to find the contacts between the two occur when the seller visits the buyer to discuss such things as future business, general commercial problems and re-negotiation of prices.

As the purchasing function grows both the number of visits and meetings between the two sides are likely to grow, with the buyer spending a larger

proportion of his or her time at the supplier's premises, dealing with commercial matters. This was certainly true from information obtained from the main sample of six, and Pilot Study II. One also found that the qualitative nature of the relationship changed as exhibited in the list below in Table 7.41, when some or all of the following was now being discussed as both sides invested in the relationship.

TABLE 7.41 QUALITATIVE ASPECTS OF RELATIONSHIPS

(i)   number of long/short term contracts with major supplier.

(ii)   length of typical contracts.

(iii)   time spent between buyers and sellers in each others organisations, essentially dealing with strategic issues between them.

(iv)   investment in joint systems - EDI.

(v)   evidence of information to supplier.

(vi)   initially vet suppliers - evaluation, ongoing evaluation, vendor rating.

(vii)   evidence of long term projects to reduce cost of supply.

(viii) nature and extent of the integration of both buyer and supplier in each other's activities in an attempt to increase efficiency and effectiveness.

(ix)   openness in the exchange of information.

(x)   concentration on reducing added costs and maximising adding value in the supply chain.

(xi)   negotiation strategic, win-win.

(xii)   joint development of World Class strategies.

In Table 7.42, the results relating to this measurement criteria are shown.

TABLE 7.42 SUMMARY OF VISITS/MEETINGS - PROFILES

ORGANISATION	STAGE OF DEVELOPMENT
Leyland Daf	Advanced
Kent County Council	Developing
TDS Pneumonics	Developing
Lancs County Council	Developing
TML Plastics	Developing
BBC Engineering	Awakening

In many ways this was a particularly interesting variable. As expected, Leyland Daf was particularly advanced and was deeply involved with its major suppliers in all of the criteria mentioned in Table 7.41. Buyers were encouraged to spend as much time as possible with key suppliers, developing the relationship. Their Director of Purchasing believed this meant at least two to three days per week should be spent with such key suppliers, working together to reduce strategic acquisition costs. With staff cutbacks at Leyland, the amount of time available to spend with suppliers had also been reduced. Many of the buyers at Leyland had reduced their time visiting suppliers substantially. This reduction, provided it's relatively short term, would not, it was believed, lead to major problems. The nature of the relationships established with key suppliers had been built up over many years, and short term changes were not seen to be too much of a problem.

In the case of the other four organisations at the developing stage, they, for the most part, realised there was a need for much greater involvement with key suppliers, if acquisition costs were to be reduced.

TML Plastics, whilst having a higher rating in this area, was not committed to its major suppliers through its own policy. What had happened was that major customers such as Rover and Ford had insisted they become more involved with their key suppliers if they were to continue to get business. A summary of comments relating to the number of visits and meetings and quality of the buyer-supplier relationship is given in Table 7.43.

TABLE 7.43 VISITS-MEETINGS AND QUALITY OF BUYER/SUPPLIER
RELATIONSHIP

ORGANISATION	COMMENTS
Leyland Daf	Buyers need to be spending 2/3 days with key suppliers, looking at ways of improving efficiency. We need to be totally integrated with our supplier base. Suppliers must be as efficient as we are. World Class concepts mean World Class suppliers.

Kent County Council	We need to get far more involved with
Lancs County Council	our key suppliers, but rules/regulations forbid it. The policy of long term contracts and a close relationship with suppliers is not allowed.
TML Plastics	Customers are forcing us to get closer to our key suppliers.
BBC Engineering	For too long we have had cosy relationships with suppliers. We need to improve this situation quickly, but our hands are tied by major budget holders.
TDS Pneumonics	Our ability to develop relationships with our key suppliers has been severely damaged by the recession and cut backs weave had to make.

7.28.1 Summary

With one exception (TML Plastics) all organisations saw the need for a close relationship with key suppliers, if strategic acquisition costs were to be reduced. One of the major problems was how to bring this change about. Different organisations had particular problems. Leyland and Kent County Council faced the problem of restrictive procedures, TDS was faced with the problem of intensive competition and major reductions in output, whilst the BBC faced problems of convincing major budget holders of the way ahead. In Fig 7.24, some of the major factors affecting the qualitative and quantitative aspects of the buyer-supplier relationship are identified.

FIG 7.24   QUANTITATIVE,/QUALITATIVE ASPECTS AFFECTING THE
              BUYER/SUPPLIER RELATIONSHIP

EXTERNAL	INTERNAL
Recession	World Class concepts
Competition	Internal regulations/procedures
Customers	Other functions' requirement
World Class concepts	Clerical/Strategic role of Purchasing
	Power of budget holders

7.29   Organisational Aggregate Purchasing Variables

The literature survey had suggested that the development of the function within an organisation was also affected by the level of purchasing expenditure and its level compared with total sales or revenue within the organisation, Jones (1983), Farmer (1990). As purchasing expenditure grew as a proportion of total sales or income within the organisation, then so would the development of the activity increase. Table 7.44 summarises both the total level of purchasing expenditure, and the ratio of purchasing to sales or revenue for each organisation.

TABLE 7.44   PURCHASING EXPENDITURE ABSOLUTE AND AS A PERCENTAGE OF SALES OR INCOME OF THE ORGANISATION

ORGANISATION	TOTAL EXPT.	PURCH. EXPT. SALES REVENUE %	DEVT. STAGE
Leyland Daf	£325M	76	4/5
Kent County Council	£220M(75)	26	3/4
TDS Pneumonics	£3.4M	61	3
Lancs County Council	£300M(25)	25	2/3
BBC Engineering	£280M	24	2/3
TML Plastics	£7.5M	47	2

It is difficult from this information to draw any conclusive result. Leyland Daf's purchasing expenditure is high both in absolute and relative terms, and purchasing has reached a high stage of purchasing evolution, but Kent County Council, also reasonably well developed, has a much smaller level of purchasing expenditure in both absolute and percentage terms. There are other examples in the survey where high levels of purchasing expenditure in both absolute and percentage terms can be associated with both high and low stages of development, and vice versa. It would therefore seem that other factors enter into the equation in terms of this variable.

7.30   External Factors Affecting Development

In addition to the eighteen internal criteria used to measure purchasing development, considerable information was collected that helped to identify external variables likely to affect the process of purchasing development. It

is intended in this section of the Chapter, to summarise the effects of the major external factors recorded. The questionnaire highlighted various external areas that might affect the development of the activity. Respondents also added some of their own. The areas explored are listed below for each of the organisations, and conclusions drawn.

7.31 Major External Factors

In the survey, major external/environmental factors identified from the literature were:

- Technology
- Inflation
- Shortages/Surpluses in the markets in which the buyer operates.
- Competition in the buyer's organisation's markets
- General economic factors
- Government controls
- European Community Directives and influence

Comments received for each of the above are recorded in Tables and conclusions drawn.

7.32 Technology

All respondents expressed views concerning this variable, some were more affected than others, for example the Private sector organisations tended to be more affected and aware than did the Public sector organisations. Table 7.45 gives a summary of major comments made.

TABLE 7.45 SUMMARY - TECHNOLOGY COMMENTS

ORGANISATION	COMMENTS
Leyland Daf	Improved technology in the systems/computer areas improved the purchasing function, releasing the buyer from routine clerical activities. Product technological improvement could also lead to lower prices. The need to re-design or re-engineer products called for a closer relationship between purchasing and the rest of the organisation.

Kent County Council	Improved computer technology should help improve purchasing performance, EDI links reduce clerical nature of the job, more time for real buying.
TDS Pneumonics	Rapidly changing technology in terms of the markets in which the buyer purchases means the buyer needs to be more aware of the products they buy to avoid shortages and obsolescence. Purchasing needs to be more involved in the product life cycle which are falling for most products over time. This requires a more developed activity.
Lancs County Council	Specification changes need to be watched
TML Plastics	carefully to avoid a build up of stock.
BBC Engineering	Rapidly changing technology could help purchasing to be less clerically oriented. There was a need for buyers to be more aware of changing product technologies.

7.32.1 Summary

The majority of those interviewed felt that improved technology was likely to help the buyer in terms of reducing the clerical nature of the job. If buyers could be released from such clerical activities they would be able to spend a greater proportion of their time on managerial and strategic aspects of the purchasing job and use their time more effectively, this in turn would improve the development of the activity.

Leyland Daf and TDS believed that as product life cycles fall, so there is a greater need for purchasing to be more integrated with other parts of the organisation in order for it to respond more quickly to new product demands. As products become more technologically involved, and product life cycles compress, it becomes even more important to develop an efficient purchasing activity. Public sector organisations like the County Councils in the survey, appeared to be less concerned with technological changes on the purchasing activity, on the whole they tended to react to such changes rather than become actively involved. With the development of new

manufacturing technology such as FMS, CAD/CAM and other extremely expensive capital projects, it would be unthinkable having to rely on a poorly developed purchasing function, Avloitis and Parkinson (1986). It therefore appears likely that improved and changing technology is likely to have a positive effect on purchasing development overall, but particularly in the Private sector.

7.33   Inflation

The effects of varying levels of inflation on the purchasing activity are difficult to assess. It was expected that with high levels of inflation and rapid price increases, this would have put pressure on organisations to improve the effectiveness of their purchasing activities in general, this view seemed to prevail amongst those interviewed, although the period when the interviews were conducted was generally a period of relatively low levels of inflation and recession. Comments relating to this factor are recorded in Table 7.46.

TABLE 7.46	SUMMARY - INFLATION COMMENTS
ORGANISATION	COMMENTS
Leyland Daf	Higher levels of inflation likely to put more pressure on the activity to control cost. This is likely to lead to an improved activity. We would however expect buyers to be operating more strategically in terms of reducing all costs through closer bondings with suppliers and improving the efficiency of the relationships.
Kent County Council	A more efficient purchasing activity would be required to cope with rapidly rising prices.
TDS Pneumonics	Higher levels of inflation require more effective buyers and a more efficient purchasing activity. TDS faces negative inflation in sectors of the semi conductor industry.
Lancs County Council	Buyers must keep in line with budgeted increases. Little pressure to be proactive.

BBC Engineering	Generally an increase in inflation required
TML Plastics	more time from more experienced buyers.
	Rising inflation would eventually put
	pressure on purchasing to develop.

7.33.1 Summary

The comments on the previous page indicated a belief that rising levels of inflation would eventually attract the attention of senior management in the organisations concerned, and possibly lead to more resources being invested in this area. Poorly negotiated price rises during an inflation period could severely reduce organisational profitability, or lead organisations to exceeding budgeted levels of expenditure. There was however, a tendency in those organisations at very early stages of development, to ignore the problem or assign non purchasing staff from other functions to negotiate major increases. It is however, likely that as the purchasing function develops beyond the early stages of development, for price negotiations to be seen as the purchasing's area of expertise. If this is the case, it is likely that poor performance in this area would lead to senior management evaluating the reasons why and eventually taking actions that would lead to the improvement and development of the activity. Such a scenario has occurred both at Leyland Daf and TDS, and to a certain extent at Kent County Council.

7.34 Shortages and Surpluses in the Buyer's Markets

Buyers in many organisations had indicated that they noticed that purchasing developed more quickly after a period of severe supply shortages. It was believed that senior management became far more aware of the importance of the input activities after experiencing major difficulties in obtaining supplies. In certain cases, production stopped, or supplies were obtained, but at excessively high prices. This was often enough to attract attention and resources towards the purchasing activity, which in many instances lead to a more developed activity. The period 1976 to 1980 was one associated with high levels of inflation and shortages. It is interesting to note that this was also a period when three of the organisations in the sample, Kent County Council, Leyland Daf, and TDS experienced growth and development in their purchasing activities.

At the other extreme, when surpluses of supplies occur, it was thought that this could lead to a reduction in efforts from the purchasing activity and less pressure for it to develop. During the time of this research project, when data was collected, that is 1989/91, organisations were experiencing much lower levels of inflation and surpluses of many of the products or services they bought. When such conditions apply, it is said to be a "buyer's market." The forces of the market place, such as competition and surpluses, help to keep prices in check, there is not the same pressure on purchasing to control prices as in times of inflation and shortages. It was therefore expected that at such time, there would be less pressure on purchasing to develop. Information derived from the sample, indicated mixed reactions to this idea.

TABLE 7.47 SUMMARY OF SURPLUSES/SHORTAGES, COMMENTS

ORGANISATION	COMMENTS
Leyland Daf	More developed purchasing functions are more likely to smooth out peaks and troughs in surpluses, and would be more able to handle shortages. Increasingly partnerships with major suppliers require a much longer term view of supply markets. Short term factors affecting either side become less important.
Kent County Council Lancs County Council	Prices would be set by the market shortages leading to rationing. Surpluses lower prices.
TDS Pneumonics	Good relations with suppliers means forewarning of shortages. In times of surpluses, you "screw" suppliers down on price.
TML Plastics	Inconclusive information.
BBC Engineering	You need to move with the market, it dictates strategies.

7.34.1 Summary

From the above summary of comments and the more detailed results, it can be appreciated that attitudes towards this variable very much depend on the development of the purchasing activity. Those organisations that are well developed will have established partnerships with major suppliers that are

more concerned with strategic goals and strategic acquisition costs rather than short term issues. There is a belief that such strategic views leads to much better long term deals. Those organisations that are less developed are more likely to exploit or be exploited by prevailing market conditions. Thus, with shortages they will pay the going rate when things change to a buyers' market, and when there are surpluses, they would exploit this situation by paying lower prices. One of the problems inherent with this type of short term approach is that both sides make little progress to really control prices. Larger, more developed purchasing organisations, by co-operating in extreme trading conditions, are likely to gain far more because of longer term strategic views of supply situations.

One might therefore find in times of rapidly rising prices, advanced purchasing activities would work closely with suppliers on strategies to reduce cost and add value. In times of recession and falling prices, co-operation could assist both organisations.

7.35 Competition in Buyer's Organisation's Markets

It was often mentioned, from the buyers in the two surveys, that competition in the markets for the buyer's organisation's finished products put pressure on the purchasing activity to be more efficient. This could also be an explanation for purchasing development or lack of it. If we examine Leyland Daf, here is an organisation operating in an extremely competitive market place, selling its trucks. There are over ten extremely efficient organisations with whom it must compete on price, delivery and service. A·poorly developed ineffective purchasing activity could easily ruin its chances of competing effectively. Leyland Daf's purchasing activity is however well developed. In contrast, organisations like Local Authorities and the BBC do not face the same degree of competition, and for the most part, do not have particularly well developed purchasing functions. Kent County Council is well developed for other reasons, but tends to be the exception to the rule as far as Local Authorities are concerned in having a well developed purchasing activity. Table 7.48 identifies the various levels of competition on the market places for the six organisations' finished products or services.

TABLE 7.48 COMPETITION IN BUYERS' MARKETS FOR FINISHED GOODS OR SERVICES (SALES)

ORGANISATION	COMPETITION		STAGE OF DEVELOPMENT
Leyland Daf	6+ suppliers	(high)	Mature/Advanced
Kent County Council	1	(low)	Developing/Mature
TDS Pneumonics	6+	(high)	Developing
Lancs County Council	1	(low)	Awakening/Developing
BBC Engineering	2/3	(limited)	Awakening
TML Plastics	2/3	(limited)	Awakening

7.35.1 Summary

Whilst it can be seen from the above table that development and competition show a reasonable correlation, the picture is certainly far more complicated in terms of explaining why some purchasing functions are far more developed than others. There will be many causal factors likely to have a bearing. It is interesting to note however, that in the case of Local Authorities, whereas a few years ago there was little competition for the purchasing function, now, as a result of Government Legislation, most budget holders within Local Authorities can buy from whom they like. This event has lead to a dramatic response from most purchasing organisations in the Public sector, who are now fiercely marketing their services to would be users, in competition with other outside purchasing organisations who can now compete. Competition would seem to be an important factor therefore, in explaining why purchasing is more advanced in some organisations and not others.

7.36   Competition in Major Buyer Markets

The extent of competition was investigated both for finished goods and services of those organisations in the sample and also the degree of competition faced by buyers in major markets in which they purchased. The idea behind investigating this area was to see if either an abundance or lack of competition in such markets was associated in any way with more developed purchasing activities. The general results are shown in Table 7.49.

TABLE 7.49 SUMMARY OF COMPETITION IN MAJOR BUYER MARKETS

ORGANISATION	COMPETITION	STAGE OF DEVELOPMENT
Leyland Daf	Low (1 or 2)	Mature/Advanced
Kent County Council	High (6+)	Developing/Mature
TDS	Medium (3 or 4)	Developing
Lancs County Council	High (6+)	Awakening
TML	High (6+)	Awakening
BBC	Medium (3 or 4)	Developing/Awakening

An abundance of available suppliers who provide goods or services to the buyer could lead, in certain instances, to purchasing functions becoming less efficient as they rely on market forces keeping prices down, and providing a good commercial deal. In the survey, Kent and Lancashire County Council purchasing activities, and also the BBC were very much of this view. Their view towards monopolies was also very staid, in that there was little they could do but accept the situation and pay up. TML Plastics had a similar view.

Leyland Daf, and to a certain extent TDS, believed that whilst competition or the lack of it were important issues, the real issue was relationships with key suppliers, with emphasis not just on price, but strategic acquisition cost. Leyland Daf in particular, believed in reducing its supplier base as a deliberate policy, but also in strengthening links with a smaller number of specially selected suppliers. The idea was that with a smaller supplier base, and a long partnership, major benefits could accrue to both sides.

7.37 Government Controls or Legislation

The extent of Government controls or new legislation was believed to be an important factor affecting the development of a purchasing function within an organisation varies. In the original interviews all the organisations were asked about various Government controls and legislation. Apart from the Local Authorities of Kent County Council and Lancashire County Council, it appeared that there was little effect as far as interviewees were concerned.

In the case of Lancashire County Council and Kent County Council purchasing functions, both had been dramatically affected by the Education Reform Act (1991), which allowed schools and colleges (Budget holders), to buy from whom they wished. No longer did they have to buy through the

Central purchasing function of the Local Authority. The effects of this legislation could lead to purchasing functions within Local Authorities disappearing if budget holders no longer used them. In an attempt to persuade budget holders to use their services, Local Authorities began to develop their purchasing activities more extensively, particularly their interface with major budget holders, or customers. This involved establishing a Marketing Officer, extending depth of service and so on. Kent County Council believed that if it was to survive, its structure might have to change, with the development of a 'hard core' purchasing group, to advise new budget holders and negotiate major contracts, but not run them. From the general information obtained in this area however, it would appear that whilst such organisations are developing the purchasing activity on new fronts, they still have major problems developing the purchasing activity elsewhere.

In the case of other examples of Government involvement in the market place, few comments were made because of little first hand experience. Price controls had not been experienced by any of those interviewed, but such controls in the period 1976/78 did have major effects on the development of purchasing at that time, Jones (1983), when major price increases were vetted. It was at this time that many organisations reviewed the role of their purchasing functions and this appeared to have a positive effect on development.

7.37.1 Summary

Whilst Government involvement in the market place could have either positive or negative effects on purchasing development, apart from legislation affecting Local Authorities and Government directives at the BBC, there was no other evidence to suggest how such involvement might affect the purchasing activity.

7.38 European Community and 1992

One of the questions asked of all respondents was how developments with the European Community were likely to affect the purchasing activity in the future. In the case of the Local Authorities and the BBC, the response was immediate and to a large extent, negative. As a result of a European Community directive to encourage competition between member states, all

tenders for more than 130,000 ECU's had to be advertised in the European Journal. This practice was seen as restrictive and time consuming.

7.39 General Economic Conditions

In the Private sector organisations, a recession seemed to cause problems, not just to the organisation concerned, but also to the purchasing activity. Leyland Daf, TML Plastics and TDS found that during a recession, all functional activities were affected. It was noted in these organisations that clerical activities for the buyer increased as staff were reduced, services once provided to the buyer were withdrawn or limited, and less time made available for the buyer to visit suppliers, or even see them. These changes in purchasing activity were felt by all concerned as having a negative effect on purchasing development.

Whilst it is appreciated that recessionary cutbacks are required in an organisation, it was surprising to find they were so widespread in the purchasing area. All of those interviewed believed that if more resources were devoted to developing the purchasing activity during a recession, then considerable savings could have been achieved in this area through more effective cost reduction techniques, better negotiations and so on.

The surprising finding here, was that this type of behaviour in response to a recession, seemed to be the response from both organisations with well developed purchasing activities, as well as in poorly developed activities. The other three organisations, BBC, Kent and Lancashire County Council purchasing were less affected by recessions and did not see similar affects on the purchasing activity. This could be due to the fact that they are not nearly as affected by recessionary factors.

7.40 Structural Changes

Structural changes within the organisation investigated in most instances, appeared to have positive effects on purchasing development. Leyland Daf was formed in the 1980's as a result of a major take-over by Daf of Holland with Leyland Trucks UK. Purchasing at Daf was regarded as a high profile activity, with a director at Board level. In the UK, the head of the purchasing activity had reported to an operations director. Other improvements in purchasing's standing occurred as a result of the merger:

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- A strengthened central activity.
- More directorships within the activity.
- Movement towards a more logistical approach towards the flow of materials, which in turn improved purchasing's standing.

The BBC likewise saw considerable re-organisation in the 1980's, which lead to the establishment of a separate purchasing unit within one of the major divisions of the organisation. It should however, be remembered that it was re-organisation in the 1970's that had lead to purchasing becoming decentralised and less involved in decision making activities. In the case of the BBC, re-organisation of the corporation's activities have lead to both a decline in the activities, and more recently, development of the purchasing activity.

In the case of Kent County Council, re-organisation over a period of time has seen the purchasing function steadily developing. Its head reported directly to the Chief Executive of the Council, and it had a mature purchasing profile. With new Government legislation and the growth of the budget holder concept, it was likely that in the future, re-organisation could lead to a smaller but more developed activity, offering a consultancy service. Lancashire County Council purchasing had similar problems in terms of the new legislation, but had not been in existence for as long. In the case of LCC, since its inception in the late 1980's, it had seen rapid development and growth. How it developed in the future depended very much on its ability, as with Kent CC, to sell its services to new budget holders.

TDS purchasing had, over the twenty years since it was established, seen considerable growth and development from a one man function to a multi-manned Materials Management activity. All of the hallmarks of development could be clearly identified, particularly after re-organisation activities with purchasing continually becoming more strategically involved at the centre.

TML Plastics had a relatively undeveloped purchasing function until major re-organisations occurred as a result of it becoming a preferred supplier of plastic components to Rover cars. This, and other orders saw TML's turnover rise dramatically from £6 M to £16 M over a period of some

eighteen months. In turn, the profile and numbers operating within the purchasing activity also rose sharply. Major suppliers like Rover were concerned that unnecessary costs generated within TML were reduced and eliminated quickly, in order to keep costs and prices under control, which in turn put greater pressure on those managing the organisation to pay more attention to the development of the purchasing activity.

7.40.1 Summary

In general, from those organisations in the survey, restructuring did appear to have a positive effect on the development of the purchasing function. In almost all instances, the activity developed in both depth and breadth as a result of major structural changes within the organisations involved. In the case of Public sector organisations like Kent and Lancashire County Councils, future structural changes will be very much affected by new developments in terms of budget holders requirements.

7.41   Corporate Management Strategies

Corporate Management Strategies such as Just in Time (JIT), Total Quality Management (TQM) and Logistical structures, from what is now called World Class Strategies, appeared to have a major influence on purchasing developments, either directly or indirectly. The direct effects of such strategies occurred within the organisation involved with purchasing. All of these World Class concepts demanded high performance from all functional, particularly input, activities. If purchasing was not developed, for example when attempting to introduce a JIT or TQM strategy, it blocked the development of the concept, JIT calls for a rationalised supplier base, and a partnership arrangement between buying and supplying organisations, this in turn requires a proactive purchasing activity and brings pressure from the rest of the organisation to develop this function.

Leyland Daf buyers and executives concluded that World Class concepts required World Class purchasing functions. They believed that purchasing had to become "smarter and more integrated with the rest of the organisation" hence the move towards a logistical structure. As such World Class concepts developed, so had the role of the buyer who was spending an increasing proportion of time with key suppliers outside the organisation, and forming stronger links within the organisation with other functions.

TDS and TML Plastics were also affected by such World Class concepts but not particularly from internal pressure, but rather external ones. Major customers of these organisations were insisting that as major suppliers they became more efficient. In an attempt to reduce acquisition costs, major customer organisations were insisting that as their major suppliers, they too developed such concepts as JIT and TQM, in order to reduce unnecessary costs in the supply chain. Inefficient suppliers operations added cost to the buying customer concerned. With the introduction of Supply Chain Management, major buying organisations were investigating sources of unnecessary costs being generated in the supply chain, and introducing measures to reduce them.

7.42   General Development Questions

The final part of the results attempted to elicit what respondents' views were in general regarding factors that are likely to affect purchasing development. The idea behind this final point of the results was to identify any factor that might affect development, but had not already been mentioned. The prevailing management culture was seen by all respondents as having an effect on purchasing development. Thus one found, for example, that Leyland Daf, Kent County Council and TDS, all had positive cultures towards the purchasing activity, which in turn appeared to correlate well with higher stages of purchasing development within those organisations. This was true of TML Plastics, where the culture appeared to ignore the importance of purchasing development. Both the BBC and Lancashire County Council operated within organisations that appeared to have more of a neutral culture. Bureaucratic organisations, not particularly affected by market forces were generally believed by all, to provide the worst possible cultures for purchasing development.

When asked to indicate which organisations were likely to be most conducive to purchasing development, those organisations like Marks and Spencer, and Ford were chosen out of a listing, whilst Local Authorities were placed further down the list. In both the cases of Marks and Spencer and Ford, one is dealing with large organisations, with high levels of purchasing expenditure, both in absolute and percentage terms, and extremely sensitive to market forces.

The person heading the purchasing function, and their backgrounds were identified by two of the respondents as being an important contributor to development of the purchasing activity. Often the backgrounds and drive of such individuals is instrumental in developing the activity.

All respondents were asked open questions concerning factors that they believed were conducive or otherwise to the development of the purchasing activity, some interesting observations were made. Leyland Daf believed one had to examine who controls expenditure in the organisation concerned, and attitudes towards commercial activities had a bearing. In the Public sector for example, following rules and providing for accountability seemed to be more important than entrepreneurial success. The right culture in terms of the purchasing activity was regarded as being important, that is purchasing's ability to reduce acquisition costs by effectively integrating World Class concepts within the organisation and within the supply chain. The buyer had to be well trained and empowered to make decisions. There had to be an error friendly approach towards mistakes and considerably more time to developing effective relationships with key suppliers.

7.43 Conclusion
In this chapter the results of the findings have been analysed and various conclusions drawn in terms of internal and external factors likely to have a bearing on purchasing development i.e. independent criteria affecting development. The dependent development criteria have been examined in the case studies concerned and have in most cases been measured.

In the next chapter all the various measurement criteria are brought together in a conceptual purchasing development framework following the final results of the research.

CHAPTER 8 CONCEPTUAL PURCHASING DEVELOPMENT FRAMEWORK - OVERVIEW

8.1 Introduction

In this chapter the analysis of results and measurement criteria are integrated into a more refined purchasing development framework. From the Analysis of Results Chapter the following developments or refinements are introduced:

- the relationship between dependent purchasing development criteria is more clearly identified
- major independent organisational criteria are examined over the total sample
- independent external criteria affecting purchasing development established
- the purchasing development conceptual framework is further simplified for operational use

8.2 Purchasing development Conceptual Framework

From the literature survey and analysis of results we have eighteen major dependent development criteria that can be used to measure the purchasing activities stages of development. These criteria are shown in Fig 8.1. In this section an attempt is made to explain the inter-relationships between measurement criteria and to show that true development of the activity requires a fully integrated strategic action plan. Because of the inter-relationship between the measurement criteria, development of one or relatively few of the criteria only are likely to be ineffective. Research findings clearly show the need for an holistic approach to purchasing development.

FIG 8.1

RELATIONSHIP BETWEEN DEPENDENT MEASUREMENT CRITERIA

MAJOR ORGANISATIONAL/SECTOR FACTORS:
•PURCHASING AGGREGATES
•CULTURE
•INDUSTRY/SECTOR TYPE

PURCHASING DEVELOPMENT

8.2.1 JOB ANALYSIS

8.2.2 PURCHASING STATUS

8.2.3 MEASUREMENT OF PURCHASING PERFORMANCE

8.2.4 DEVELOPMENT AND TRAINING OF PURCHASING STAFF

8.2.5. INTERFACE DEVELOPMENT

8.2.6 INFORMATION SYSTEMS

8.2.7 COMPUTER TECHNOLOGY

8.2.8 STANDARD OF OPERATING PROCEDURES

8.2.9 PURCHASING SPECIALISATION

8.2.10 BUYER/ SUPPLIER INTERFACE

8.2.11 ETHICS POLICY

8.2.12 SUPPLIER HOSPITALITY

8.2.13 VISITS/MEETINGS

8.2.14 PROCESS INVOLVEMENT

8.2.15 BUYER REMUNERATION

8.2.16 BUYER CHARACTERISTICS

8.2.17 PURCHASING SERVICES

8.2.18 PURCHASING STRUCTURE

EXTERNAL FACTORS:
•INFLATION
•CAPACITY IN SUPPLY MARKETS
•GOVERNMENT CONTROLS
•GENERAL ECONOMIC FACTORS
•EUROPEAN DIRECTIVES
•CUSTOMERS
•WORLD CLASS STRATEGIES
•COMPETITION IN BUYERS MARKETS
•TECHNOLOGY

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8.2.1 Clerical/Managerial/Strategic - Breakdown Analysis

From the more detailed analysis of results it can be seen that this is an important criteria in terms of purchasing development. If buyers are essentially clerical and reactive, their status and salaries will be relatively low in the organisation, which in turn will affect their position in the purchasing structure. Where purchasing has a low status it tends to be reporting to other functional area heads such as Accounts or Production, thus making it difficult for it to have any real say in policy and strategy determination. Their clerical role is often reinforced by measurement of performance in terms of clerical efficiency, number of orders processed or invoices cleared. Training is either non existent in such clerically oriented functions, or superficial. If the purchasing function is seen as essentially reactive and. clerical, the characteristics demanded of the buyer are also limited. Those organisations recruiting essentially clerical buyers offer lower levels of remuneration, this in turn leads to problems of recruiting the right calibre of staff in the future.

Organisations attempting to develop World Class strategies will be severely restricted if the purchasing activity remains clerically oriented and has a low status within the organisation. As these organisational strategies develop, there is a need to move towards a much closer relationship with key suppliers and to develop them. Just in Time strategies for example, require a rationalised integrated supplier base, interfacing with a logistically oriented buying organisation.

Well developed and integrated computer technology and information systems can considerably reduce the clerical nature of the purchasing function. In order for these to be effective however, training and development of staff is essential,, so is the need for purchasing to interface effectively with the rest of the organisation. The growth of back up purchasing services also helps to reduce the clerical or administrative side of the purchasing function.

8.2.2 Purchasing Status

The status of the purchasing activity is affected by many other of the measurement criteria. If purchasing is seen as essentially an order clerk activity, its status will be low. Where it has a strategic role and is well

integrated with the rest of the organisation, its status is likely to rise. The more it becomes involved in the buying process and is seen as a prime activator in the Buying Centre, the more likely its status and remuneration will rise. As this occurs, so it is likely to be given more computer and specialist purchasing resources in order to make it even more effective.

8.2.3 Measurement of Purchasing Performance

The extent and depth of the criteria, measurement of purchasing performance, is itself indicative of purchasing development. If purchasing is not well developed, or is clerically oriented, measurement of its performance will be ignored or superficial. As the activity develops and becomes more integrated with other functions, so its effectiveness and performance are likely to be more carefully monitored by senior management.

In those organisations where purchasing had a high profile, its ability to achieve strategic objectives as well as making savings was measured. As the rest of the organisation realise purchasing's savings potential and its ability to help achieve World Class performance, so its status is likely to rise. If its performance is measured essentially in clerical terms, then the buyer characteristics are likely to be seen in terms of an order clerk, with lower remuneration. If the activity is measured in terms of its ability to achieve cost savings, reduce strategic acquisitions and help achieve corporate goals, then the buyer characteristics required, training, development and salaries are all likely to be higher. Once strategic performance targets have been identified and agreed by senior management for purchasing, so its status and development is likely to rise.

Thus if supplier development and strategic sourcing are seen as important areas, then the time the buyer will spend in this area is likely to rise. This includes developing the buyer supplier interface, ethics, hospitality and visits between the buyer and supplier. Almost certainly this will lead to less purchasing time being spent on clerical activities and greater buyer specialisation as the opportunity cost of the buyer's time is realised. Good information systems and integrated databases will also help in publicising the importance of the purchasing activity to the rest of the organisation, whilst providing the buyer with computers and systems to deal with clerical work more effectively.

8.2.4 Development and Training of Purchasing Staff

As the status of purchasing increases and the organisation begins to appreciate its strategic importance, so the level of training and development will increase. This in turn will affect the type of buyer required in the future, remuneration, and their place in the organisation structure. In those organisations where the activity was well developed, the educational requirements of would be buyers was higher, that is HND/C, degree or CIPS qualifications, and then considerable time and effort was spent on training and developing the buyer further.

8.2.5 Interface development

As purchasing is recognised as being an important contributor to corporate profitability and strategic objectives, so its status within the organisation is likely to rise. This in turn enhances its role within the buying centre and the buying process. In those organisations sampled where purchasing was well developed, the organisation expected major inputs of supply information and other positive contributions from the activity. This in turn leads to greater demands to select and develop the right person for the purchasing function. Order clerk buyers would not be able to make the type of contributions now required within World Class organisations.

8.2.6 Information Systems

All the well developed organisations believed that efficient information systems were essential for purchasing development. Integrated databases, both within the organisation and with external customers and suppliers was essential for future development. This also, of course, required a developed computer system to access and provide information on line quickly. Providing information, particularly from a purchasing standpoint, made others in the organisation more aware of its role and potential. All the World Class concepts required an integrated computerised information system if they were to work effectively. A poorly developed, clerically oriented purchasing activity was soon revealed and appropriate developments made, otherwise the whole information system would be retarded.

Handling and evaluating strategic purchasing information, required a more developed proactive buyer. This involved different buying characteristics

and higher remuneration. Information systems also reveal, through performance measurement, the type of work the purchasing function is involved with, and subsequent re-evaluation of its role.

8.2.7 Computer Technology

Computer technology and effective information systems go together. Thus with an efficient computer system, a considerable amount of routine clerical activities can be taken out of the purchasing specification and allow the buyer to concentrate on more strategic and managerial aspects of the job. The existence of an array of computer technology and the information systems does however, not in itself guarantee development of the purchasing activity. However, the lack of these factors can certainly inhibit development. Computer technology and integrated systems can certainly enable the buyer, if properly trained, to become more effective. If however, such developments are not backed up with good training of staff, their effectiveness is reduced.

8.2.8 Standard of operating procedures

It was believed that both the level and quality of operating procedures given to the buyer were indicators of a developed purchasing activity. In the main sample however, it soon became clear that whilst the existence of operating procedures do indeed indicate development, they can however also restrict development in certain organisations.

In the Public sector, operating procedures tended on the whole, to be restrictive, particularly in the purchasing area. Tendering procedures, relationships with suppliers and ethical considerations set out in standard operating procedures, all tended to restrict the development of the purchasing activity. In the Private sector of the sample, operating procedures were designed to improve and develop the activity. Thus one found for example, good practices in the negotiation, supplier development, and cost reduction areas established in operating procedures for all to follow, that is, a form of bench marking.

8.2.9 Purchasing Specialisation

In all of the organisations sampled, it was found that as the purchasing activity grows and develops, so does specialisation within the purchasing

function. The more clerically oriented the purchasing activity is however, the less the chances for specialisation, this factor was, in many ways, one of the biggest impediments to specialisation. The clerical content of the activity however, was in turn affected by the underlying status of the activity.

8.2.10 Buyer - Supplier Interface

The quality and depth of the interface or bonding with key suppliers was indicative of purchasing maturity. Those organisations that were well advanced in terms of Total Quality Management, Just in Time, Logistics and Strategic Acquisition Cost, had invested huge amounts of manpower and resources into developing relationships. The idea was by working closely together with key suppliers, and eliminating unnecessary costs in the relationship, acquisition costs fell sharply over a number of years. Such strategic reductions in the cost of supply however, required a deep commitment from both buyer and supplier, this would not be possible with an immature purchasing activity.

Developed relationships were built over many years and were based on a much more open relationship between the two sides. Buyers however, would often work in a cross functional team with key suppliers. Suppliers, once chosen, were given long term contracts and became the preferred supplier for that and associated products required from the buying organisation. In those more developed purchasing organisations, many of the high value items were single sourced. As a result of the length and nature of the relationship, paperwork was eliminated and the whole working relationship simplified, reducing supply costs.

8.2.11 Ethics Policy

The ways in which purchasing treats its internal customers and its suppliers as it evolves is critical. Often ethical considerations are contained in Standing Orders or operating procedures. In some organisations, they are simply left to the individual to interpret. As the purchasing activity develops, it is noticeable that ethical considerations come more to the fore. This is not surprising, if suppliers are badly treated or exploited by the purchasing activity, they are not likely to want to form long term relationships because of uncertainties over commercial practices. Moreover, developed organisations could not afford to have the bad press generated from the

activities of unscrupulous buyers. Thus the existence and scope of codes of ethics in themselves are indicative of purchasing development. One of the problems however, particularly in the Public sector, is that the scope of ethical factors often goes too far and restricts the effective performance of the buyer.

8.2.12 Supplier Hospitality

Developed purchasing activities tended to provide commensurate hospitality to the supplier. Those organisations where the purchasing activity was poorly developed, either avoided situations where hospitality was required, or expected the suppliers to provide hospitality for both sides. In a close relationship, one finds that a tremendous amount of informal information, that can benefit both sides is given over lunches or at other informal meetings between the buyer and supplier. Unless hospitality can be reciprocated by the buyer, there is a strong chance that the relationship between the two sides could be limited. The view was often expressed by those in the Public sector, that more senior buyers avoided going out with suppliers for lunch because they could not afford to pay their share of the costs and their organisations would not allow the seller to pay.

8.2.13 Visits and Meetings between the Two Sides

From what has already been said concerning the three other preceding criteria, regular meetings between the two sides and the quality of such meetings are indicative of purchasing development. In advanced purchasing organisations, the buyer might be spending two or three days a week at key suppliers' premises, discussing managerial and strategic purchasing issues. The idea behind such meetings is to "kill off" supply problems before they occur. A proactive buyer would be moving his limited supplier base towards "World Class" concepts and thereby reducing or eliminating quality and delivery problems.

8.2.14 Process Involvement

It is likely that as purchasing develops, so it becomes more involved in the buying process, but in a selective way. Thus one would not expect experienced buyers to be getting involved with routine low value items of expenditure on a short term basis. In a developed activity, more of their time would be involved with high value items and identifying strategic problems in

their buying plans. As key suppliers become more of an integrated part of the supply chain, so it becomes important for purchasing to represent this relationship effectively within their own organisation. They must find ways of streamlining such interfaces and managing the relationships effectively.

As the purchasing activity develops and becomes more involved in the buying process, it needs a much higher quality buyer. The characteristics required of the buyer vary considerably, depending upon their role in the organisation. The skills required of strategically involved buyers are far more comprehensive, demand higher salaries and more effective training.

8.2.15 Buyers' Remuneration

In many ways, you get what you pay for. Those organisations who pay low salaries to buyers tend to end up with reactive order clerks. All the organisations in the sample agreed that "real" buyers have to be paid an appropriate salary. The order clerk buyer cannot demand the same salary as the buyers who spends a considerable part of their time deeply involved with key suppliers, resolving strategic problems and working towards World Class concepts, both internally and externally. There are however, many examples cited in the research, where organisations want to pay salaries commensurate with an order clerk buyer but write the job specification around a high powered strategic buyer. They are often disappointed with the results. If the organisation recruiting buyers is expecting a buyer who can work with integrated management information systems, making decisions that affect the rest of the buying centre and key suppliers, they must pay the appropriate salaries and staff development costs.

8.2.16 Buyer Characteristics

From what has already been said in this section, it can be appreciated that at different stages of development, different characteristics are expected of the buyer. At early stages of purchasing development, the buyer is seen as a clerically reactive person, and recruiting is done on this basis. The status of the activity and its interfaces both internally and externally may demand this type of buyer. The remuneration will also be relatively low. As the status and demands of the function change, so will the buying characteristics demanded.

Major cultural clashes can be caused by Purchasing Managers who try too quickly to change the role of the buyer within an organisation, without realising how these measurement criteria inter-relate. There have been examples where buyers have come from outside organisations, where purchasing has been particularly well developed, into poorly developed purchasing activities. In the vast majority of cases, they have quickly lost interest in their new jobs, when faced with an organisational culture and structure that sees purchasing as unimportant. Changing the profile of the activity in itself is a strategic process, that may require extensive surgery and a deep commitment from all concerned.

8.2.17 Purchasing Services

If purchasing is to develop effectively, it needs back up services to assist buyers, such as cost analysis, legal help and other information services. Such services are likely to develop as those in the organisation realise the potential savings in this area, and find ways of releasing the buyer from more mundane aspects of the job, measurement of purchasing performance is often a useful device for identifying areas that might benefit from additional expertise.

8.2.18 Purchasing Structure

As the purchasing function develops, so its structure becomes more specialised and complex. It interfaces with senior management occur at all levels of the organisation. Such structures are indicative of its status. With the growth of purchasing involvement in strategy, so one finds purchasing structures are becoming more effectively integrated with the rest of the organisation. Logistical considerations mean integrated databases with both customers and suppliers. Managing the flow of materials into and out of the organisation in an integrated way, to maximise value added concepts and minimise costs, become important measurement areas for the activity. Developments towards supply chain management concepts clearly lead to more sophisticated and integrated purchasing structures.

8.3 Summary

It is impossible to say which of the measurement criteria are the most important in affecting development. It is likely they will change in any purchasing activity over time. From this analysis however, it can be seen

that changes in one variable has impacts on others. In order to achieve development of the purchasing activity, engineering change requires a clear understanding of how development can be affected. This requires a more holistic view of the inter-relationships of the criteria affecting the development process.

8.4 Purchasing Development - Organisational and Sectorial Criteria Affecting Purchasing Development

A number of measurement criteria identified in the literature review and results analysis were seen as having affects on the purchasing development process. These were identified as:

- purchasing aggregates
- culture
- sector and industry type

8.4.1 Purchasing Aggregates

The higher bought out materials expenditure was as a percentage of total sales the more developed the purchasing activity tended to be. For example, Organisations where this percentage was in excess of 70% also tended to have reasonably well developed purchasing functions. The correlation may however may be one of a number of variables that could account for such development. One would also have to look at absolute levels of purchasing expenditure as well. Thus Organisations with a high level of purchasing expenditure in both absolute and percentage terms were likely to be associated with higher levels of purchasing development than those with correspondingly low levels.

8.4.2 Culture

Organisational culture was identified as being an important factor in the development of the purchasing activity in all the organisations sampled. Those organisations such as Kent County Council and Leyland Daf had a culture that valued its purchasing activity and lead to its development. Those organisations where the activity was less developed were often associated with culture a that did not understand the importance of a developed purchasing activity.

8.4.3 Sector and Industry Type

In very broad terms those major organisations associated with the automotive industry and retail sectors tended to have more developed purchasing activities. There was also a higher correlation between continuous production, process, larger retail organisations and purchasing development.

8.5 External Criteria Affecting Purchasing Development

In addition to the above organisational factors likely to affect development of the purchasing activity, there are numerous external factors already identified and evaluated in this and the previous chapter. The major factors concerned are:

- Inflation

Higher levels of inflation are likely to focus attention on those areas involved in spending the organisation's money. Thus a poorly developed purchasing activity is likely to become an area of concern if it cannot control costs. It is likely therefore, that higher levels of inflation may lead to a more developed purchasing activity.

- Customers

Major customers or organisations, particularly those involved in World Class approaches would be keen to deal with suppliers who themselves are efficiently run and keep costs under control. They in turn are likely to put pressure on suppliers to become more efficient. It is therefore likely pressure would be exerted on purchasing from this area to become more efficient. In the survey, it was found major customers were often prepared to send teams of specialists from their own organisation to help suppliers become more efficient throughout the supply chain. This often had a knock on effect on purchasing development.

- Government Controls or Legislation

These were many and varied, and could affect purchasing in a variety of ways, for example making markets more competitive, or controls over prices could lead to development or otherwise of the purchasing activity. Perhaps

the best example to illustrate one of the effects of Government legislation, was in the area of the 1990 Educational Reform Act, and the growth of "budget holders". In a relatively short period of time, purchasing functions within Local Authorities found that no longer did budget holders have to buy directly from them, they could buy from whom they liked. This lead to a major re-appraisal of purchasing within Local Government and the rapid growth of a marketing function, within purchasing, to help market its services. As a result of this legislation however, it is likely that the purchasing function will cease to exist in some Local Authorities and possibly flourish in others. There are however, many other examples of Government controls and legislation that can have both a positive and negative effect on purchasing development.

• European Directives

The emergence of an increasing number of European Community Directives has had a mixed effect on purchasing development. With the Public sector Sourcing Directives have meant Public sector organisations particularly have had to spend considerably more time on the clerical activities of sourcing. High value items now have to be put out to tender throughout Europe. This has had, for the most part, negative effects on purchasing development in those organisations sampled.

• World Class strategies

The emergence of such strategies as Total Quality Management, Just in Time, Logistics, Electronic Data Interchange, has lead to many companies bench marking their organisations and functions accordingly. This has in turn affected the development of the purchasing activity, in that all such strategies rely heavily on a developed proactive purchasing function for their achievement.

• General Economic Factors

Factors such as interest rates, recessions, booms, exchange rate fluctuations, could also affect the purchasing activity, in different ways.

- Suppliers

Suppliers into purchasing organisations may themselves bring new ideas on cost reduction techniques that might need to be evaluated and internally developed through a purchasing activity. Similarly, World Class strategies require a well developed purchasing activity that is constantly improving the efficiency of the supplier base, particularly if strategic acquisition costs are to fall. A poorly developed purchasing activity would impede this strategy.

- Shortages or surpluses

Shortages or surpluses of materials in the supply markets need to be handled in a mature way that allows the flow of materials to continue in such a way that long term supplies are safeguarded. In the case of surpluses, it may well be that purchasing has a relatively easy time, however, in cases of shortages a more innovative effective purchasing function might well be required.

- Competition in the Buyer's Organisation's Markets

If the buyer's organisation is selling its products or services in highly competitive markets, then almost certainly there will be greater emphasis on a developed purchasing function. A lack of competition may have the opposite effect. In the survey sample, those organisations in the Public or Private sector were often not under the same pressure to develop their purchasing activities in an attempt to keep costs under control, as there was not really effective competition. In the Private sector, there appeared to be far greater pressure where competition existed to keep costs and prices under control, thus putting pressure on the purchasing activity.

- Technology

Rapid Technological change puts increasing pressure on developing a more advanced purchasing function, that quickly reacts to changes in the market place. There is a requirement for the purchasing activity to improve the efficiency and technical expertise of its supplier base in order to react quickly enough to market changes. Internally, with product life cycles falling, only a developed purchasing activity would be able to move quickly enough in these technical areas to be effective.

Any one of these external variables can affect development, combinations of them at different levels and time periods are constantly affecting development of the purchasing activity. If one examines Leyland Daf, development has occurred over many years, from a combination of these variables working slowly over a long time period, for example World Class strategies and their implementation has been a long term factor in purchasing development. The organisation itself has always had to operate in very competitive market conditions. With the introduction of integrated databases, over a five to ten year period, this has further increased its status within the organisation. The profile and development of a buyer has been built up over many years, as has purchasing's position within the organisation.

Other organisations sampled in the research would have combinations of long term and short term factors affecting the development of the function, gradually. From time to time, major changes affect purchasing, reorganisation been brought about by the changes in the market place. The effects of such changes on purchasing development, is difficult to predict, but more often than not, lead to short term increases in clerical activities of buyers, until things settle down.

New legislation has affected Local Authority purchasing in a dramatic way. Almost certainly, the development of independent budget holders will lead to some purchasing functions within Local Authorities ceasing, whilst in others, who can react quickly to these changes will continue.

8.6 General Overview of Purchasing Development

From all the research findings, it would appear that changing the profile of the purchasing function takes time. There are both short and long term factors affecting development of the activity. It is the gradual development of the activity that is particularly important, because the majority of the measurement criteria that affect development need time to change. Those organisations attempting to change their profiles quickly, often fail to appreciate the inter-relationships of these development criteria. Thus for example, bringing in a new Purchasing Manager, paying higher salaries and suddenly training buyers who essentially were previously considered to be

order clerks, is unlikely to have much affect on positive development unless accompanied by other changes. What is likely to happen, is that the rest of the organisation's view of purchasing will have a much bigger effect on the development process. If they still perceive purchasing to be clerical and reactive, the function will still be treated much as before.

It is therefore a pre-requisite when developing the profile, that those involved clearly understand the inter-relationship of the criteria. To obtain development in the activity may require improving all the measurement criteria, or a few major ones. The more developed the activity is, the more likely that fewer measurement criteria will be involved. However, a purchasing organisation at the infant stage of development is likely to require improvements on all fronts, in some cases such improvements can be enacted quickly, in others a longer time period is involved.

If one looks at the measurement criteria involved, the time taken to bring about changes is indicated in Table 8.1. The time periods vary from short (a couple of months) to long term (several years). Because of the different time periods involved in changing the criteria involved, and the fact that the variables are interdependent reveals a complex problem when attempting to develop the activity. Failure to recognise such problems leads inevitably to short term approaches in solving development problems that are essentially only solvable by adopting a long term strategic approach.

There is much at stake in understanding the development process involved in changing the profile of the purchasing function. A failure to realise the inter-relationships and timing involved in change could affect the whole organisation, and its future profitability. An advanced purchasing organisation could have a dramatic effect on cost reductions within the organisation and in the rest of the supply chain, as well as helping to achieve various strategic goals.

TABLE 8.1 ESTIMATED TIME PERIODS FOR CHANGING
            MEASUREMENT CRITERIA

MEASUREMENT CRITERIA	TIME PERIOD
Purchasing Structure	Long
Purchasing Services	Short/Medium
Buyer Characteristics	Long
Buyer Remuneration	Short
Buying Process Involvement	Long
Buyer/Seller Interface Devt	Long
Ethics Policy	Medium
Supplier Hospitality	Long
Visits/Meetings Between Two Sides	Short
Purchasing Specialisms	Short/Medium
Standard of Operating Procedures	Medium
Computer Technology	Long
Information systems	Long
Interface Development	Long
Training and Development of Staff	Medium
Measurement of Performance	Short
Purchasing Status	Long
Clerical/Strategic Job Content	Medium

Those organisations with poorly developed purchasing activities will not be capable of reaching their full potential. Having realised that the purchasing activity holds the key to improvements, how they plan for its development, is of strategic importance. A superficial, one off, approach is not the answer. There is a need to carefully profile the activity, identify where the function is particularly backward, and formulate an appropriate development plan. Such a plan must recognise the inter-relationship of the criteria involved and produce an integrated approach to development of the activity, based on affecting criteria over different time periods.

It might well be useful to benchmark the development criteria against other departments within the organisation, or more developed purchasing functions in other organisations.

Future developments of the purchasing function will be affected by the ability of the organisation to recognise the complexity of the change process. Effectively managing change is important for all functional activities, but particularly the purchasing activity, which traditionally has been most neglected of the business functions. Purchasing must be a developed activity if the organisation it represents is to prosper in the future. A dynamic, proactive strategic purchasing function offers the organisation it represents a future strategic advantage.

8.7   Purchasing Development Profile Analysis

In order to make the profiling technique more user friendly and after the research results had been obtained, many of the measurement criteria were later simplified. In an attempt to give practitioners a measurement tool they could use the measurement criteria had to be understood. This meant redefining some of the variables but in such a way that accuracy was not lost. An example of the original data sheet from the research is given in Table 8.2. In order to complete it satisfactorily for each Organisation a considerable amount of work is involved. The new style profiling analysis, whilst not as accurate is useful in giving a broad brush view of how developed a purchasing function is. An example of the new style profiling analysis is given in Appendix 6. Having identified possible development problem areas using the more simplified measurement criteria a more in depth approach could be conducted using outside consultants or other impartial purchasing executives. Once agreement had been reached on the purchasing profile exhibited by an Organisation appropriate strategy or action plan could be determined for the requisite criteria development bearing in mind inter-relationships amongst the variables and time periods needed for changing the development of the criteria involved.

Table 8.2   Stages In Purchasing Development Framework

	CRITERIA	1. INFANT STAGE	2. AWAKENING STAGE	3. DEVELOPING STAGE	4. MATURE STAGE	5. ADVANCED STAGE
A. SCOPE	A.1 Organisation and Scope of the Function - Activity Range	100% Clerical Operation 0% Real buying	90% Clerical Operation 10% Real buying	80% Clerical Operation 20% Real buying	70% Clerical Operation 30% Real buying	60% Clerical Operation 40% or more % Real buying
	A.2 Purchasing Organisation	Simple structure. all purchasing and supply activities performed by one or a few staff	As (1). moves to restructure for greater effectiveness	Possibly materials management structure, or one that allows purchasing specialism. buyer's concentrate on buying activities. move to centralisation of key purchasing activities	Specialisation within mm or similar concept. help from specialist activities within organisation. specialist buyers developing.	4 + centralised purchasing function decentralisation of certain purchasing tasks on a materials management and logistical basis, purchasing research function, specialist buyers and negotiators
	A.3 Existence of Back up Services	None	Occasional help from other departments if required	Regular help from other departments if required	Systems that direct the buyer to use specialist help in limited areas, for example, legal and costing information on items of high expenditure	Extensive use of specialist skills - product cost analysis, value analysis and engineering, vendor rating, supplier assessment, and financial analysis on items of high expenditure
B. STATUS OF THE FUNCTION	B.1. Who Head of Purchasing Function Reports To	Various other functional heads	One special functional head, but below Managing Director level	As 2, Occasionally MD	Managing Director	Direct to Board level
	B.2 Title of Head of Purchasing	None	Buyer	Senior Buyer - or Equivalent	Purchasing Manager - or Equivalent	Director of Purchasing - or Similar
	B.3 Training of Purchasing Staff	Occasional in plant	Regular for senior staff	Regular for all staff	Regular in plant and outside courses. Appraisal interviews. Qualification encouraged	Regular training at all levels. Training programme maintained. Regular audits. Qualifications necessary for promotion. IPS Qualification sought.
	B.4 Salary of Purchasing Staff	30% or less below average	15% or less below average	average	15% above average	30% above average
	B.5 Measurement of Purchasing Performance	Very few staying within agreed budgets	Mainly measuring clerical efficiency of the function, ie orders and requisitions outstanding	Clerical buying efficiency ie savings cost reduction negotiating efficiency	As with 3 + supplier development and intra organisational interface development	As with 4 but concerned with strategic development JIT, etc measurement of "total costs of supply concept
C. ORGANISATIONAL AGGREGATES	C.1 Purchasing : Sales Revenue	Less than 40%	40 - 49%	50 - 60%	61 - 70%	71% +
	C.2 Size	To be defined				
D. TECHNOLOGY	D.1 Rate of	To be defined				

DIFFUSION	Technology Diffusion		'')			
E. ADVANCED SYSTEMS AND COMPUTER TECHNOLOGY	E.1 Advanced Systems/New Philosophies	Simple systems, manual in operation	Simple computer purchasing systems	MRP and more advanced systems developing	Introduction of Logistical Management, JIT	4 + Computer links with suppliers
	E.2 General Computer Developments/ Stage of Computer Activity	No action on any function	In planning or implementation stage	On line with at least one, but not more than 4 functions	On line with 5 or more functions	On line with one or more suppliers
F. PURCHASING PROCEDURES	F.1 Purchasing Procedures	No laid down procedure	Verbal procedures, not necessarily followed	Verbal procedures, but also the existence of written procedures that must be followed	Written procedures that must be followed. Existence of Purchasing Manual in early stages of development	Comprehensive Purchasing Manual covering all current standard operating procedures and systems
G. CORPORATE CULTURE	G.1 Corporate Culture	To be defined				
H. BUYING CENTRE CONCEPTS	H.1 Buying Centre and Purchasing Involvement	No real involvement	Little involvement other than ordering the goods	More positive involvement, but only in terms of price	Involvement to a degree in most aspects of the product, but a major say only in terms of price	Involvement and consultation in all aspects of the purchasing of goods and services, and all elements of the "deal". Ability to veto others involved in the buying centre.
	H.2 Involvement in the Buying Process	To be defined				
I. BUYER CHARACTERISTICS AND DEVELOPMENT	I.1 Buyer Characteristics and Development	No special requirements	Experience useful but not essential - no training	Experience essential and training given	Experience essential, but training given to develop right people. Probably 25% of staff have qualifications above A level. Professional IPS Qualifications being encouraged	As (4) but newcomers tend to be at graduate or equivalent level. All encouraged to be professionally Qualified with IPS. Corporate Membership. Regular in company and outside courses arranged. Regular staff appraisal and reviews.
	I.2 Specialisms within Purchasing	Buyer responsible for all aspects of buying and supplies	Buyer responsible for all aspects of buying	Specialisms begin, buying expediting, invoice clearing separate functions performed by individuals within purchasing.	Stage (3) + specialist buyers, ie buyers specialise in a product range	As (4) + growth of such functions: - Value Analysis - Product Cost Analysts - Purchasing Research - Planners - Specialist Quality Control Teams
J. BUYER/ SUPPLIER RELATIONSHIPS	J.1 Buyer-Supplier Bonding	To be defined				
	J.2 Buyer-Supplier Ethics	None mentioned	General common sense	Understanding of key areas: - Gifts - Lunches - Information	Written and enforced set of rules and guidance	As (4) + covers wider range
	J.3 Hospitality to Seller.	None	Seller Provides	Buyer occasionally invites seller to dine in work's dining room	Recognised as important part of relationship. Reciprocity encouraged	As (4) + wider range of hospitality issues
	J.4 Visits and	None	Occasional visits	Regular visits from	Regular visits from	Regular reciprocal

8.8 Conclusion

In this chapter the purchasing development profiling framework has been further developed, and attempts made to make it more user friendly. In the following final chapter further conclusions are drawn and recommendations for future research discussed.

CHAPTER 9 CONCLUSIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

9.1 Introduction

In this chapter conclusions are drawn and recommendations for future research discussed.

9.2 Overview

From the general research findings already described in various chapters, it is possible, using various measurement criteria to indicate the stage of purchasing development reached by an organisation, The purchasing profiling technique is likely to be a useful diagnostic tool for both consultants and practising managers. It identifies, using the eighteen measurement criteria, approximately where the purchasing function is in terms of its development profile. Having identified the profile and approximate development stage, the organisation must be clear as to where is sees the purchasing function's role in the organisation, i.e. clerical or strategic. There will be organisations that are not aware of the importance of a developed purchasing activity in attaining organisational objectives, in other cases, the company may not be aware of how to improve purchasing's performance. Using the profiling technique, it becomes possible to identify the stage of purchasing development reached, and indicate which areas may need the most attention.

From the literature survey, there were many references to organisations wishing to develop and effectively integrate the purchasing activity with the rest of the organisation. Reck and Long (1988), Bevan and Evans (1989), Cavinato (1992) , Gracia (1993) et al. A poorly developed purchasing activity is likely to affect the achievement of corporate strategy and profitability. This point was clearly understood by all those involved in the purchasing activities in the case studies, it may not however, be fully appreciated by other functional specialists or senior management in organisations concerned.

There were examples, both in the literature review and case studies, of senior management not being aware of the need to develop the purchasing activity as the organisation concerned moved towards World Class

standards, using concepts such as Just in Time (JIT), Total Quality Management (TQM), Integrated Data Bases, and Electronic Data Interchange (EDI), and re-engineered flatter organisational structures. Such strategies require a proactive strategic response from their purchasing functions, in order to reduce input costs, and effective management of the supply chain, Lamming (1995). This often requires the purchasing activity to rationalise its supplier base and improve its efficiency, being concerned more with strategic acquisition costs rather than price, and have greater involvement in the decision making process. Purchasing functions at the infant, awakening and developing stages of evolution would have major difficulties in achieving such goals with their existing profiles.

The profiles generated from the analysis more clearly identify which of the development criteria need attention. Interestingly, from the research, none of the organisations had all the development criteria at the same stages of development, although in general, some were more advanced, others less advanced. Where this research is particularly useful, is in identifying areas that are comparatively undeveloped and need to be advanced, if an organisation wishes to develop its purchasing activity. Research from the case studies is also useful in identifying which of the criteria are linked and may require joint development. It has also been confirmed from the case studies, that the development time of these criteria varies. Some require far longer time horizons than others and may need greater management attention.

9.2.1 Outsourcing of the Purchasing Activity

There have been numerous articles recently suggesting that the purchasing activity might be outsourced, Benmeridja and Benmeridja (1996), Rich et al (1996) and Cox et al (1995), or even eliminated, Pederson and Torvajn (1996), Evans (1996), Cannon (1995) and Stannack and Jones (1996). Many of the arguments centre very much on the role of the activity and its contribution to the Organisation.

Most writers and practitioners would agree that the old clerically reactive transactionary functional style of purchasing is dying. Such an activity cannot give the organisation it represents a strategic advantage by effectively managing the supply chain. A purchasing activity, whether it be a

purchasing department or fragmented purchasing activity shared by a number of people in the organisation that is poorly developed is likely to slow development of the whole Organisation. In such cases it might make sense to outsource the purchasing activity to an outside Organisation where the activity is more developed.

In the case of Local Authorities and certain parts of the Public Sector, because of practical constraints placed on the purchasing activity, outsourcing may well offer certain advantages.

All those purchasing activities below stage 3 of development are likely to be considered for outsourcing if the organisation needs a strategic proactive purchasing activity quickly and cannot wait or invest in the development of the purchasing activity that is required.

Internal outsourcing of certain elements of the purchasing activity, namely the handling of low value and transactional purchasing to users or requisitioners is likely if purchasing is to evolve and spend more of its time on strategic purchases and all that this involves. Such internal outsourcing or devolution of the activity to other functions is likely to occur at stages 3 and 4, otherwise purchasing would have difficulty in making the "Quantum Leap", Sysons (1995) i.e. stage 5 with most of purchasing involvement concentrating on strategic purchasing and supply chain management.

Outsourcing of the purchasing activity could take place at any time if an organisation desired, but, it is more likely to occur for the above reasons. If the activity is outsourced one would still need to use some form of measurement criteria to see if that activity once outsourced was continuing to develop in the right direction and was giving the organisation it represented a strategic advantage.

9.3   Benefits of Research Project

- Profiles

This research thesis has allowed, using some eighteen measurement criteria or variables, the measurement and profiling of the purchasing activity. Those who took part in the study were extremely interested in knowing how developed their purchasing activity was. They believed in nearly all cases

that their function had been neglected by senior management and that many of the demands now being made of them were unrealistic in terms of the stage of development they had reached.

Apart from Leyland Daf, the other five organisations in the sample felt the purchasing function was in need of rapid development if it was to make an effective contribution in the future. The literature survey clearly identified the purchasing activity as a neglected area of management in many organisations.

Using the Purchasing Profile Analysis (PPA), they could identify more clearly which areas required particular attention. The actual profiling would have to be conducted, at present, by either the researcher or someone well versed in the techniques involved, to have credibility with senior managers. Although the revised operational framework discussed in the last chapter would provide indication as to the stage of development reached.

The five stages of development criteria are associated with capabilities of the purchasing activity whether within a purchasing department fragmented over the organisation or strategically integrated across functions. Fig 9.1 identifies the likely performance indicators for each of the stages:

Fig 9.1   Purchasing Development Stages and performance Capabilities

STAGE OF DEVELOPMENT	CAPABILITIES	ORGANISATIONAL CONTRIBUTIONS
Infant - Stage 1	• Fragmented Purchasing	• None or Low
Awakening - Stage 2	• Realisation of savings potential	• Clerical efficiency. Small savings through consolidation 2-5%*
Developing - Stage 3	• Control and development of purchase price/negotiation capabilities	• Cost reductions 5-10%*
Mature - Stage 4	• 80/20 recognised	• Cost reductions 10-20%*
	• Specialist buyers	• Acquisition cost 1-10%*
	• Cost reductions	
	• Commencement of supplier base management	
Advanced - Stage 5	• Devolution of purchasing	• Cost reductions 25%*
	• Strong central control	• Cost of ownership
	• Supply chain management	• Acquisition cost & supply chain management 30%+*
	• Leverage buying	
	• Global sourcing	
	• Understanding & practice of acquisition cost & cost of ownership	

* = ESTIMATES

With reference to Fig 9.1 it can be appreciated that a purchasing activity profiled between stages 2 and 3 would not be capable of stage 5 Advanced/Strategic performance. Major re-engineering of the measurement criteria would be necessary, possibly taking some years and considerable investment.

- **Organisational Achievement of World Class Strategies**

If Organisations are to be World Class, they need to ensure that all aspects of the business are properly integrated and developed. Purchasing historically has been a late developer. From the literature survey and case studies, it can clearly be seen that a poorly developed purchasing activity can effectively act as an anchor on future developments of the organisations. Just in Time, Total Quality Management, Logistical Concepts and Integrated Data Bases, all require an efficient and effective input activity within the business, purchasing is at the heart of the input activities of most organisations. With the growth of out-sourcing, a shrinking production base and the need to link suppliers and customers effectively through the organisation, purchasing development is becoming of paramount importance.

- **Best in Class**

It is hoped that this research will help to identify where development needs to take place within organisational purchasing. Comparative analysis indicates that some organisations are already well developed and at the advanced stage. For those organisations that are less developed it should be possible to identify which criteria need more development and bench mark against other organisation's purchasing activities. Thus for example, a purchasing activity where the interface with suppliers was poor, could through a consultant or directly with another organisation, identify best practice used elsewhere and develop an appropriate action plan to copy such developments.

- **Organisational Buyer Behaviour**

Much of the literature in this area makes little or no reference to Purchasing development, in the areas of buying centre or DMU, buying phases, buyer-supplier relationships and buying characteristics. The stage of purchasing development is therefore seen from these research findings as a relevant

factor to be taken into account when researching the activity and particularly when selecting small scale samples in order to avoid bias.

- Acquisition Costs

As the purchasing activity develops it becomes far more able to control and reduce longer term costs and hence price. Reductions in acquisition costs or long term strategic purchasing acquisition costs only seemed to be effectively practised with one organisation in the sample, Leyland Daf. Leyland Daf was essentially between stages four and five in terms of its development profile for most of the measurement criteria. This high level of purchasing development allowed it to become effectively involved with suppliers and internal customers in reducing unnecessary costs. Buyers on the whole were encouraged to reduce the supplier base and develop long term relationships with suppliers that lead to the elimination of unnecessary costs. Buyers worked as part of a team identifying ways of becoming more efficient, both internally and externally.

Other organisations in the sample aspired to become more strategic in their purchasing approach, but were finding the lack of development in the purchasing function made it difficult or impossible. If however, they cannot develop the activity, it is likely that their costs will be higher and they will be affected by lower profits and lower market shares in the future.

- Marketing Responses

The realisation that from a marketing perspective, different buying organisations require varying marketing approaches is not new. The research however, should more clearly identity the stage of development reached by the organisation involved and help marketers to make a more realistic market offering to new customers. For example, purchasing organisations at the advanced stage of purchasing development might require a different marketing package to one at the infant stage. At the advanced level almost certainly such topics as strategic acquisition costs, bondings, sharing of information,, strategic alliances, common information systems and joint production development would be at the top of any agenda. An approach from a marketing organisation based purely on price and short term considerations might not be regarded as acceptable from a purchasing organisation attempting to reduce strategic costs through an

efficient partnership programme. There is a belief that buying and selling organisations' profiles should match more closely. Mismatching could lead to a major reduction in the effectiveness of the relationship. This does not mean that advanced purchasing organisations would not deal with undeveloped sales organisations, but it does mean they would have to adapt their approaches to be more effective. Thus if an organisation wanted the buyer to become more involved in managerial and strategic elements of purchasing, it would need to consider a number of factors such as more back up services, better computer systems, training and development, and so on. If the purchasing activity can, using this profiling, identify more clearly to senior management why it is unable to perform effectively, and which areas it needs to change, then there is a much greater chance of engineering the changes purchasing requires to become more developed and effective. What is likely to happen, in an advanced major buying organisation, particularly where large sums of money are involved, is for pressure to be put on the supplying organisation to become more efficient and reduce its costs both short and long term.

- Purchasing Development Framework

The purchasing development framework identified in Chapter 8 is a useful guide in determining the way ahead after profiles have been produced. It attempts to establish the relationship between dependent development criteria showing the need to consider the development of several criteria concurrently because of interlinking.

9.4 Future Research

9.4.1 Introduction

This thesis was essentially exploratory and fact finding. It is therefore not surprising that in the course of the research, other ideas materialise that could not be incorporated into this research thesis, but could form the basis of future research projects. Areas for future research are therefore given in this section and their importance reviewed.

9.4.2 Additional Measurement Criteria

• Corporate Culture

Whilst the measurement criteria developed from the literature review and case studies were reasonably comprehensive, measurement of certain other criteria could also be useful and form the basis of additional research. For example, whilst an attempt was made to give an indication of the culture found both in purchasing and the rest of the organisation, it was often difficult to measure. From the case studies however, it became apparent that both the culture within purchasing and in which it works has an effect on its development. If it is believed by the rest of the organisation, that purchasing is clerically reactive and has no part to play in strategic objectives, then this culture will almost certainly retard the growth of the activity. In the case studies, TML Plastics illustrates this point well, Directors did not believe the activity to be as important as say Production or Finance. The purchasing manager was well trained and believed the purchasing function was being largely ignored by senior management. He eventually left the organisation, frustrated by the lack of interest from top management in the activity.

Interestingly, in the case of TML Plastics, major customers like Rover and Ford were calling for a more developed purchasing activity they pushed the organisation to adopt JIT and TQM concepts. Another example of corporate culture and its effects on development of the activity occurs within the Public sector. The local authorities in the sample, and to a certain extent the BBC, had a culture that dictated the need to be accountable at all times. The impact of this dictate and the culture surrounding it has already been reported in chapter 7, it leads to purchasing staff using tendering systems, following bureaucratic administrative systems, and because of ethical codes of conduct, maintaining a distant relationship with suppliers. These policies and procedures are not regarded as examples of good purchasing practice by those involved in the purchasing activity, and are likely to hold up the development of purchasing in the Public sector.

The Public sector tendering process was the most cited example in the research as being unhelpful and inefficient in enabling purchasing to negotiate good deals. Even post tender negotiations were criticised as being labour intensive and time consuming. The major criticism was the

scope of the tendering process, in that it involved putting tenders out for relatively small levels of expenditure. Whilst tendering may be a useful technique for high levels of expenditure, it was not seen as an example of best practice for the majority of purchasing conducted at the BBC and Kent County Council.

Changing the culture built up over many decades is likely to take considerable time however, and may lead to many Local Authority purchasing organisations being closed because of such high acquisition costs compared with the Private sector. One of the problems with organisational culture is measuring it. This is likely to be a complex problem, but the variable is of considerable interest when explaining factors affecting purchasing development.

- Technology Diffusion

The rate at which internal technology diffusion, that is the ability of the organisation to accept new technical ideas, affects the purchasing activity was difficult to assess. Whilst an attempt was made to indicate whether or not the organisations in the case studies were affected by it in a major way, it did not prove successful. It is believed however, that organisations faced with rapid technological innovations have to quickly engineer changes in their functional activities and it was thought that organisations faced with rapid developments in this area were more likely to have developed purchasing activities. It was not possible in the case studies, to find organisations faced with rapid technological change. In all cases, changes were still relatively slow. However, those organisations involved in the case studies believed that rapid technology change could put pressure on purchasing to develop more quickly.

Purchasing in the future would need to be far more actively involved in new product design, identify and develop a more effective and efficient supply base, with greatly reduced lead times, this in turn requires far greater sophistication from the purchasing activity.

- Key Staff

This is seen more as an external variable likely to affect the development of the activity. In the case studies there were no examples that could be

investigated of new key staff, for example a purchasing manager coming to an organisation and having a major impact on the development of the activity. In pilot study II however, and from the experience of the researcher, there have been examples of new purchasing managers coming into the purchasing department who, through their own personalities and eloquence, have convinced senior management of the importance of the activity, leading to a major increase in its profile. A more comprehensive survey may reveal further information concerning this variable.

- **Customer Development of the Supply Chain**

During the course of the research, case studies revealed that major customers or clients were beginning to have an effect on purchasing development. If an organisation supplies a major part of their products or services to a particular customer, it is likely the customer concerned will have a say in supplier's costs. An example to illustrate this point was with TML Plastics and the Rover group. Rover was the major customer and wanted to reduce costs wherever possible. They had recognised that inefficient suppliers cost money and acquisition costs were higher than they should be. Pressure from the major customer came to bear on their suppliers, in this case TML. Rover wanted TML to take on board World Class Management approaches. As the pressure increased from the customer, so the organisation was forced to improve inefficient management areas, eventually this affected purchasing. Further research in this area could reveal how effectively this process could be managed with purchasing organisations at different stages of development.

- **Cognitive Dialogue**

It was noted during the preparation of the taped transcripts that managers with more developed purchasing activities tended to:
- be more enthusiastic when talking about the purchasing activity;
- sounded more interesting;
- used more purchasing terminology;
- were more concise in giving responses and had clearly thought their responses through, indicating greater understanding of the problems;
- generally seemed happier in their jobs and had fewer grumbles;
- had a clear understanding of the strategic role of the activity and could more clearly see the way ahead.

These and other areas of cognitive dialogue were only superficially investigated in this research thesis. They could well, however, become an area of research in the future, particularly in the area of external perceptions of purchasing. Thus if external customers believe, from the purchasing dialogue, that the activity is not particularly well developed, it may be treated accordingly. Perceptions, once made, could be extremely difficult to change. Purchasing therefore must make an effort to communicate its ideas and strategies effectively if it is to be recognised and develop itself. Further, more extensive research however, would be required in this area.

- Measuring Savings of Achievements at Each Development Stage

It was hoped, during the research, that one could measure the savings or achievements identified as the purchasing activity develops. The literature survey indicated, the savings potential of an underdeveloped as opposed to a developed purchasing activity. In practice this is extremely difficult to measure. None of the organisations in the sample had measured the performance over a sufficiently long enough time period, or had the information available. At attempt was however made in Fig.9.1 to indicate general views of savings at each development stage.

In all of the cases however, there was a belief that as purchasing developed, the activity reduced costs, saved money and contributed in a major way to strategic objectives. Certainly from the survey, the majority of the organisations could clearly identify savings achieved by a proactive purchasing function, and illustrate how an effective purchasing activity helped to achieve various strategic objectives. Much of the information however, was over a relatively short time period in terms of development profiles, that is two or three years. Further research, using a longer time period sample might reveal more interesting results.

- Building up Sets of Profiles

It would be useful to build up a bank of purchasing development profiles over a wide range of organisations. These could then be used to make comparisons both within various organisational sets, and across sectors, for example Public or Private sector, Manufacturing and Service. An organisation in a particular organisational sector could then begin to make

appropriate comparisons in terms of its purchasing development, with other more advanced organisations in the same sector. Bench-marking becomes possible, either using consultants or obtaining help from more advanced organisations, plans could be constructed to develop some or all of the development criteria, making the purchasing activity in the process more effective.

9.5 Summary and Conclusion

The research into stages of purchasing development is exploratory and will need further refinements. Some of the additional research mentioned in this chapter would help in extending both the breadth and depth of knowledge in this area. The main objectives of the research programme however, have been completed. Purchasing development stages have been identified and, using a number of measurement criteria purchasing development profiles identified. Using the methodology, it is now possible to identify which stage of development a purchasing activity has reached, and using the profile, where it may need to develop further in the future.

The research has, also using a conceptual framework, been able to identify the likely relationship between various measurement criteria and the need to take on a more holistic view of the development process. Finally, independent variables likely to affect the development process have been more clearly identified, and their part in the development process examined.

TABLE 1-4   Specific Responsibilities or Activities of Typical Purchasing Department

Records, Data, and Basic Information
  Maintaining general purchase records
  Maintaining price records
  Maintaining parts history records
  Maintaining stock and consumption records
  Maintaining vendor records, including financial and performance
  Maintaining specification files
  Maintaining standards file, including MIL/JAN specifications
  Maintaining catalog files
Purchasing Research, Analysis, and Studies
  Conducting market studies and trends
  Conducting material studies
  Conducting make-or-buy studies
  Conducting price/cost analysis
  Investigating supply sources
  Conducting supplier-plant visits and inspections
  Developing new supply sources
  Developing alternate materials and sources
  Participating in value analysis studies
Purchasing
  Checking authorized requisitions
  Obtaining capital appropriations
  Issuing requests for bid
  Determining bidders list
  Preparing request for bids
  Conducting pre-bid briefings
  Receiving all bids
  Analyzing quotations and/or proposals
  Determining nonresponsive bids
  Evaluating suppliers
  Selecting suppliers
  Determining quantity to buy ·
  Scheduling purchases and deliveries
  Determining mode of transportation and carrier
  Interviewing salesmen
  Determining type of contractual instrument
  Negotiating contracts
  Writing and issuing contractual agreement (purchase order, subcontract, blanket
    order, lease, rental agreement, etc.)
  Developing legal conditions of contracts
  Determining applicable federal, state, and local taxes or foreign duties
  Following up for delivery, i.e., expediting and updating open-order status reports
  Checking receipt of materials
  Checking and approving invoices
  Corresponding with suppliers
  Negotiating adjustments with suppliers
  Negotiating contract changes .
  Terminating contracts
Inventory Management
  Developing inventory classifications
  Maintaining minimum stocks
  Establishing economic order levels

TYPICAL PURCHASING ACTIVITIES

Operating a purchasing department to meet these responsibilities involves a variety of detailed assignments, of both an administrative and a routine nature. Typical activities of even the simplest purchasing program include:

Basic Information
 Maintaining purchase records
 Maintaining price records
 Maintaining stock and consumption records
 Maintaining vendor records
 Maintaining specification files
 Maintaining catalog files
Research
 Conducting market studies
 Conducting material studies
 Conducting cost analysis
 Investigating supply sources
 Inspecting suppliers' plants
 Developing supply sources
 Developing alternate materials and sources
Procurement
 Checking requisitions
 Securing quotations
 Analyzing quotations
 Choosing between contract or open-market purchase
 Scheduling purchases and deliveries
 Interviewing salesmen
 Negotiating contracts
 Issuing purchase orders
 Checking legal conditions of contracts
 Following up for delivery
 Checking receipt of materials
 Verifying invoices
 Corresponding with vendors
 Making adjustments with vendors
Materials Management
 Maintaining minimum stocks
 Maintaining inventory balance
 Improving inventory turnover
 Transferring materials
 Consolidating requirements
 Avoiding excess stocks and obsolescence
 Standardizing packages and containers

TABLE 1-4   Specific Responsibilities or Activities of Typical Purchasing Department

Records, Data, and Basic Information
  Maintaining general purchase records
  Maintaining price records
  Maintaining parts history records
  Maintaining stock and consumption records
  Maintaining vendor records, including financial and performance
  Maintaining specification files
  Maintaining standards file, including MIL/JAN specifications
  Maintaining catalog files
Purchasing Research, Analysis, and Studies
  Conducting market studies and trends
  Conducting material studies
  Conducting make-or-buy studies
  Conducting price/cost analysis
  Investigating supply sources
  Conducting supplier-plant visits and inspections
  Developing new supply sources
  Developing alternate materials and sources
  Participating in value analysis studies
Purchasing
  Checking authorized requisitions
  Obtaining capital appropriations
  Issuing requests for bid
  Determining bidders list
  Preparing request for bids
  Conducting pre-bid briefings
  Receiving all bids
  Analyzing quotations and/or proposals
  Determining nonresponsive bids
  Evaluating suppliers
  Selecting suppliers
  Determining quantity to buy
  Scheduling purchases and deliveries
  Determining mode of transportation and carrier
  Interviewing salesmen
  Determining type of contractual instrument
  Negotiating contracts
  Writing and issuing contractual agreement (purchase order, subcontract, blanket
    order, lease, rental agreement, etc.)
  Developing legal conditions of contracts
  Determining applicable federal, state, and local taxes or foreign duties
  Following up for delivery, i.e., expediting and updating open-order status reports
  Checking receipt of materials
  Checking and approving invoices
  Corresponding with suppliers
  Negotiating adjustments with suppliers
  Negotiating contract changes .
  Terminating contracts
Inventory Management
  Developing inventory classifications
  Maintaining minimum stocks
  Establishing economic order levels

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TABLE 1-4   Specific Responsibilities or Activities of Typical Purchasing Department
(Continued)

Maintaining inventory balance
Improving inventory turnover
Establishing stock and parts numbering system
Transferring materials
Consolidating requirements
Avoiding excess stocks and obsolescence
Declaring surplus inventory
Standardizing packages and containers
Accounting for returnable containers
Accounting for demurrage charges
Making periodic reports of commitments
Maintaining property records

Managerial

Preparing and updating purchasing manuals
Assisting in department audits and reviews
Evaluating purchasing performance
Evaluating personnel performance
Performing merit reviews and salary determination
Making reports to management
Conducting training and job enrichment programs
Conducting cost improvement programs
Participating in quality and zero defects programs

Shared with Other Departments

Contracting for services
Purchasing consultants' and special services
Purchasing construction contracts
Determining whether to make or buy
Negotiating leases for real property and equipment
Purchasing vehicles, trucks, and off-the-road equipment
Operating garage and fleet maintenance
Operating janitorial and custodial services
Operating and maintaining record archives
Supervising reproduction equipment
Purchasing exhibit and advertising material
Conducting scrap and surplus sales
Establishing employee purchase program
Operating cafeteria, in-plant feeding, and vending services
Purchasing computer time sharing and special outside test facilities
Operating and maintaining company aircraft

OBJECTIVES OF THE PURCHASING FUNCTION

Creation of a purchasing department represents a recognition of purchasing as an organized activity. Organized activities are characterized by their discernible objectives. Purchasing activities, in order to make an effective contribution to the institution of which they are part, must be attuned to and oriented toward the over-all objectives of the organization.

Purchasing Procedure

Appendix 2

KEY SUPPLIER PRICE NEGOTIATIONS

1) INTRODUCTION

Approximately 80% of the total annual Truck and Bus direct material buy is covered by those suppliers whose 1974/75 turnover exceeded £150,000. Approximately 220 of the 2,000 plus production suppliers to Truck and Bus Group are involved. Operational control procedure is essential to ensure a strict discipline on our direct material budget and its subsequent effect on Group profitability. The key suppliers to be negotiated on a Group basis are listed in Appendix 1 and those to be negotiated at Operations/Plant listed in Appendix 2.

This is achieved by:-

1) Providing cost objectives for general price increases.

2) By analysis of targets and settlements. Product Cost Estimating (PCE)are aware of the latest developments allowing new model cost objectives to be based upon realistic levels.

3) To monitor the ongoing effect on specific increases, ie, design changes, recosts.

4) To monitor and control overall material cost inflation in line with budgetted levels.

2) DEFINITIONS

2.1 Control parts will be selected for each key supplier against the following criteria:-

a) That the control parts are significant items in terms of annual turnover.

b) That the range of control parts selected from any supplier is representative from the range of items which that supplier produces for Truck and Bus.

This will enable a detailed recording and analysis of price levels of the control parts to be related to the suppliers total turnover.

Once identified, the key suppliers and the relevant control parts will be continually reviewed. Any changes to key supplier list and control parts will be agreed by Purchasing/Purchase Cost Analysis (PCA).

2.2 Fully developed estimates (FDE)are objectives which will be prepared from initial dtailed drawings, synthetic operation sheets, etc, for all control items. FDE's will reflect domestic market conditions and will not utilise data derived from any particular supplier.

2.3 Varianced Objectives (VO) will be used to evaluate the effects of inflation on the supplier's costs. Adjustments to each cost element will be determined and related to the FDE at the pre-increase economic level to identify the basis of the allowable cost increase.

3) PROCEDURE

3.1 On receipt of a key supplier's claim the negotiator will prepare PPORs against the control items together with any relevant correspondence and pass to Purchasing Services who will record and forward to PCA.

3.2 PCA will enter details into a register and check to ensure that the necessary control part PPORs have been raised.

3.3 PCA will then despatch package to PCE who will prepare objectives as follows:-
a) If the supplier's claim is associated with

1) Recost
2) Design modification to an existing part
3) Introduction of new part

a VO (where relevant) and a FDE at the relevant economic level will be prepared and used as a base for performance reporting - both piece cost and tooling objectives will be established.

b) Where the claim is associated with general cost movements a VO which identifies the cost movements within the developed estimate will be prepared.

3.4 PCE will return the PPOR to PCA once the objective has been established
PCE will enter the details in register.
PCA will establish if the objective is in excess of budgetted level of inflation.
PCA will provide budget level objective if required.
Before the PPOR objective is returned to Purchasing it requires to be authorised by the Product Cost Estimating Manager and Purchase Cost Analysis Manager.

3.5 PCE will provide PCA a commodity analysis with estimated rate of escalation of each cost element for each PPOR which will form the basis of subsequent variance analysis.

3.6 Purchasing will use the PPOR objective as the basis for negotiation. PCE/PCA will be available to assist with the negotiation as required.

3.7 When the negotiator requires an alteration to target the PPOR should be returned to PCA detailing the reasons for the request. Requests for alterations to targets should only be made normally against one of the following criteria:-

a) The PCE has made a straight forward error, eg,

1) Choosing the wrong production process.
2) Calculating an incorrect casting weight.
3) Making an arithmetical error.

b) If it can be identified that the supplier is purchasing material at prices in excess of those assumed in the objective for reasons outside his control and this is of a temporary nature, then this will be shown as a temporary surcharge on the objective.

3.8 When the negotiation is complete, Purchasing will record the settlement prices. Should the total settlement not be fully represented by control parts, then in addition to returning the PPOR's further settlement details should be provided to PCA to enable them to calculate a realistic weighted average settlement against the supplier's total turnover.

3.9 The following signatures are required on the PPOR after completion of negotiation before its return to PCA.

a) If the settlement is below the objective the completed PPOR will be approved by Group/Plant Purchasing Manager. The objective against which the settlement is measured will be the budgetted objective.

b) If the proposed settlement is in excess of the objective the PPOR must be approved by the Supply Director. If it is considered that the adverse variance will have a major impact on group profitability he may then consult with Group Finance Staff.

4) PERFORMANCE REPORTING

4.1 These will detail adverse/favourable variances by key supplier and annual turnover. Increases will be identified in sterling and expressed by percentage to the budgetted turnover. PCA will circulate monthly reports to senior Group/Operations Management on achievements.

5) The procedure must be operated against target timings to facilitate control. These are:-

RESPONSIBILITY	ACTION	TIME
Purchasing	From receipt of initial information to issue of PPOR (including mail time to Purchase Cost Analysis)	7 working days
Group Finance Staff	From receipt of PPOR to issue of objective (including mail time to originator)	15 working days
Purchasing	From receipt of PPOR to negotiation and completion (including mail time back to Purchase Cost Analysis)	30 working days

6) The new PPOR form is explained in attachment 1.

KEY

Purchase Cost Analysis	PCA
Fully Developed Estimates	FDE
Product Cost Estimating	PCE
Varianced Objectives	VO
Purchase Price Objective Record	PPOR

ATTACHMENT 1

PPOR FORM

Purchase have responsibility for completing details in the unshaded areas of the sample form attached.

The information to be entered in the spaces numbered on the form is detailed below:-

1) Enquiry batch size - Delivery batch size required quoted on enquiry.

2) Release number - Engineering release number of part where applicable.

3) Economic level - Effective date and average percentage last agreed on the cost elements for which the new increase is submitted.

4) Current status - supplier, annual volume with that supplier and last agreed price against which the PPOR is raised, plus similar details for multiple sources.

5) PPOR type - general increase or recost.

6) Previous PIR - effective date and average percentage of last price increase either settled or outstanding.

Leyland Truck & Bus

PURCHASE PRICE OBJECTIVE RECORD

PART NO.		PPOR NO.	
DESCRIPTION		NEGOTIATOR	
ENQUIRY BATCH SIZE		DATE	
ESCALATOR			
RELEASE NO.		PPOR TYPE	
ECONOMIC LEVEL		SUPPLIER T/O	

CURRENT STATUS			PREVIOUS PIR	
SUPPLIER	VOLUME	PRICE	REMARKS ON SUPPLIER	
			DATE REC'D PCA	

SETTLEMENT %	EFFECTIVE DATE	PO/POA NO.	TOOLING			DATE REC'D PCE	
					PCT	DATE REC'D PCA	
					FCT		
					PCT	DATE REC'D PURCH	
					FCT		
					PCT	DATE REC'D PCA	
					FCT		

SUPPLIERS CLAIM				USAGE FACTOR	FAV/(ADV)		
COMMODITY	AMOUNT	REASON	PERIOD				
STEEL				VAR. OBJECTIVE	SETTLEMENT	B/(W)	
OTHER MAT'L							
DIRECT LABOUR				DEV. ESTIMATE	SETTLEMENT	B/(W)	
LABOUR RELATED				TOOLING OBJECTIVE	SETTLEMENT	B/(W)	
C :R COSTS				BUDGET OBJECTIVE	SETTLEMENT	B (W)	
TOTAL							

VARIANCE ANALYSIS			SETTLEMENT ANALYSIS			B (W) VARIANCE	
COMMODITY	AMOUNT	REASON	AMOUNT		REASON	OBJECTIVE	CLAIM
STEEL							
OTHER MAT'L							
DIRECT LABOUR							
LABOUR RELATED							
OTHER COSTS							
NEGOTIATION							
TOTAL							

PCE ENG.	DATE	NEGOTIATOR	DATE	REMARKS
PCE MANAGER	DATE	OPS/GROUP PURCH MGR.	DATE	
GROUP FINANCE	DATE	SUPPLY DIRECTOR	DATE	

F.3591

This price increase request, reference.., complies with Stage IV of the Government's Counter Inflation Policy and is not likely to lead to our exceeding the limitations of Net Profit Margins set out in the code.

SUPPLIER	CERTIFIED BY	
	POSITION	DATE

The composition of the proposed increase is set out below

CAUSAL FACTORS	COMPO-SITION OF CURRENT PRICE LEVELS	EFFECT ON CURRENT SELLING PRICE LEVELS INCR. (DECR)

A. MATERIAL   Materials covered by escalator agreement are not included

MATERIAL SPECIFICATION & UNIT OF MEASURE	OLD PRICE in £	NEW PRICE in £	EFFECTIVE DATE	% MOVEMENT UP (DOWN)	%	%

B. LABOUR   1. BASIC INCREASE

GROUP OF WORKERS	OLD RATE in £	EFFECTIVE DATE	NEW RATE in £	EFFECTIVE DATE	INCREASE PASSED ON in £	% OF OLD RATE	%	%

2. PROVISION FOR "EQUAL PAY FOR WOMEN"

GROUP OF WORKERS	OLD RATE FEMALE in £	EFFECTIVE DATE	NEW RATE FEMALE in £	EFFECTIVE DATE	REF. RATE MALE, in £	% INCREASE	%	%

3. OTHER LABOUR ISSUES INVOLVED

EXPLANATION	% INCREASE	% PASSED ON	%	%

C. OTHER ALLOWABLE COSTS

OLD COST in £000's	EFFECTIVE DATE	NEW COST in £000's	EFFECTIVE DATE	INCREASE (DECREASE) in £000's	% OF OLD COST	%	%

Basis of allocation of "OTHER ALLOWABLE COSTS" :–

Other factors which are taken into account in the increase :–

D. SUB-TOTAL – – – ALLOWABLE COSTS

BASE DATE :–	TOTAL EFFECT OF ALLOWABLE COSTS	%

150103 (01D15)

Sections E to K on reverse (Page 2)

TOTAL EFFECT OF ALLOWABLE COSTS B/F from Section D on Page 1:—		%

E. SAFEGUARDS   Entry of X in box signifies claim of increase under one of the Safeguard clauses, such as Low Profits, Erosion or Reduction of Profit Margins.

☐

For supporting detail see Section K below   %

F. RELIEF FOR LOW PROFITS   Entry of X in box signifies claim of increase under the Relief for Low Profits clause.

☐

For supporting detail see Section K below   %

G. RELIEF FOR INVESTMENT   %

CHOSEN INVESTMENT YEAR i.e. 12 MONTHS COMMENCING / /19	INVESTMENT APPROVED BY BOARD OF DIRECTORS £	R = RELEVANT EXPENDITURE i.e. 17½ % OF INVESTMENT £	PROPOSED RELIEF YEAR i.e. 12 MONTHS COMMENCING / /19	T = TURNOVER FORECAST FOR RELIEF YEAR PROPOSED £	FORMULA FOR MAXIMUM PERMITTED % INCREASE UNDER INVESTMENT CLAUSE $\frac{100 \times R}{T}$ =

For the major constituents of expenditure on investment see Section K below.

H. RETROSPECTIVE RECOVERY OF COSTS

For supporting detail see Section K below

	TOTAL COST TO BE RECOVERED £	PERIOD OVER WHICH TO BE RECOVERED months	RESULTANT INCREASE FOR PERIOD ONLY:—	%

J. TOTAL EFFECT OF PROPOSED INCREASE   %

TOTAL INCREASE PROPOSED:—	EXCLUDING RETROSPECTIVE RECOVERY OF COSTS	
	INCLUDING " " " "	

	PROPOSED EFFECTIVE DATE:—		

Statement by manufacturer with annual Home Sales of over £5m.
A PROPOSED INCREASE IN LINE WITH ABOVE WAS NOTIFIED TO THE PRICE COMMISSION ON:—

K. SUPPORTING DETAIL in respect of claim items E to H, each identified below by appropriate item letter in "Ref." column. Any continuation pages &/or other enclosures are numbered consecutively (from 3 onwards). The page numbers of any such attachments are entered in the right-hand column where applicable.

REF.	PARTICULARS	PAGE Nos. OF ANY ATTACHMENTS

(R) 150103

APPENDIX 4

A.   Organisation and Scope of the Function

A.1.   Degree of purchasing involvement in strategic/managerial

functions, compared with operational/clerical activities.

Question A.1.

What proportion of your time is spent on strategic/managerial

activities, compared with clerical and operational activities?

FIG. 1 identifies what constitutes strategic/managerial and

clerical/operational activities. FIG. 2 identifies percentage of

buyer's time in each area.

FIG. 1.   PURCHASING

Strategic Negotiations

Purchase Research   Strategic

Sourcing Policy/Supplier Development   Managerial

Policies Development   Activities

Intra Functional Developments

Systems Design
——————————————— Routine ————————————————✕—
Sourcing   Clerical

Expediting   and

Systems Operations   Operational

Invoice Clearance   Activities
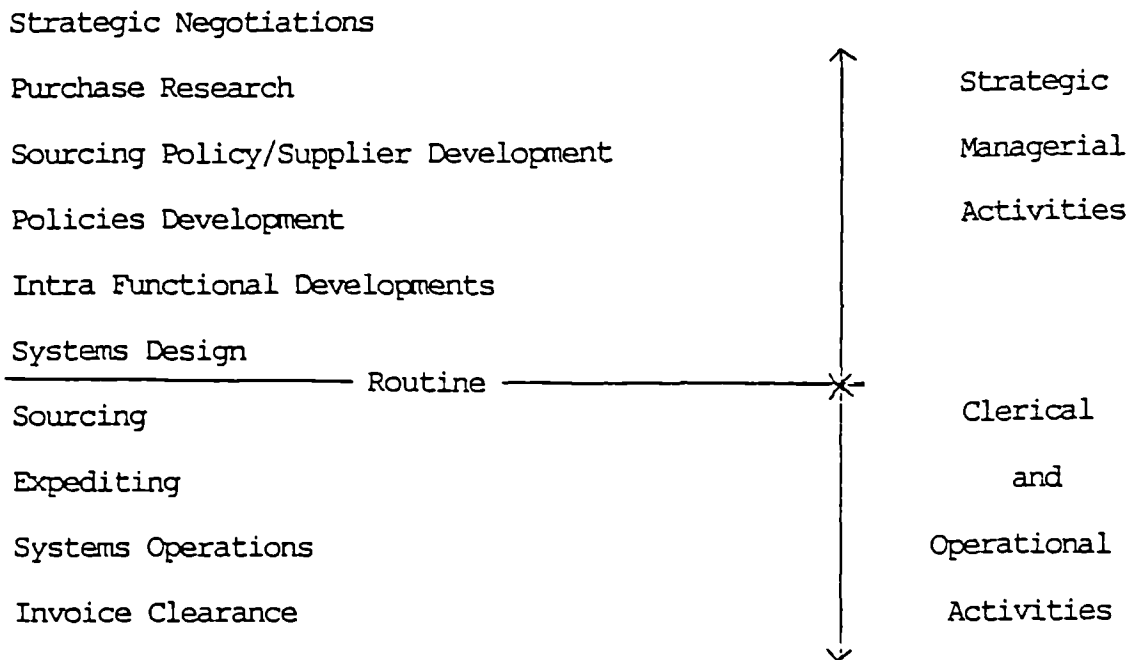
Response Fig 2   Clerical   %   Strategic   %

Now

3 Years Ago

Future

Question A.2.

Please indicate as closely as possible, the characteristics of the purchasing organisational structure in Fig. 3 , that best describes purchasing organisational structure <u>within</u> <u>your</u> organisation.

FIG. 3

| 3-5 years | | 3-5 years |
| past | present | future |

SIMPLE STRUCTURE. ALL PURCHASING AND SUPPLY ACTIVITIES PERFORMED BY ONE OR A FEW STAFF.

SIMPLE STRUCTURE. ALL PURCHASING AND SUPPLY ACTIVITIES PERFORMED BY ONE OR A FEW STAFF. MOVES TO RESTRUCTURE FOR GREATER EFFECTIVENESS. SOME SPECIALISATION OF ACTIVITY.

AS 2+ POSSIBLY MATERIALS MANAGEMENT STRUCTURE, OR ONE THAT ALLOWS PURCHASING SPECIALISM. BUYERS CONCENTRATE ON BUYING ACTIVITIES. MOVE TO CENTRALISATION OF KEY PURCHASING ACTIVITIES. GREATER CLERICAL ASSISTANCE.

AS 3+ SPECIALISATION WITHIN MM OR SIMILAR CONCEPT. HELP FROM SPECIALIST ACTIVITIES WITHIN ORGANISATION. SPECIALIST BUYERS/LEAD BUYERS DEVELOPED.

AS 4+ CENTRALISED PURCHASING FUNCTION. DECENTRALISATION OF CERTAIN PURCHASING TASKS ON A MATERIALS MANAGEMENT/LOGISTICAL BASIS, PURCHASING RESEARCH FUNCTION, SPECIALIST BUYERS/NEGOTIATORS.

OTHERS, PLEASE SPECIFY;
which nearest at moment?

A.3.   Back Up Services to Purchasing

Question A.3.

What is the extent of 'back up' or ancilliary services available to purchasing within your organisation?

Refering to FIG.4, please indicate which stage best summarises the extent of such services.

FIG. 4   EXTENT OF BACK UP SERVICES

3-5 years past	present	3-5 years future	
☐	☐	☐	NONE
☐	☐	☐	OCCASIONAL HELP FROM OTHER DEPARTMENTS IF REQUIRED.
☐	☐	☐	REGULAR HELP FROM OTHER DEPARTMENTS IF REQUIRED
☐	☐	☐	SYSTEMS THAT DIRECT THE BUYER TO USE SPECIALIST HELP IN LIMITED AREAS, EG LEGAL/COSTING INFORMATION ON ITEMS OF HIGH EXPENDITURE.
☐	☐	☐	EXTENSIVE USE OF SPECIALIST SKILLS - PRODUCT COST ANALYSIS, VALUE ANALYSIS/ENGINEERING, VENDOR RATING, SUPPLIER ASSESSMENT, FINANCIAL ANALYSIS ETC, ON ITEMS OF HIGH EXPENDITURE.

OTHER, PLEASE SPECIFY:

B. Status of The Function

Question B.1.

Within your organisation, to whom does the head of the purchasing function report?:

FIG. 5

3-5 years past	present	3-5 years future	
☐	☐	☐	Various other functional heads.
☐	☐	☐	One special functional head, but below Managing Director level.
☐	☐	☐	As 2, occasionally Managing Director.
☐	☐	☐	Managing Director.
☐	☐	☐	Direct to Board level.

Other, please specify:

Question B.2.

What is the title of the head of the purchasing function?

TITLE OF HEAD OF PURCHASING

FIG. 6

3-5 years past	present	3-5 years future	
☐	☐	☐	None
☐	☐	☐	Buyer
☐	☐	☐	Senior Buyer, or equivalent
☐	☐	☐	Purchasing Manager, or equivalent
☐	☐	☐	Director or Purchasing, or equivalent

Other, please specify:

Question B.3.

What is the level of training and staff development within the purchasing function? Please complete Fig. 7 as appropriate.

FIG. 7   DEVELOPMENT & TRAINING OF PURCHASING STAFF

3-5 years   3-5 years
  past   present   future

☐   ☐   ☐   Occasional in plant

☐   ☐   ☐   Regular for senior staff

☐   ☐   ☐   Occasional for all staff,
                                      Regular for senior staff.

☐   ☐   ☐   Regular in plant and outside courses
                                      Appraisal interviews. Qualifications
                                      encouraged.

☐   ☐   ☐   Regular training at all levels. Training
                                      programme maintained. REgualr Audits.
                                      Qualifications necessary for promotion.
                                      IPS Qualification sought.

Question B.4.

What is the average salary paid to a buyer with between 3 - 5 years purchasing experience within your organisation?

FIG. 8

3-5 years past	present	3-5 years future	
☐	☐	☐	30% or less below average
☐	☐	☐	15% or less below average
☐	☐	☐	Average
☐	☐	☐	15% above average
☐	☐	☐	30% above average

Other, please specify:

B.5. Measurement of Purchasing Performance

Question B.5. From the model, please indicate which of the boxes best indicates how purchasing performance is measured. Also indicate position, status, and focus of your purchasing function.

CONCEPTUAL PERFORMANCE MODEL

Fig. 9

POSITION OF PURCHASING	STATUS	PURCHASING PERFORMANCE MEASUREMENT	FOCUS ON
FRAGMENTED PURCHASING CARRIED OUT MAINLY BY FUNCTIONAL AREAS. SMALL CLERICAL PURCHASING FUNCTION	LOW	VERY FEW STAYING WITHIN AGREED BUDGETS	GETTING THE GOODS IN
PURCHASING FUNCTION ESTABLISHED MAINLY CLERICAL FUNCTIONAL AREA STILL INVOLVED IN BUYING	LOW BUT IMPROVING REPORTING VIA OTHER FUNCTION TO TOP MANAGEMENT	MAINLY MEASURING CLERICAL EFFICIENCY OF THE FUNCTION, ie ORDERS AND REQUISITIONS OUTSTANDING	CLERICAL EFFICIENCY
PURCHASING FUNCTION COMMERCIAL	RECOGNISED FUNCTION WITH PURCHASING MANAGER REPORTING TO MD. ALL PURCHASING CARRIED OUT BY PURCHASING DEPT	CLERICAL BUYING EFFICIENCY IE SAVINGS COST REDUCTION NEGOTIATING EFFICIENCY	CLERICAL BUYING EFFICIENCY
PURCHASING FUNCTION COMMERCIAL BUT ELEMENTS OF STRATEGIC INVOLVEMENT	REPORTING DIRECTLY TO TOP MANAGEMENT PURCHASING MANAGER	AS WITH 3 + SUPPLIER DEVELOPMENT AND INTRA ORGANISATIONAL INTERFACE DEVT.	AS WITH 3 + BEGINNING TO MEASURE OVERALL EFFECTIVENESS LONGER TERM
PURCHASING IS A STRATEGIC BUSINESS FUNCTION	REPORTING TO TOP MANAGEMENT PURCHASING DIRECTOR HEADS FUNCTION	AS WITH 4 BUT CONCERNED WITH STRATEGIC DEVELOPMENT JIT, ETC MEASUREMENT OF "TOTAL COSTS OF SUPPLY CONCEPT"	STRATEGIC EFFECTIVENESS
Other, please specify:			

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C.   Organisational Aggregate Purchasing Variables

Question C.1.

Please indicate the Purchasing.Expenditure sales revenue/
Organisational Income in FIG. 10 below:

FIG. 10   PURCHASING EXPENDITURE
                           SALES REVENUE

3-5 years past	present	3-5 years future	
☐	☐	☐	Less than 40%
☐	☐	☐	40 - 49%
☐	☐	☐	50 - 60%
☐	☐	☐	61 - 70%
☐	☐	☐	71% +

C.2.   Organisational Size

Question C.2.   What is the sales revenue/income of your organisation?

FIG.11

3-5 years past	present	3-5 years future	
☐	☐	☐	Less than £5M
☐	☐	☐	£5M - £19M
☐	☐	☐	£20M - £49M
☐	☐	☐	£50M - £99M
☐	☐	☐	£100M +

D.   Technology Diffusion

Question D.1.

Is technology within your organisation changing;

- hardly at all
- about average
- rapidly

E.   Advanced Systems and Computer Technology

Question E.1.

Which of the following in FIG. 12 best describes the systems/ technology developments applicable to your organisation?

FIG. 12

3-5 years past	present	3-5 years future	
☐	☐	☐	Simple systems, manual in operation
☐	☐	☐	Simple computer purchasing systems
☐	☐	☐	MRP and more advanced systems developing.
☐	☐	☐	Introduction of Logistical Management, JIT.
☐	☐	☐	4 + Computer links with suppliers .

Other, please specify:

Question E.2.

Which of the following stages of computer activity best describe
developments within your organisation?

FIG. 13

STAGE OF COMPUTER ACTIVITY

3-5 years past	present	3-5 years future	
☐	☐	☐	No action on any function.
☐	☐	☐	In planning or implementation stage.
☐	☐	☐	On line with at least one, but not more than four functions.
☐	☐	☐	On line with five or more functions.
☐	☐	☐	On line with one or more suppliers.

Other, please specify:

Question F.1.

The table on the next page lists varying degrees of procedural/
systems development. Please select the one that most closely relates
to developments in your own organisation.

FIG. 14

3-5 years past	present	3-5 years future	

☐ ☐ ☐ No laid down purchasing procedures.

☐ . ☐ ☐ Verbal procedures, not necessarily followed. Generally relating to documentation, eg documents in purchasing cycle.

☐ ☐ ☐ Verbal procedures, but also the existence of written procedures that must be followed - purchasing cycle documents and general policy.

☐ ☐ ☐ Written procedures that must be followed. Existence of Purchasing Manual in early stages of development. Covering Standard operating procedures,cost reduction, negotiation, policy, suppliers policy.

☐ ☐ ☐ Comprehensive Purchasing Manual covering all current standard operating procedures and systems, as covered by 4, but more comprehensive, also covering detailed relations with suppliers and other departments.

Other, please specify:

G.   Corporate Culture

Question G.1.

What do you understand by corporate culture. In what ways does it affect the purchasing and supply activity?

H.1.   Buying Centre Concepts

Question H.1.   The buying centre is said to comprise all those major functions involved in the purchasing decision. In your organisation, how involved is the purchasing function in the buying centre? Please study the figure below.

FIG. 15   Buying Centre/Purchasing Involvement

3-5 years past	present	3-5 years future	
☐	☐	☐	No real involvement
☐	☐	☐	Little involvement other than ordering goods.
☐	☐	☐	More positive involvement, but only in terms of price.
☐	☐	☐	Involvement to a degree in most aspects of the product, but a major say only in terms of price.
☐	☐	☐	Involvement and consultation in all aspects of the purchasing of goods and services, and all elements of the 'deal.' Ability to veto others invloved in the buying centre.

Other, please specify:

Question H.2.

On a typical purchase, how involved is the purchasing function likely to become in the buying process below?

FIG. 16

(1)   Identification of needs

(2)   Establish Specifications

(3)   Search for alternatives

(4)   Establish contact

(5)   Set purchase/usage criteria

(6)   Evaluate alternative

(7)   Budget availability

(8)   Evaluate specific alternatives

(9)   Negotiate

(10)   Buy

(11)   Use

(12)   Post purchase evaluation
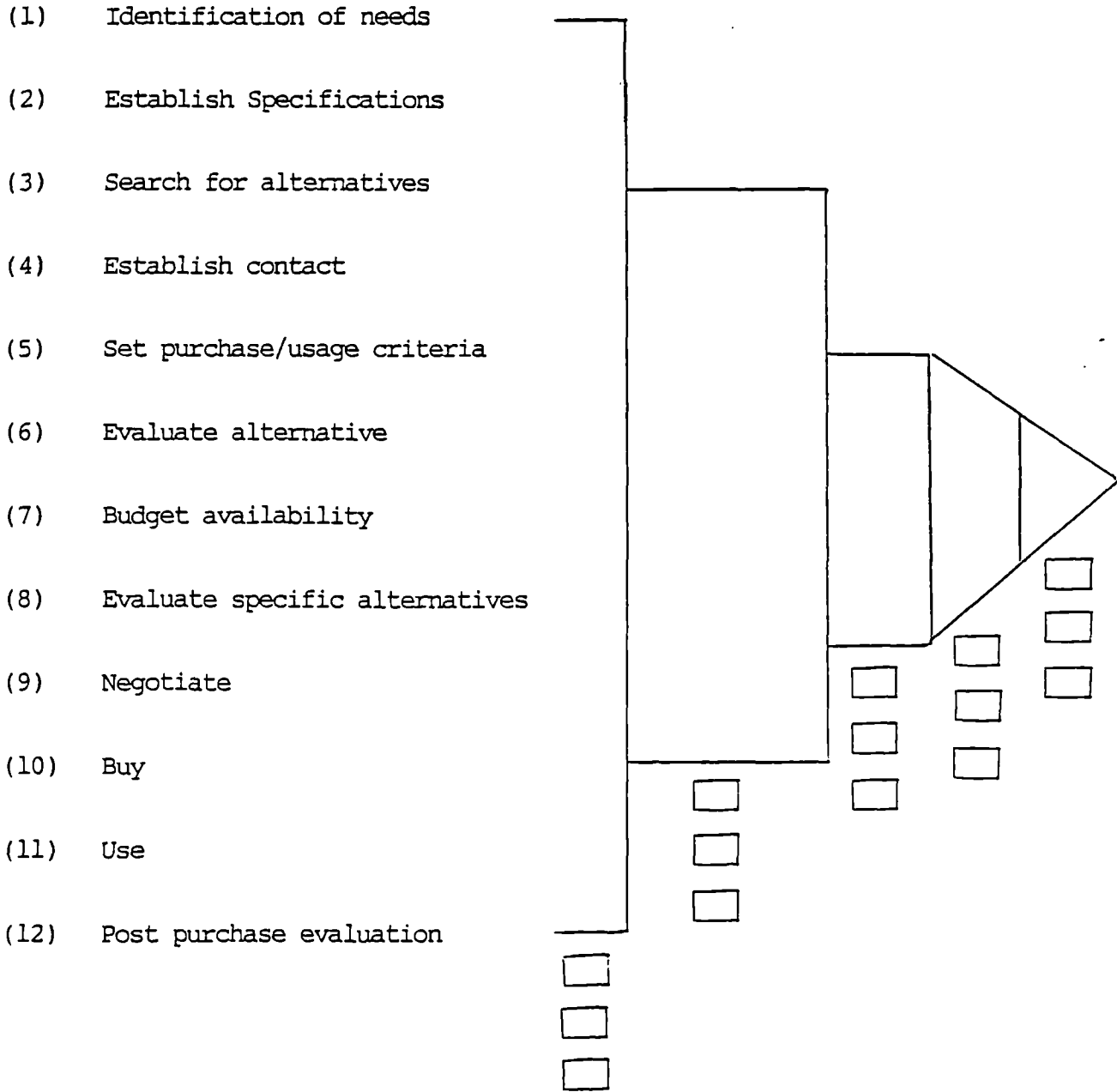
Please tick where appropriate.   ☐ 3-5 years past

                                          ☐ present

                                          ☐ 3-5 years future

I.1.   Buyer Characteristics and Development

Question I.1.

Which of the following best specifies the characteristics and development of buyers within your purchasing function now, and likely in the future?

FIG. 17

3-5 years past	present	3-5 years future	
☐	☐	☐	No special requirements.
☐	☐	☐	Experience useful but not essential - no training.
☐	☐	☐	Experience essential and training given.
☐	☐	☐	Experience essential, but training given to develop right people. Probably 25% of staff have qualifications above A level. Professional IPS Qualifications being encouraged.
☐	☐	☐	As (4) but newcomers tend to be at graduate level, or equivalent. All encouraged to be professionally Qualified with IPS. Corporate membership. Regular in company and outside courses arranged. Regular staff appraisal and reviews.

Other, please specify:

I.2.   Specialisms Within Purchasing

Question I.2.

Please indicate the degree of specialisation within your organ-
isation, from the figure below.

FIG. 18   Specialisms Within Purchasing

3-5 years   '   3-5 years
   past   present   future

☐   ☐   ☐   Buyer responsible for all aspects
                                  of buying and supplies.

☐   ☐   ☐   Buyer responsible for all aspects
                                  of buying.

☐   ☐   ☐   Specialisms begin, buying, expediting,

                                  invoice clearing, etc. Seperate func-

                                  tions performed by individuals within

                                  purchasing.

☐   ☐   ☐   Stage (3) + specialist buyers, ie

                                  buyers specialise in a product range.

☐   ☐   ☐   As (4) + growth of such functions:

                                  Value Analysis

                                  Product Cost Analysis

                                  Purchasing Research

                                  Planners

                                  Specialist Quality Control Teams.

Other, please specify:

J.   Buyer - Seller Relationships

J.1.   Buyer - Supplier Bondings

Question J.1.

How strong is your interface with major suppliers, ie suppliers where a lot of money is spent on materials/services, or where the item bought is of crucial importance to the buyer's organisation?

(i)   Suppliers dealt with over the phone, and through correspondence.

(ii)   Regular visits by supplier's sales staff.

(iii)   Regular visits from Purchasing Organisation staff - yearly contracts.

(iv)   As (iii) + involvement when new products are designed. Talks of period contracts more than 1 year.

(v)   As (iv) + strategic plans mutually developed. Contracts likely to be based on booking capacity over many years and long term systems development.

J.2.   Buyer Supplier Ethics

Question J.2.

What is the scope and degree of ethics between the purchasing function and its suppliers? Please indicate your response in Fig. 19.

FIG.19   Buyer Supplier Ethics

3-5 years past	present	3-5 years future	
☐	☐	☐	None mentioned
☐	☐	☐	General common sense
☐	☐	☐	Understanding - gifts
			of key areas - Lunches
			- Information

Fig. 19 cont.

☐ ☐ ☐ _ Written and enforced set of rules and guidance.

☐ ☐ ☐ As (4) + covers wider range.

Other, please specify:

J.3.   Hospitality to Seller
Question J.3.

From FIG. 20, please identify the level of hospitality, ie, lunches, special social events, arranged by either side, etc, and how important hospitality is in your relationship with key suppliers.

FIG.20   Hospitality to Seller

3-5 years   3-5 years
  past   present   future

☐   ☐   ☐   None

☐   ☐   ☐   Seller provides

☐   ☐   ☐   Buyer occasionally invites seller to dine in work's dining room.

☐   ☐   ☐   Recognised as important part of relationship.

☐   ☐   ☐   As (4) + wider range of hospitality issues.

Other, please specify:

.

J.4. Visits/Meetings Between the Two Sides

Question J.4.

How often do you visit or meet with your key suppliers?

FIG.21 Visits/Meetings Between the Two Sides

3-5 years past	present	3-5 years future	
☐	☐	☐	None
☐	☐	☐	Occasional visits from supplier
☐	☐	☐	Regular visits from supplier
☐	☐	☐	Regular visits from supplier,+ visits from buyer.
☐	☐	☐	Regular reciprocal visits regarded as essential.

Other, please specify:

K. General - Open Questions

(1)   If you examine the purchasing function over the previous 3-5 years, or longer (please specify), have there been any noticeable internal organisational factors that have increased -

(i)   its status?

(ii)   development of the function?

(2)   How would you expect the function to develop in the next 3-5 years?

(3)   What, in your opinion, constitutes development of the purchasing function?

(4)   If purchasing is concerned with obtaining goods and sources at the lowest cost of supply, which of the following organisations or sectors are furthest down the road to this objective?

A   ICI   ☐

B   FORD   ☐

C   LOCAL AUTHORITIES ☐   please rearrange

D   COAL INDUSTRY   ☐   the letters, or

E   SHELL   ☐   number.

F   JOBBING SHOPS   ☐

G   MARKS AND SPENCER ☐

H   YOUR ORGANISATION ☐

(5)   What particular problems do you envisage purchasing facing in the next 5 years (internally?)

(6)   How would you re-structure the purchasing function to enable it to perform more effectively?

(7)   In what ways do you see the skills and qualities of a buyer changing to meet future requirements?

(8)   Does the purchasing function within your organisation need to

    (i)   change   -   define

    (ii)   develop   -   define

    (iii)   both   -   define

General Environmental Factors

Hypothesis L.1. - Environmental factors, eg, technology, inflation, competition, etc, have no affect on purchasing development.

Question L.1.

In what ways have changes in technology affected the purchasing function, and its development?

Past   (Please specify)

Present   (Please specify)

Future   (Please specify)

Question L.2

In what ways have changes in <u>inflation</u> affected the purchasing function and its development?

Question L.3.

In what ways have changes in <u>shortages/surpluses in the markets in which the buyer buys</u> affected the purchasing function and its development?

Question L.4.

In what ways have changes in <u>extent of competition in buyers organisational markets</u> affected the purchasing function and its development?

Question L.2.

What category of industry would your organisation be placed in?
(see below)

Retailing ☐

Mass production ☐

Process ☐

Public Sector ☐

Batch production ☐

Jobbing Industry ☐

Extractive industry ☐

Question M.1.

Has your organisation introduced any of the following new Management concepts over the past 5 years, or is it likely to in the future?

		Past 5 years	Future
(i)	Just In Time Manufacturing	☐	☐
(ii)	World Class Manufacturing	☐	☐
(iii)	Total Quality Control	☐	☐
(iv)	Logistical Management	☐	☐
(v)	Materials Management	☐	☐
(vi)	MRP/MRP II	☐	☐
(vii)	Other new computer developments, please specify:	☐	☐

Question M.2 - previous 5 years

What effect has the development had on purchasing?

Question M.3

What effect is it likely to have?

N. Supplier Market Variables

Question N.1.

How much competition do you face in the major markets in which you purchase?

(i) no competition - one supplier ☐

(ii) little competition - one to three suppliers ☐

(iii) average competition - three to five suppliers ☐

(iv) plenty of competition - six + suppliers ☐

(v) competition exists, but resourcing is impossible ☐

because: (Please specify)

Question N.2.

Would you regard your major suppliers as being:

(i)   more developed and sophisticated than your

organisation?   ☐

(ii)   about the same?   ☐

(iii) less developed and sophisticated than your   ☐

organisation?

(iv)   other, please specify

O.   Supplier Market Variables

Question O.1.

How developed is your relationship with major suppliers now, in
the past, and how is it likely to change in the future?

Now:

Past:

Future:

Question P.1.

From the following listing of Government involvement in the market place, select any with which you have knowledge, and indicate whether such involvement has either helped develop purchasing, or otherwise:

GOVERNMENT CONTROL'S

EFFECT ON PURCHASING.

NONE - HELPED - NEGATIVE

- Price Controls ☐ ☐ ☐

- Monopoly and Restrictive Practice ☐ ☐ ☐

- Legislation ☐ ☐ ☐

- Quotas ☐ ☐ ☐

- Changes in Regulations ☐ ☐ ☐

- Import Controls ☐ ☐ ☐

- Buy British or EEC Directives ☐ ☐ ☐

- Others, please specify: ☐ ☐ ☐

Question P.2.

How is 1992 likely to affect the role of purchasing within your organisation?

Q. <u>Purchasing Aggregates</u>

<u>Question Q.1.</u>

What is the level of purchasing expenditure to sales revenue in your organisation?

less than 25%

        26 - 36%

        37 - 54%

        55 - 64%

        65 - 74%

<u>Question Q.2.</u>

What is the level of purchasing expenditure within your organisation?

      £1M - 2M

      £3M - 20M

      £21M - 50M

      £51 - 100M

      £101M - 250M

      £251M - 499M

      £500M +

<u>Question Q.3.</u>

What is your organisation's:

(1) Total Sales Revenue £

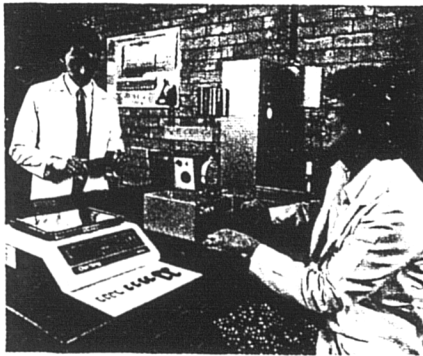(2) Purchasing Expenditure £

tml

Mouldings for Industry

From
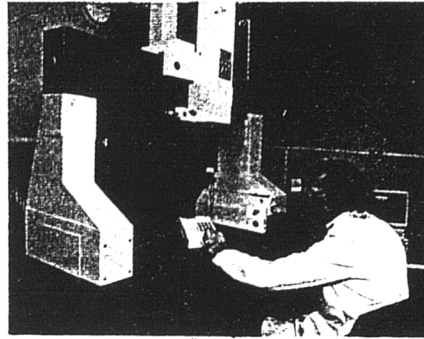# TML Plastics Ltd

Above: A section of the production facility.

Above: High precision computer controlled co-ordinate measuring machine in use checking component accuracy against the original specification.

Above: Keying new instructions into a moulding machine control panel.
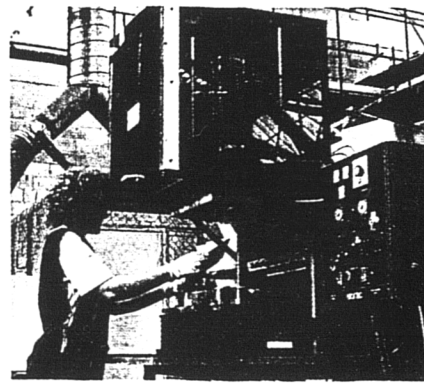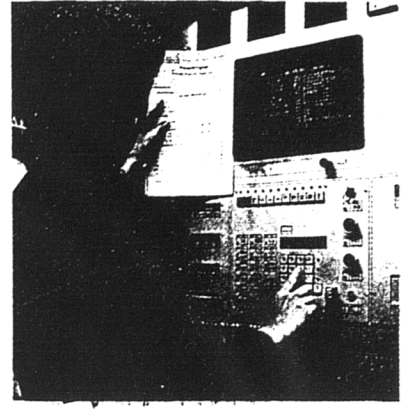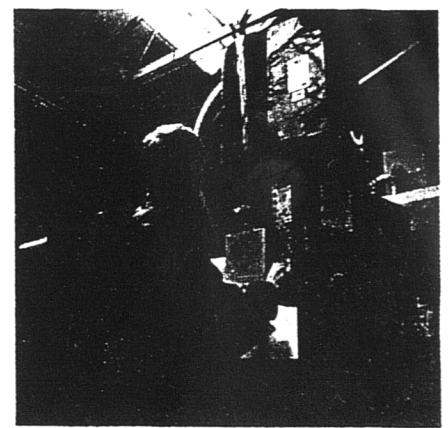

Above: An area of the Material Control Laboratory where both raw materials and finished products are checked against specified control requirements.

Above: Hot plate welding machine facilities.

Above: Moulding machine fitted with heated gravity feed hopper, to monitor and adjust moisture content of raw material, being fed into machine. Part of the overall quality improvement programme.

Further services include:

Hot Foil Stamping, Silk Screen Printing Facilities and Spray Painting to exacting standards.

Quality control approvals:

M.O.D. 05-24/2
British Railways Board — to Category A1. British Telecom — delegated release. Ford — Approval Q101 BS 5750 Part 2.

For more detailed information on available services and machine capacity range or for assistance with projects please contact us at TML Plastics.
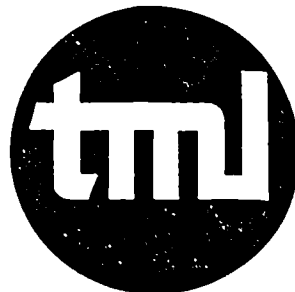
TML Plastics Limited, P.O. Box 22, Temlon Works, Exchange Street, Accrington, Lancashire BB5 0LA.
Telephone: Accrington (0254) 384241. Cables: Temlon Accrington.
Telex: 635536. Fax: (0254) 399185.

PURCHASING PROFILE ANALYSIS

MEASUREMENT AREA

STAGE OF DEVELOPMENT

	MEASUREMENT AREA	1 INFANT	2 AWAKENING	3 DEVELOPING	4 MATURE	5 ADVANCED
1	Function Position in the Business.					
2	Purchasing Organisational Structure.					
3	Activity Breakdown Analysis.					
4	Relative Remuneration Levels.					
5	Measurement of Purchasing Performance.					
6	Standard of Information Systems.					
7	Standard of Operating Procedures.					
8	Intraface Development.					
9	Supplier Interface Development.					
10	Quality of Buyer/Seller Relationships.					
11	Buying Process Influence.					
12	Level of Education.					
13	Extent of Training Development.					
14	Degree of Purchasing Specialism.					
15	Policy on Ethics/Hospitality.					

1. Function Position in the Business.

☐ 1/1   Non Supervisory Position.

☐ 1/2   Supervisory Level.

☐ 1/3   Functional Management.

☐ 1/4   Executive Level.

☐ 1/5   Seat on Main Board.

2. Purchasing Organisational Structure.

☐ 2/1   Single member of staff - all activities.

☐ 2/2   Simple supervisory structure - few members of staff - some specialisation.

☐ 2/3   Intermediate status - limited inter-functional links.

☐ 2/4   Partial integration with other functional areas.

☐ 2/5   Fully integrated structure embracing M.M and/or centralised/decentralised purchasing approach.

3. Activity Breakdown Analysis.

☐ 3/1   80% + Clerical.

☐ 3/2   60% + Clerical.

☐ 3/3   40% + Clerical.

☐ 3/4   20% + Clerical.

☐ 3/5   > 20% Clerical.

Comments

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4. Relative Remuneration Levels.

- [ ] 4/1   70%   of Index.
- [ ] 4/2   80%   of Index.
- [ ] 4/3   90%   of Index.
- [ ] 4/4   100%   of Index.
- [ ] 4/5   100%+ of Index.

5. Measurement of Purchasing Performance.

- [ ] 5/1   Non/superficial measurement.
- [ ] 5/2   Budget control/clerical measurement.
- [ ] 5/3   Cost savings reports/negotiated settlements.
- [ ] 5/4   Measures all foregoing and suppliers (Vendor Rating) intra measurements.
- [ ] 5/5   Strategic measurement of total aquisition costs.

6. Standard of Information Systems.

- [ ] 6/1   Simple systems - solely manual.
- [ ] 6/2   Stand alone computer purchasing systems.
- [ ] 6/3   MRP and partial linking with other functions systems.
- [ ] 6/4   Fully integrated MRP 11/Logistics or equivalent.
- [ ] 6/5   6/4 + E.D.I. with Major Suppliers.

Comments

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7. STANDARD OF OPERATING PROCEDURES.

☐ 7/1   No guidance whatsoever.

☐ 7/2   Verbal procedures - limited management follow up.

☐ 7/3   Existence of written procedures, not comprehensive.

☐ 7/4   Comprehensive procedure manual limited to Purchasing Function.

☐ 7/5   As 7/4 plus procedure covering relationships with other functions and outside suppliers.

8. INTRAFACE DEVELOPMENT.

☐ 8/1   Re-active to the demands of other functions.

☐ 8/2   Occasionally consulted by other functions, but little influence over decision making.

☐ 8/3   Regular inter-functional contact - Influence limited to operational purchases.

☐ 8/4   Involved at the beginning of all major contracts/new designs. Major say in all supply matters.

☐ 8/5   As 8/4 plus making strategy/Influencing events at board level.

9. SUPPLIER INTERFACE DEVELOPMENT.

☐ 9/1   Contact limited to telephone/correspondence.

☐ 9/2   Supplier representative visits only.

☐ 9/3   Buyer visits to supplier on exceptions basis.

☐ 9/4   Planned visits to cover regular contact/new products plus review of supplier development.

☐ 9/5   Strategic planning meetings to agree long term goals.

Comments

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10. QUALITY OF BUYER/SELLER RELATIONSHIPS.

☐ 10/1   Orders placed mainly on basis of cheapest price. Short term contracts. Relationships mainly adversarial.

☐ 10/2   Wider evaluation of bids (price, delivery dates, payment terms etc). Relationships still short term and based on competitive spirit.

☐ 10/3   One year contracts common. More emphasis on value for money evaluations. Competition still encouraged.

☐ 10/4   Moves towards longer term frame agreements. Vendor rating systems to measure performance. Early attempts at calculating total acquisition costs.

☐ 10/5   Supplier seen as major partner. Long term agreements. Close involvement at every stage of product development.

11. BUYING PROCESS INFLUENCE.

☐ 11/1   Non existent.

☐ 11/2   Re-active order placement.

☐ 11/3   Partial involvement in decision making.

☐ 11/4   Pro-active.

☐ 11/5   Strategic.

12. LEVEL OF EDUCATION.

☐ 12/1   No formal qualifications.

☐ 12/2   G.C.S.E.

☐ 12/3   A Levels.

☐ 12/4   HND or equivalent.

☐ 12/5   I.P.S. Professional Diploma.

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13. Extent of Training Development.

- [ ] 13/1 Strictly limited - restricted to internal training only.
- [ ] 13/2 Occasional exposure to external/internal courses.
- [ ] 13/3 Regular exposure to external/internal courses.
- [ ] 13/4 Fully defined needs analysis - leading to detailed training programme.
- [ ] 13/5 As 13/4 above plus competence testing to establish quantifiable benefits.

14. Degree of Purchasing Specialism.

- [ ] 14/1 Buyer responsibilities extend to other supplies related activities (non-specialist).
- [ ] 14/2 Buyer responsible soleley for buying activities (non-specialist).
- [ ] 14/3 Specialism begins - clearly defined responsibilities. Separate functions performed by individuals within the function.
- [ ] 14/4 As 14/3 above plus specialist commodity buyers.
- [ ] 14/5 As 14/4 above plus support services - Value Analysis, Purchasing Research and Product Cost Breakdown.

15. Policy on Ethics and Hospitality.

- [ ] 15/1 None defined.
- [ ] 15/2 Loose rules informally communicated.
- [ ] 15/3 Clear rules relating to limited areas (e.g gifts and lunches).
- [ ] 15/4 Fully defined policy contained in procedure manual.
- [ ] 15/5 Wider circulation of 15/4 above throughout organisation plus audit review.

Comments

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