# A Model of Customer Loyalty:

## An Empirical Investigation of the Relationship Between Value, Satisfaction and Commitment

by

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# Abstract

Customer loyalty has been recognised as a potent defensive weapon in the marketing

literature (Reichheld, 1996a). However, the relationship between customer perceptions

of value, customer satisfaction and customer commitment in the development of

customer loyalty remains unclear. In addition, many studies in this field have been

primarily theoretical in nature despite the managerial utility of examining the effect of

individual performance attributes (Patterson and Spreng, 1997).


The objective of this study is therefore to develop and empirically test an integrated

post-consumption model of customer loyalty. The proposed model is built on the

components of customer commitment, customer satisfaction and customer perceived

value, and includes the hypothesised antecedents of these components (product

quality, service quality, relationship quality, extra benefits, problem resolution and

customer costs). All components were examined via structural equation modeling

(Bagozzi, 1982). Because it was desired that the results of the study also be

operationally relevant, the factors that significantly impact customer commitment

were examined at the individual attribute level. In this way, areas of potential

opportunity for enhancement of the hotel industry's offering to the meeting market

were identified. Finally, the outcomes of customer commitment were investigated.


The model was tested in the meeting market segment of upscale (4 and 5 star) hotels.

Both qualitative and quantitative methodologies were employed. The qualitative data

was in the form of in-depth semi-structured field interviews with eight top-level

meeting planners from the UK and USA. The quantitative data was in the form of self-

administered mail-in questionnaires. The questionnaire sample included 206 meeting planners from the USA and the UK who use upscale hotels for their meetings.

The study found that both customer satisfaction and perceived value influence customer commitment directly. In addition, perceived value affects commitment indirectly through satisfaction. The results of the research also indicate that in the meeting market of upscale hotels, (1) relationship quality and problem resolution are significant antecedents of customer satisfaction, (2) product quality and relationship quality are significant antecedents of perceived value, and (3) customer costs have a negative impact on perceived value but a positive impact on customer satisfaction. At the attribute level, the results indicate that the greatest area of opportunity for hotels to increase the level of meeting planner commitment to booking meetings at their hotel is in fully meeting the agreements that it makes with the meeting planner, with particular care being given to the related issues of staff reliability, low turnover of top executives, attention to detail and the accurate recording of meeting requirements.

The results of the present study also confirm that committed customers (1) are proactive in their purchase behaviour; (2) are not actively pursuing alternatives; (3) speak positively to others; that (4) their behaviour is voluntary; and that (5) they intend to continue doing business with the company. Furthermore, although usually only about 5% of customers who encounter problems will let a company know (Hart *et al*, 1990), the results of the present study indicate that committed meeting planners communicate with the hotel they are committed to when they encounter problems, thus providing the hotel with invaluable information.

# Dedication

This dissertation is dedicated to my wife, Kathy. Without her unerring support and loving patience, this research project would have never come to fruition.

# Acknowledgements

Executive of the Greater Glasgow & Clyde Valley Tourist Board; Mr. Hans Rissman, Chief Executive, Edinburgh Conference Centre; Mr. Charles Blowfield and Sally Greenhill of the United Kingdom Meeting Industry Association; Mr. Burt Cabanas, President, and Sam Haig, Chief Operating Officer, of the Benchmark Hospitality Group; Mr. Karl Nueser, Managing Partner, Hotel Nassauer Hof; Mr. Rob Cornell, Senior Vice President of Preferred Hotels; and Jacquelyn van Gorp of the American Marketing Association.

I would also like to thank those academicians who led the way in services marketing research, thereby allowing me to pursue research inquiries building on the foundation of their work.

Finally, I would like to convey my heartfelt thanks to my family, especially to Kim and Doug, Carol and Jim, and Leslie and Kevin, who at all times offered encouragement and support – thanks to you all!

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# CHAPTER ONE: RATIONALE FOR THE STUDY

Although there has been a substantial amount of research conducted during the past twenty years in the areas of service quality and customer satisfaction, researchers have found that investments in service quality need to be balanced with a consideration of which aspects of quality customers value and are willing to pay for (Rust, Zahorik and Keiningham, 1995). Furthermore, researchers have found that even satisfied customers defect (Jones and Sasser, 1995). As a result, the relationship of service quality and customer satisfaction to actual benefits for the company in terms of customer repeat purchase, positive word-of-mouth and increased 'share of wallet' has come under question (Anderson, Fornell and Lehmann, 1994; Hennig-Thurau and Klee, 1997; Jones and Sasser, 1995; Rust and Zahorik, 1993).

In addition, much marketing research has been undertaken to investigate strategies for attracting new customers (*offensive marketing*), but much less research has been conducted to investigate strategies for strengthening the base of a company's existing customers (*defensive marketing*) (Bowen and Shoemaker, 1997; Reichheld, 1993; Rust and Zahorik, 1993; Zeithaml, Berry and Parasuraman, 1996). In the 1970's, a study on the Profit Impact of Market Share (PIMS) concluded that one of the most important determinants of company profitability was market share (Buzzell and Gale, 1987). In their pursuit of market share, many companies became more concerned with the acquisition of new customers than with the retention of existing ones. Recently, however, it has been suggested that customer retention and loyalty are more important determiners of profit than market share (Reichheld and Sasser, 1990), and that the key

to achieving customer loyalty is through the creation and delivery of superior

customer perceived value (Heskett, Jones, Loveman, Sasser and Schlesinger, 1994).

In the 1990's, therefore, the focus in marketing research shifted from quality to value

(which benefits at what cost), and from satisfaction to loyalty. Two of the leading

industry and academic marketing research bodies, the American Marketing

Association (AMA) and the Marketing Science Institute (MSI) have identified

customer perceived value and customer loyalty as top priorities for the coming years

(*AMA Call for Papers*, 1999; *MSI Overview of Research Priorities*, 1998-2000).

## OBJECTIVES OF THE STUDY

The objectives of this thesis are to synthesise previous research in the areas of

customer loyalty and commitment, customer satisfaction and customer perceived

value, and to develop and test an integrated post-consumption model of customer

loyalty based on these components. Certain outcomes that are beneficial to a company,

such as positive word of mouth, increased share of wallet, and decreased price

sensitivity, have been proposed to result from customer loyalty. A further objective of

this thesis, therefore, is to investigate whether this is indeed the case. Customer loyalty

is defined as a series of actual repeat purchases in the past accompanied by a

commitment to continue purchasing in the future. Customer commitment is defined as

a customer's enduring favourable intention towards a firm. Customer satisfaction is

defined as a pleasurable feeling of fulfilment resulting from a positive evaluation of

the consumption experience. Customer perceived value is defined as an interactive,

relativistic, preferential judgement of the benefits and costs of the total consumption

experience as perceived by the customer. In short, customer benefits and costs are

proposed to lead to a customer's perception of value which in turn leads to customer

satisfaction and to loyalty (of which commitment is the attitudinal dimension). Figure

1.1 displays the conceptual framework guiding the study.

## Figure 1.1 Conceptual framework of the study

```
┌──────────┐      ┌──────────┐      ┌──────────────┐      ┌──────────┐
│          │      │          │      │  Customer    │      │          │
│ Customer │      │ Customer │      │  Loyalty     │      │          │
│ Perceived│ ───> │          │ ───> │──────────────│ ───> │ Outcomes │
│  Value   │      │Satisfaction│    │ - Repurchase │      │          │
│          │      │          │      │ - Commitment │      │          │
│          │      │          │      │ - Over time  │      │          │
└──────────┘      └──────────┘      └──────────────┘      └──────────┘
      ↑                ↑                   ↑
┌──────────────────────────────────────────────────┐
│                                                    │
│   Customer Benefits  and  Customer Costs           │
│        (individual performance attributes)         │
│                                                    │
└──────────────────────────────────────────────────┘
```
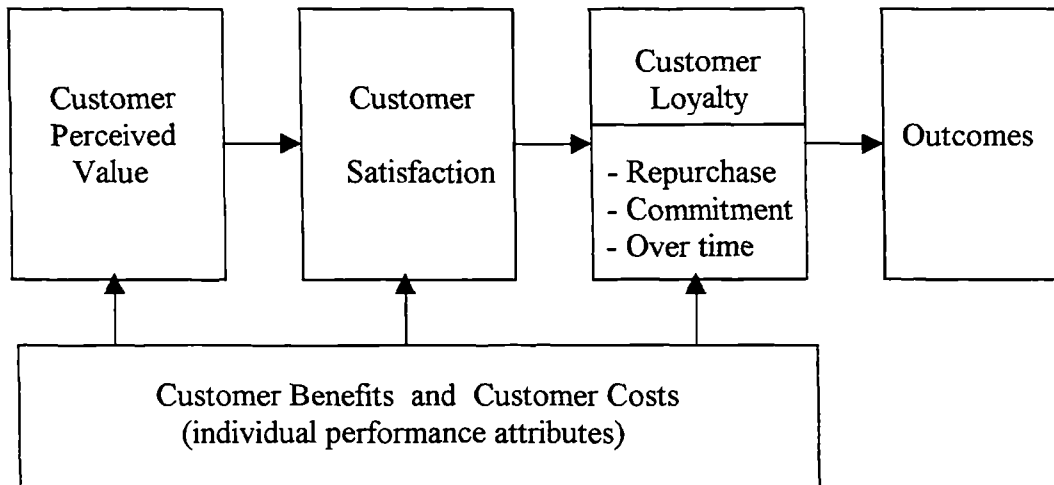
A further objective of this thesis is to investigate the drivers of customer commitment

at the individual performance attribute level. The drivers of customer commitment are

those individual performance attributes that are deemed to have the greatest impact on

the customer's level of commitment.

Specifically, the objectives of the study are to:

1.  investigate the correlation between customers' perceptions of their level of

    commitment and their actual described behaviours and attitudes (outcomes of

    customer commitment).

2.  determine areas of opportunity to increase the level of customer commitment;

3. investigate the drivers of customer commitment at the individual attribute level from the customer's perspective; and

4. develop and test an integrated post-consumption model of customer loyalty (the relationship between customer commitment, customer satisfaction and customer perceived value) as applied to the meeting industry.

## RESEARCH STRATEGY

This study is integrative in nature and uses a multi-method research strategy in the belief that each of the various research strategies employed provides insights from a different perspective, with synthesis occurring at the final stage of the analysis (Morgan, 1983, p.380 as cited in Gill and Johnson, 1991, p.147). The use of more than one research method to examine a particular phenomenon may improve understanding of that phenomenon and each technique may reveal facets of the phenomenon that would not be yielded by the use of alternative methods (Clark, Riley, Wilkie and Wood, 1998, p.39). Multi-methods are infrequently used in research as they are extremely time consuming and costly. However, for students undertaking extended pieces of work such as research degrees, multi-methods may be especially appropriate (Gill and Johnson, 1991, p.152).

Both quantitative and qualitative research was conducted. Quantitative research in the form of mail-in questionnaires was conducted with a sample of meeting planners from the UK and USA who book meetings at four to five star hotels (see Appendix A). Qualitative analysis was undertaken in the form of in-depth semi-structured interviews

with corporate and association meeting planners purchasing meeting facilities and services from four to five star hotels (see Appendix B).

It was desired that the results of this study be both theoretically and operationally relevant. According to Patterson and Spreng (1997, p.415):

> Most studies modeling the impact of perceived performance on satisfaction or behavioural intentions have done so at the aggregate construct level, despite the fact that examining the effect of individual performance attributes has potentially great utility for practising managers.

Therefore, the following research strategies were employed:

1. *frequency analysis* was used to identify the behavioural and attitudinal outcomes of customer commitment;

2. *gap analysis* was used to investigate the differences (gaps) between the levels of individual performance attributes received by meeting planners from hotels and the importance of the various individual performance attributes to meeting planners' level of commitment, in order to reveal potential areas of opportunity for hotels to enhance their offering to meeting planners (including a visual prioritisation of these gaps by means of quadrant charts);

3. *regression analysis* was used to investigate the drivers of customer commitment (which individual performance attributes of a hotel's offering have the greatest impact on customer commitment); and

4. *structural equation modeling* was used to investigate any causal relationships between customer commitment, customer satisfaction and customer perceived value (including product quality, service quality, relationship quality, extra benefits, problem resolution and customer costs). Structural equation modeling is

particularly useful when one desires to examine a series of dependence

relationships simultaneously and identify possible structural relationships between

constructs (Hair, Anderson, Tatham and Black, 1998, p.578; Vavra, 1997, p.354).

Figure 1.2 outlines how each research strategy is related to the various portions of the

conceptual framework.

## Figure 1.2 Conceptual framework with research strategy

| Customer Perceived Value | 4. | Customer Satisfaction | 4. | Customer Loyalty<br>- Repurchase<br>- Commitment<br>- Over time | 1. | Outcomes |

4.↑     4.↑     2.↑ 3.

Customer Benefits and Customer Costs
(individual performance attributes)
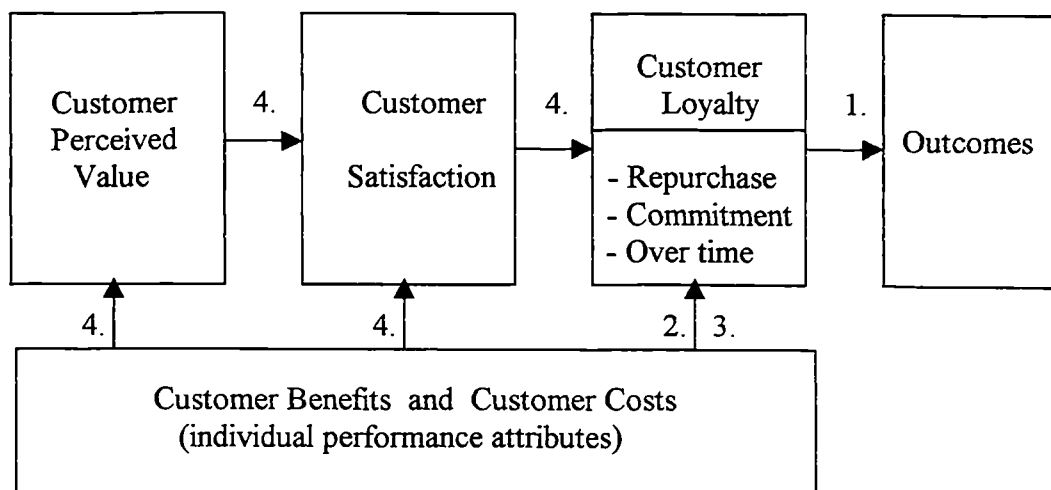
## DOMAIN OF THE STUDY

Since the 1950's, the world economy has become increasingly integrated. Most

recently, rapid globalisation has largely been fuelled by the fall in trade barriers set

into motion through the agreement by the 128 member countries of the World Trade

Organisation (WTO) to liberalise their product markets (General Agreement on Tariff

and Trade, 1994). Since that time, many WTO countries have also signed agreements

to expand free trade in services such as telecommunications and information

technology. The OECD estimates that more than half of total Gross Domestic Product

(GDP) in the advanced economies is now knowledge-based (The Economist,

December 6, 1997, p.81-82). The privatisation process of formally public held

companies such as airlines, rail, communication and utilities have created mega-

mergers and cross-national alliances, all contributing towards the spectacular growth

of the service sector and an increasingly competitive environment (Schlentrich, 1993,

p.14).


Furthermore, the increase in disposable income, especially of the population in the

western industrialised nations, has resulted in an increasing demand for personal

services, particularly in areas of travel, leisure and entertainment. As of 1993, the

service sector accounted for 58 % of world wide GDP. In the United States, services

accounted for 74 % of GDP. In the European community, the service sector employed

more than 133 million people, or 60% of the work force (Bateson, 1995a, p.4-5).

There is also a hidden service sector largely unaccounted for by government

statisticians that relates to the manufacturing, agricultural and extractive industries.

These industries contain a wide array of internal service components such as legal

services, human resource administration, office cleaning or security services which are

presently accounted for under the manufacturing sector (Lovelock, 1996, p.3). In

response to an increasingly demanding and sophisticated consumer market,

manufacturing is adopting service sector strategies. Products once mass-produced are

now often being tailored to the needs of the individual (Wyckhoff, 1996, p.44).


## The hotel industry

One of the industries in the service sector that has seen rapid international expansion

and consolidation is the tourism and travel industry, of which the hotel industry is a

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major component. As a result of mergers and take-overs, consolidation has led to the

creation of new hotel mega-holding companies (Bass Plc, Intercontinental and Holiday

Inn; Granada Plc, Forte and Meridien; Starwood, Westin and Sheraton; Patriot

American, Wyndham and Carefree Resorts; Marriott, Renaissance Hotels and Ritz-

Carlton; Hilton USA and Doubletree). In the US alone, over 170 hotel chains vie in

different market segments for a customer who increasingly has more options from

which to choose. In a recent interview with leading hospitality executives, it was

stated that some of the most important strategies for the future of the industry are (1)

to pay close attention to the customer, (2) to adapt to customers' changing needs and

lifestyle, (3) to create brand differentiation, and (4) to enhance customer loyalty

(Lodging Magazine, January 1998, p. 40-43). Hotel marketers are therefore vitally

interested in developing strategies to increase their customer base through both

customer acquisition and retention, and thereby increase their overall profitability.


## The meeting market

The meeting and convention market segment of the hotel industry has also grown

proportionately with the globalisation that service industries have experienced during

the past decade. Meetings, conventions and exhibitions have greatly benefited from

the rapidly changing political, economic, social and business environment. Although

the growth of economic communication networks has taken over from the traditional

print media, face-to-face communications for marketing, networking and general

communication purposes are still the preferred channels. Following is a description of

the main categories of the meeting and convention market (see Schlentrich, 1999):

- Associations can be broadly classified into the following categories: trade and professional associations, government organisations, labour unions, scientific and medical associations, avocational associations and charitable associations. Each one of these associations has special meeting requirements in terms of function and exhibition space, food and beverage, and entertainment. Major association meetings require long lead times and are often held on a rotating basis in different geographic locations. Attendance at association meetings is voluntary and, as such, it is critical that the programme content, the selected destination and the venue appeal to the membership.

- SMERF is a subset of the association market and stands for social, military, educational, religious and fraternal organisations. The majority of functions sponsored by these organisations are individually paid for by the meeting participant and usually involve spouse or family participation. Meeting participants are usually price conscious. SMERF functions are usually held on weekends during the off-season and are regarded by hotels and convention venues as good 'filler' business.

- Corporate meetings represent one of the major meeting sectors. As a result of privatisation, mergers and globalisation, the corporate meeting market has expanded rapidly during the last decade. Corporate meetings can take on many different forms. A survey by Meetings and Conventions Magazine (1996) identified the types of meetings corporations hold most frequently as management meetings, training seminars, marketing and sales meetings, shareholder and board of director meetings. Attendance at corporate meetings are mandatory and meetings are held with shorter lead times than association meetings.

- Incentive travel is an important subset of corporate group business. It has long been recognised by companies as an effective motivational tool for rewarding the outstanding performance of employees and management. Meeting planners and incentive travel organisers seek venues (hotels, cruise ships or country estates) that offer high quality facilities and services in order to create a memorable experience for their customers. Almost all incentive travel includes some form of special entertainment, themed food and beverage functions, and either spectator or participative events.

- Exhibitions and trade fairs may be organised by trade or professional organisations, exhibition centres, exhibitors themselves, and private or public companies. Trade shows are so successful because they unite under one roof during a limited period of time (usually three to five days) exhibitors and buyers from different parts of the world, thus making them a cost-effective marketing and sales vehicle. Trade fairs are usually held during the same period and in the same location each year. Exhibitions are increasingly held in conjunction with the annual meeting of associations and are used as an important source of additional income for associations.

The convention, exhibition, meeting and incentive markets make a significant economic contribution to the tourism industry in general and the hotel industry in particular. The Union of International Associations has records of international conferences being staged in 187 countries in 1996 (Rogers, 1998, p.80). A study by the consulting firm Deloitte and Touche in 1993 concluded that the economic impact of conventions, exhibitions, meetings and incentives in the USA totalled $82.8 billion

in direct spending and represented 36% of hotel industry operating revenue (Crouch and Ritchie, 1998). Accurate statistics for the rest of the world are not available, but it is estimated that the remaining G7 countries generate between $40 and $65 billion in the meeting market segment per year (Schlentrich, 1996). A survey of 2,000 hotels in America conducted by PKF Consulting (1997) found that meeting planners were increasingly generating more business for 40% of the surveyed hotels. In terms of profitability and the ultimate financial success of a hotel, it is imperative that management fully understands this market's structure, buying centres, venue and service requirements (Schlentrich, 1999, p.150). However, the meeting industry represents one of the least understood market segments of the hospitality industry and very little academic research has focused on this industry (Crouch and Ritchie, 1998, p.49). Figure 1.3 depicts the functional inter-relationships between the external environment, relevant stakeholders and the internal operational environment, including reporting relationships with the meeting market (with front and back of the house functional structure).

## The meeting planner

The meeting planner acts primarily as an intermediary who facilitates the transfer of services or information between the 'client' (the association or corporation sponsoring the meeting) and the 'venue' (the hotel), and thus plays an instrumental role in the venue selection and evaluation process (see, for example, Kotler *et al*, 1996, p.172; Maister and Lovelock, 1982, p. 20). It is difficult to define precisely all the job titles of those responsible for planning corporate or association meetings. The two major categories of meeting planners are (1) those who hold in-house corporate or

**Figure 1.3  Functional inter-relationship model**



External
Environment
Economic
Political
Social
Legal

Industry
Environment
Corporate
Operating
Technological
Competitive
Suppliers
Alliances

Sales and
Operating
Services

Admini-
stration

Customers
(meeting
planners)

Contract
Services

Public
Services,
Supplier
Support

Internal
Environment
Customers
Community
Banks
Unions
Shareholders
Board
Employees

Front of the House          Back of the House

association positions (for example, corporate travel manager, in-house corporate meeting planner or association meeting planner), and (2) those who offer such a service externally to the corporation or association (for example, travel agents or freelance meeting planners). A great number of meetings are also booked directly by corporate operating departments, such as human resources or marketing. Although meeting planners are not the end-users of the service, they are 'customers' in the sense that they are the influencers, decision-makers or buyers of the offering (see, for example, Bennington and Cummane, 1998, p.396). Meeting planners coordinate approximately two-thirds of conventions and trade shows (Judd, 1995). However, little research has been done in the area of intermediaries in a service context and research in this area is much-needed (Mehta and Durvasula, 1998, p. 40; Parasuraman, 1998, p. 309).

## Convention Service Manager

Previously, meeting planners were required to be in contact with various hotel department heads, such as the front office manager, concierge, food and beverage manager, head housekeeper, and so on. However, in order to provide a more reliable and responsive service offering to meeting planners, hotels are increasingly assigning a single hotel representative, sometimes called the Convention Service Manager (CSM), to coordinate the very complex and diverse requirements that meeting planners often have. Once a meeting has been booked, it is the responsibility of the CSM to coordinate all the requirements of the function with the meeting planner. The CSM must therefore have an intimate knowledge of the hotel's facilities and how the operating departments of the hotel function. Typically, the CSM has the authority and

responsibility for determining strategy and tactical details of a meeting or convention during the time it is in the hotel. Some of these responsibilities include, for example, working with the director of marketing and the director of sales to develop and implement programs, maintaining records of meetings, co-ordinating with the hotel's department heads to ensure that all plans are followed, checking daily on the function, and scheduling a post-event review session with the meeting planner (see Montgomery and Rutherford, 1994). Furthermore, the CSM must have the ability to work in a professional and cooperative manner, be detail oriented, be able to handle stress, and have the authority to handle last minute changes which will impact the various departments of the hotel.

This new organisational hotel structure has proved useful in the development of longer term relationships based on commitment and trust (Bowen and Breiter, 1998, p.4). In a study investigating the interaction between meeting planners and hotel employees, Rutherford and Umbreit (1993, p.77) found that no one was more important during an event than the Convention Service Manager. In case after case, meeting planners stated that it was the knowledge and professionalism of that key staff member which made the difference between success and disaster.

The typical relational structure between the meeting planner (intermediary), the meeting client (sponsor), and the venue (hotel or convention centre) as well as the key sequential stages (such as meeting planning, the buying process, the delivery function and the overall client evaluation of the consumption process) is represented in Figure 1.4. The relationship between the hotel industry and the meeting industry is a complex

.

## Figure 1.4 Meeting planning flow-chart

| Sponsor (Corporation/ Association) | Intermediary (Meeting Planner) | Venue (Hotel) |
|---|---|---|

| Objectives of Meeting | Meeting Planner Functions | Venue Selection Process |
|---|---|---|

| Development Of Conference Programme | | Hotel Negotiations |
|---|---|---|

| Meeting Planner ⟺ Conference Service Manager |
|---|

| The Delivery Process |
|---|

| Post Consumption Evaluation |
|---|

| Outcomes |
|---|
| • Satisfied / Dissatisfied |
| • Retained / Defected |
| • Committed / Uncommitted |

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one, and meeting planners, although they are not end users, represent an important target market of hotel customers.

## The service/product relationship

Although service industries have been the dominant force in the more affluent nations for the past fifty years, it is only within the past thirty years that researchers and practitioners alike have come to the conclusion that both management and marketing tasks in the service sector differ from those in manufacturing in several important aspects. The traditional management approach originated in manufacturing and has its roots in the industrial area of economics of scale. Efficient utilisation of product resources, capital and labour were regarded as the driving forces in the creation of company value. Management style was largely hierarchical and involved the controlling and allocation of these resources. However, in service dominated industries, although the production process also often involves physical resources (such as hotels, hospitals, restaurants and educational institutions), the focus is on the service production process in which the customer becomes the focal point.

The unique characteristics that are commonly accepted as distinguishing services from goods are intangibility, inseparability of production and consumption, heterogeneity and perishability (Berry, 1980; Shostack, 1977; Zeithaml and Bitner, 2000, p.12). In the following sections, these characteristics of services are applied to the meeting market segment of the hotel industry.

## Intangibility

The relationship between goods and services runs on a continuum between intangibility and tangibility. Nearly all industries have some service element and nearly all services have some product element. This is particularly true in the hotel industry which has a high investment in physical plant but which is also highly labour intensive. Figure 1.5 demonstrates the overlap between products and services in a full-service conference hotel.

## Figure 1.5 The service-product relationship in a conference hotel



**Product (Tangibles)**

**Service (Intangibles)**

| ↑ | ↑ | ↑ | ↑ | ↑ |
|---|---|---|---|---|
| Meeting Rooms | Meeting Breaks | Food Service | Check-in Check-out | Convention Services |
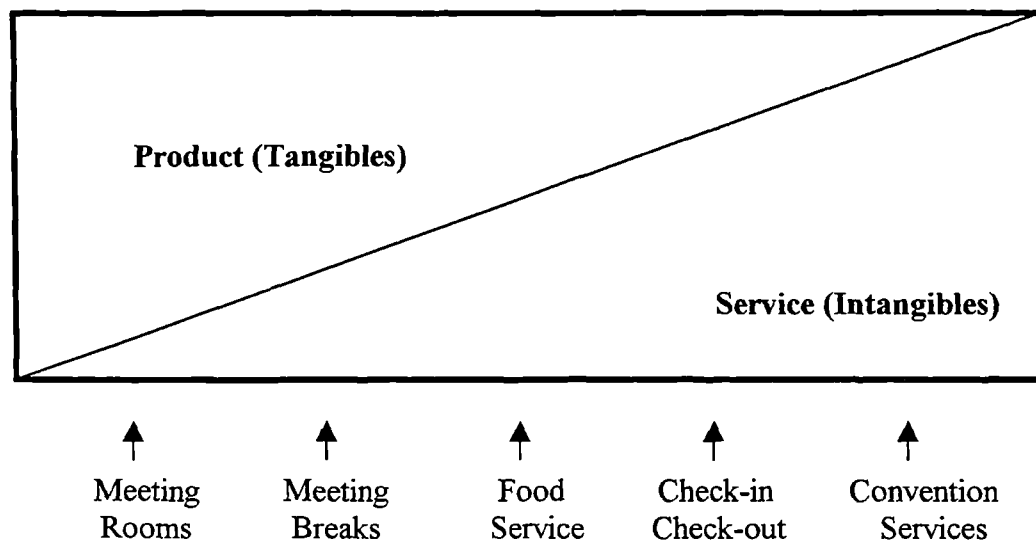
Products, such as hotel facilities and amenities, can be inspected and evaluated prior to purchase. Most services, on the other hand, such as meeting activities or post-event review sessions, cannot be inspected prior to consumption. The risk associated with the purchase of services is therefore considered to be substantially higher (Zeithaml, 1981). Customers place credence in the promises made by sales staff or service

operators in the hope that promises will be met during the consumption process (Bitner, 1995).

## Inseparability

Many services require the customer to enter the 'service factory'. The hotel's service factory is divided into the production element, commonly referred to as 'back-of-the-house' (BOH) and the service delivery process, commonly referred to as 'front-of-the-house' (FOH). Increasingly, service providers are moving aspects of the back-of-the-house to the front-of-the-house in order to (1) increase levels of productivity by involving the customer in the service process (for example, self-service meeting break stations), (2) increase levels of efficiency (for example, by automating check-in and check-out of convention participants), and (3) improve employee attitude and relationship with the customer (for example, by having back-of-the-house staff participate in the process of conference programme development). It is in the front-of-the-house that the critical interface, often referred to as the 'service encounter' (Bitner, 1990), between customer, service provider and the service process occurs.

## Heterogenity

Heterogeneity refers to the variability that is an integral part of the service process. Each customer is unique, each employee is unique and each service encounter is unique. Many different employees may be in contact with an individual customer, raising a problem of consistency of behaviour (Langeard *et al*, quoted in Zeithaml, 1985, p.34). In addition, events outside the control of the service provider often have a

strong influence on the customer's perception of the service process, for example, customers' prior experiences (Boulding *et al*, 1993).

Standardised operating procedures are one means of attempting to introduce more consistency into the delivery of services. Unfortunately, in the hotel industry operating procedures are usually developed without the involvement of front-line staff with the result that they can often be cumbersome, impractical and irrelevant. In addition, management's focus on short-term results and lack of concern for front-line staff often results in poor pay, unpleasant work conditions and high labour turnover (Wood, 1994). Some aspects of the meeting service process can be standardised but, in general, the meeting planner will customise each event to the specific client. To further complicate the issue, this process of customisation involves many different hotel departments (for example, purchasing, housekeeping, food and beverage, engineering, security, accounting, front office) as well as external subcontractors (for example, musicians, florists, decorators, translators, transportation) thus requiring excellent communication, collaboration and timing.

## Perishability

Services cannot be inventoried. If a day goes by and a hotel room or a meeting room is not used, the lost revenue for that day cannot be recaptured. In view of a hotel's relatively high fixed costs, it is essential that the hotel operate at maximum occupancy levels. Traditionally, hotels have focussed on the acquisition of new customers and relatively little effort has been exerted to increase the retention rate and commitment level of the existing customer base. Depending on location, four-to-five star hotels

usually operate at an occupancy level of 55-75% (Smith Travel Research, 1998),

which indicates that an opportunity exists to increase the use of their perishable

commodity.

While serving in an executive capacity at Hilton International Hotels and later at

Stakis Hotels, the researcher investigated the occupancy level of function rooms and at

that time found them to be surprisingly low (Hilton was 36% and Stakis 28%).

Considering the high capital costs for the building and equipping of the function

spaces and the required support facilities (kitchens, storage and technical areas),

targeted marketing and service strategies were put into place in order to increase the

occupancies of these facilities. Customer research at that time indicated that the

service and product offerings in these hotel companies did not provide sufficient

differentiation from the competition to create a significant competitive advantage.

Furthermore, many of the service and product offerings did not conform to customer

requirements. This experience of identifying the features that would indeed generate

such a point of differentiation in the minds of customers and thereby increase

customer commitment and achieve a significant competitive advantage became a focal

point of interest for the researcher and an impetus for the current study.

## The research setting

Four to five star hotels were selected for this study because they are able to provide

the full range of products and services that meeting planners require and therefore are

the preferred venue for meetings and conventions. The five star hotel segment includes

brands such as Four Seasons, Ritz-Carlton, Savoy and Mandarin Oriental as well as

luxury independents affiliated with membership organisations such as Preferred Hotels & Resorts Worldwide. The four star segment consists of brands with slightly lower service levels, less extensive amenities and lower average room rates than the five star segment. This segment typically caters to business travelers and convention and meeting groups. Marriott, Sheraton, Hyatt and Hilton dominate this segment (Bear Stearns, 1997, p.67-68).

## In conclusion

Service industries today are characterised by increasing levels of globalisation, industry consolidation, and customer demands for improved quality and value (Parasuraman, 1998, p.309). In this competitive service industry environment, service providers and marketers need to focus not only on the development of strategies for acquiring new customers but also on developing strategies for improving the level of retention and commitment of their existing customer base. The aforementioned changes in the service industry coupled with the increasingly competitive environment make it imperative for service providers to understand and respond to customer needs and the underlying factors that lead to their satisfaction and loyalty. New models to analyse services oriented industries and to reflect changing customer perceptions therefore need to be developed (Chase and Heskett, 1995). The primary purpose of the current research is to develop and test such a model.

The meeting market of the hotel industry is a complex one in which many diverse factors play important roles. Cross-functional thinking is required, calling for inter-disciplinary research. In accordance with the preceding discussion, it was felt that the

meeting market segment of the 4 and 5 star hotel industry lends itself well to such an undertaking.

## CONTRIBUTION OF THE STUDY

It is anticipated that, as a result of this study, there will be an increased understanding of the role of customer perceived value and customer satisfaction in the development of customer commitment and loyalty, especially in the important meeting market in four-to-five star hotels.

Specifically, it is anticipated that this study will help provide:

1.  confirmation of the behaviours and attitudes of committed customers;

2.  identification of potential areas of opportunity for enhancement of the hotel industry's offering (value proposition) to the meeting market;

3.  an increase in the hotel industry's understanding of the drivers of customer commitment in the meeting market; and

4.  clarification of the relationship between customer commitment, customer satisfaction and customer perceived value.

## MODEL OF CUSTOMER LOYALTY

Figure 1.6 represents an integrated model of customer loyalty. The model is a post-consumption evaluation by the customer of a firm's value proposition (customer benefit and cost considerations) and its impact on their overall level of satisfaction and commitment. Whereas at the pre-purchase stage, the focus of the customer is on a

**Figure 1.6 Model of customer loyalty**



Value to Company

Company Benefits → Company Costs

Truly Loyal Customer (committed) → Spuriously Loyal Customer (uncommitted)

Retained Customer → Defected Customer

Customer Satisfaction ← Customer Perceived Value

Customer Benefits ← Problem Resolution ← Customer Costs

Product Quality | Service Quality | Relationship Quality | Extra Benefits | Direct Costs | Indirect Costs

23
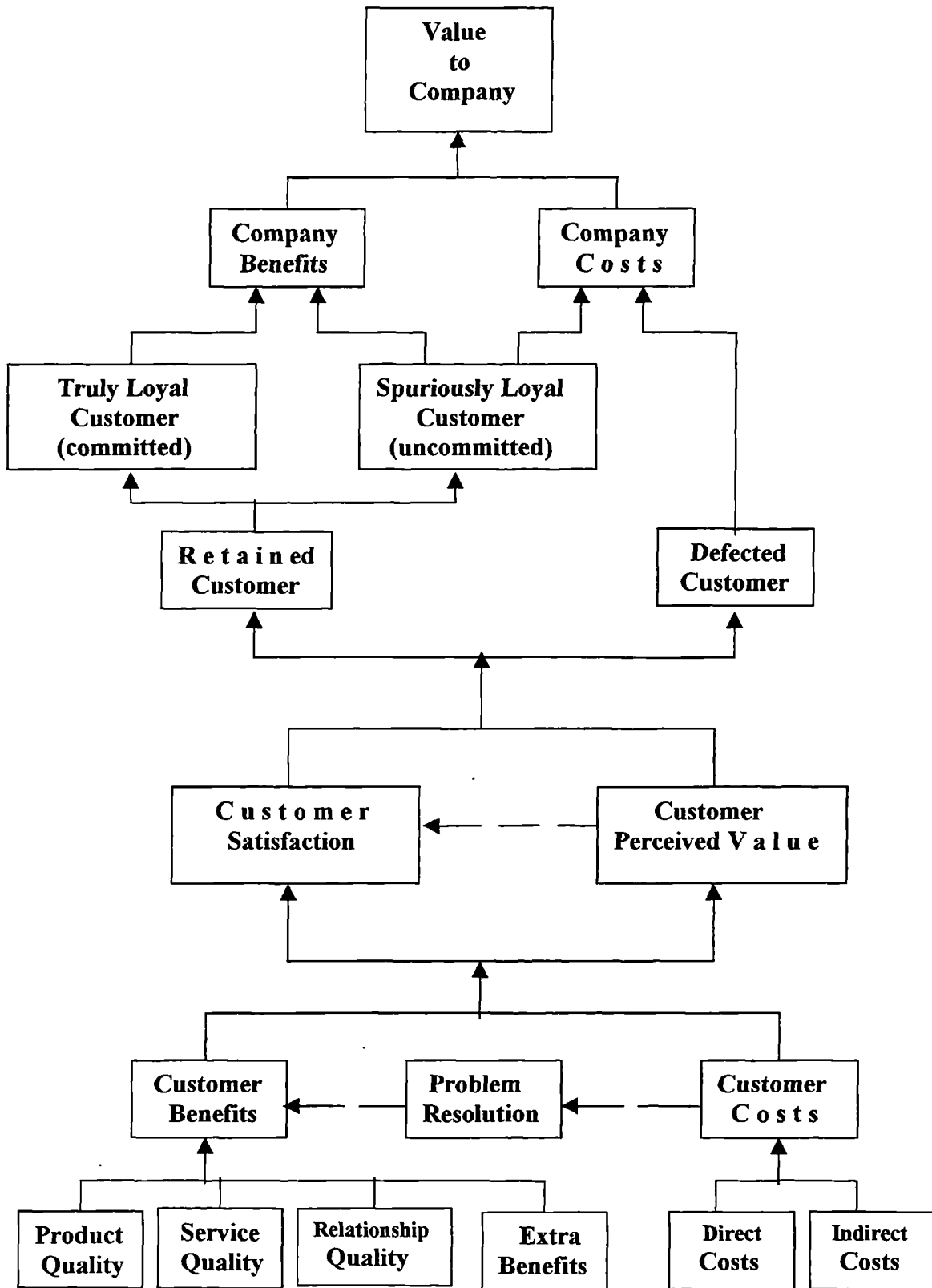
choice between alternative offerings, at the post-consumption stage the focus is on an evaluation of the performance of the chosen alternative (Liu, 1998, p.8; Spreng, Dixon and Olshavsky, 1993, p.50; Woodruff, 1997, p.141). According to previous research, in a post-consumption situation, the customer has gained first-hand experience with the firm's offering and is therefore less influenced by extrinsic cues such as the competitive environment and marketing communication (Patterson and Spreng, 1997, p.417). As this is a post-consumption model of the customer's evaluation of the perceived performance of the chosen alternative, the consideration of these factors is not included. The model draws on previous work in the areas of customer loyalty (commitment), customer satisfaction and customer perceived value, and evolved out of personal experience in the field as well as an extensive literature review.

## ORGANISATION OF THE STUDY

This thesis is organised into five chapters. The first chapter provides an introduction to the conceptual domain and establishes the objectives of the research. An integrated post-consumption conceptual model of customer loyalty is presented. Chapter Two contains a literature review in the areas of customer loyalty and commitment, customer satisfaction, customer perceived value, and the antecedents of satisfaction and value (product quality, service quality, relationship quality, extra benefits, problem resolution and customer costs). Construct definitions underlying the proposed framework and research hypotheses are provided. Chapter Three describes the research methodology, including the sampling plan. Chapter Four presents the research findings. Chapter Five presents concluding remarks with future research and managerial implications.

# CHAPTER 2: LITERATURE REVIEW AND HYPOTHESES

This thesis focuses on customer loyalty and the related concept of customer commitment, which is viewed as the attitudinal dimension of customer loyalty. This thesis attempts to determine the relationship between customer commitment, customer satisfaction and customer perceived value, and which specific attributes of a company's offering have the greatest impact on levels of customer commitment. The purpose of the literature review is to examine relevant research in areas that are related to and underlie the concepts of customer loyalty and commitment. The literature review is divided into four sections that present and synthesise prior research in the areas of:

1. customer loyalty (e.g. Bowen and Shoemaker, 1998; Dick and Basu, 1994; Reichheld, 1996a, 1996b) and customer commitment (e.g. Gundlach, Achrol and Mentzer, 1995; Morgan and Hunt, 1994);

2. customer satisfaction (e.g. Fornell, Johnson, Anderson, Cha and Bryant, 1996; Oliver, 1980, 1997; Spreng, MacKenzie and Olshavsky, 1996);

3. customer perceived value (e.g. Holbrook, 1994; Patterson and Spreng, 1997; Zeithaml, 1988); and

4. the antecedents of value and satisfaction, including

    a. product quality (e.g. Bitner, 1992; Dube, Enz, Renaghan and Siguaw, 1999; Garvin, 1984; Turley and Fugate, 1992),

    b. service quality (e.g. Gronroos, 1984, 1990a; Schlesinger and Heskett, 1991; Shostack, 1977; Zeithaml, Berry and Parasuraman, 1996),

    c. relationship quality (e.g. Berry, 1983, 1995a; Bendapudi and Berry, 1997; Gronroos, 1997; Morgan and Hunt, 1994),

d. extra benefits (e.g. Dowling and Uncles, 1997; O'Brien and Jones, 1995; O'Malley, 1998),

e. problem resolution (e.g. Hart, Heskett and Sasser, 1990; Johnston, 1995; Smith, Bolton and Wagner, 1999; Tax, Brown and Chandrashekaran, 1998), and

f. customer costs (e.g. Dodds, Monroe and Grewal, 1991; Oh, 1999).

The literature review provided the theoretical basis for the development of the post-consumption model of customer loyalty (see Figure 1.6). At the end of each section is a statement of the research hypotheses. There are many factors other than customer loyalty that impact the ultimate profitability of a company, such as the competitive environment, economic conditions and technological advances; however, they are outside the scope of this thesis.

## SECTION ONE: CUSTOMER LOYALTY AND COMMITMENT

The first section of the literature review provides a theoretical framework underlying the concepts of customer loyalty and commitment, and includes a discussion of customer loyalty, customer defection and customer retention, the dimensions of customer loyalty, a definition of customer loyalty, and the benefits to a company of loyal customers.

### Introduction

Marketers have struggled to understand the concept of customer loyalty and how best to pursue the goal of building and sustaining it (Brierly 1994 as cited in Pritchard and

Howard, 1997, p.2). Dick and Basu (1994, p.99 and p.111) describe loyalty as 'a construct that is undergoing a maturation process striving for theoretical legitimacy and practical usefulness' and a 'complex phenomenon that warrants a more multi-faceted conceptualisation than has been attempted previously'. Evidence from the Service Profit Chain, a study of how leading companies link profit and growth to loyalty, satisfaction and value, suggests that one of the strongest relationships in the chain is between customer loyalty and profit (Heskett, Sasser and Schlesigner, 1997, p.12).

## Customer defection

According to McKinsey & Co., losing a customer is an economic catastrophe (Leszinski, Weber, Paganoni and Baumgartner, 1995, p.124). Yet the average American company loses 15 to 20 percent of its customers each year (Griffin, 1995, p.11). A retained customer automatically generates business, but a customer defecting from a company takes the business stream along to a competitor, possibly resulting in years of lost revenue (Chakrapani, 1998, p.7). In order just to maintain market share, these lost customers must be replaced. Recent research has demonstrated that it can be four to ten times more costly to replace an existing customer than to gain a new one (Wells, 1993a; Murphy, 1997; Reichheld and Sasser, 1990). It has therefore been suggested that marketing resources may be more profitably spent on the retention and development of the existing customer base (*defensive marketing*) than on the acquisition of new customers (*offensive marketing*) (Aaker, 1992a, p. 214; Fornell and Wernerfelt, 1987; Reichheld, 1996a).

In an often-quoted study of banking, insurance and auto-service firms by Reichheld and Sasser (1990, p.105) it was demonstrated that, as a result of the profit from increased purchases and higher balances of repeat customers, reduced operating costs, referrals and being able to charge a price premium, a 5% increase in customer retention can boost profits by almost 100%. The luxury hotel company, Ritz-Carlton, has 100% customer retention as one of its foremost strategic goals (Partlow, 1993, p.21).

## Loyalty versus retention

In the marketing literature, the terms customer loyalty and customer retention are often used interchangeably or as surrogates for one another with no distinction made between the two constructs (e.g. Boulding, Kalra, Staelin and Zeithaml, 1993; Fornell, 1992; Heskett *et al* 1994, p.170; Liljander and Strandvik, 1995, p.142; Liu, 1998, p.1; Maloles, 1997, p.17; Storbacka, Strandvik and Gronroos, 1994, p.23). The result is much confusion and misunderstanding. Customers may continue to purchase from a company for many reasons other than loyalty, such as convenience, habit, or lack of alternatives (Bitner, 1990, p.80) and thus may appear to be loyal but, in reality, may be merely retained. Mere customer retention, without the accompanying positive attitudinal dimension of commitment, is not equivalent to customer loyalty. While all committed customers are retained customers, not all retained customers are necessarily committed. An important goal, therefore, is to try to find out what makes customers more committed (Liljander and Strandvik, 1995, p.163).

Many outcomes of customer loyalty have been noted in the literature, such as positive word of mouth, increased share of wallet and less price sensitivity (Bendapudi and Berry, 1997; Bowen and Shoemaker, 1998; Reichheld, 1996b; Zeithaml, Berry and Parasuraman, 1996) which are not outcomes of mere customer retention. If a customer is retained as a result of high exit barriers or switching costs or by a lack of available alternatives and is not satisfied, the outcomes for a firm of such a customer may not be positive and may, in fact, even be quite negative (such as negative word of mouth, extreme complaining behaviour and minimum share of wallet) (Jones and Sasser, 1995, p.97). Many researchers have investigated the antecedents of customer retention (often operationalised as 'behavioural intentions' or 'repurchase intentions') (e.g. Anderson and Sullivan, 1993; Fornell, 1992; Liu, 1998; Maloles, 1997; Taylor and Baker, 1994; Zeithaml, Berry and Parasuraman, 1996); however, for the reasons listed above, the aim of this research is to investigate the antecedents of customer loyalty (and, specifically, customer commitment which is deemed to be the atittudinal dimension of customer loyalty) rather than customer retention.

## The dimensions of customer loyalty

In a study by Jacoby and Chestnut (1978), 53 different measures of loyalty from more than 300 articles were reviewed (cited in Blackwell, 1998, p.22). These measures included behavioural dimensions, attitudinal dimensions, or a combination of behavioural and attitudinal dimensions. However, a one-dimensional conceptualisation of loyalty as either repeat purchase behaviour (a behavioural dimension) (e.g. Liljander and Strandvik, 1995, p.151) or as behavioural intentions (an attitudinal

dimension) (e.g. Zeithaml, Parasuraman and Berry, 1996) has been dominant in the literature (Morgan and Hunt, 1994, p.23; Soderlund, 1998, p.174).

Despite the predominant conceptualisation of loyalty as a one-dimensional construct, many recent definitions have included both a behavioural and an attitudinal dimension (Dholakia, 1997, p.381). According to O' Malley (1998, p.49):

> It seems that neither attitudinal nor behavioural measures *on their own* are sufficient to explain or define loyalty. This is important for managers, as it suggests that existing measures of loyalty may be seriously flawed, and thus strategies developed on the strength of such measures may be inadequate.

Day (1969) was the first to conceptualise loyalty as a two-dimensional construct with an attitudinal and a behavioural component. In a seminal study by Dick and Basu (1994), the authors adapted Day's 2-dimensional conceptualisation of loyalty. They defined loyalty as the strength of the relationship between relative attitude and repeat patronage. They criticised previous one-dimensional conceptualisations of loyalty as capturing only the static outcome of a dynamic process with no attempt to understand the factors underlying repeat purchase (Dick and Basu, 1994, p.100).

## Behavioural dimension

There has been considerable confusion in the marketing literature concerning the behavioural dimension of loyalty, particularly with regard to the phrase 'behavioural intentions'. Because this phrase links the word 'behavioural' with the word 'intentions', researchers have sometimes mistakenly identified intentions as a behaviour rather than

as an attitude (e.g. Hallowell, 1996; Liljander and Strandvik, 1995, p.143-144). In this

thesis, the behavioural dimension of customer loyalty is defined as *actual* behaviour

(repeat purchase), not behavioural *intentions*. Researchers have called for the inclusion

of *actual* customer behaviour in future loyalty research (Storbacka, Strandvik and

Gronroos, 1994, p.21; Zeithaml, Berry and Parasuraman, 1996, p.44).

## Attitudinal dimension

Researchers have argued that, in order to be truly loyal, customers must not only

exhibit actual repeat purchase behaviour but, in addition, must also hold a favourable

attitude towards a company's offering (Day, 1969; Dick and Basu, 1994; Nguyen and

LeBlanc, 1998, p.56; Pritchard and Howard, 1997, p.3). The attitudinal component of

customer loyalty denotes a strong internal disposition by the customer (Blackwell,

1998, p.24). Because a behavioural dimension fails to explain how and why customer

loyalty occurs, it is insufficient on its own to conceptualise customer loyalty (Bloemer

and de Ruyter, 1998, p.500). An attitudinal dimension must therefore be included in

order to provide a more complete conceptualisation.

Whereas loyalty is often defined as a composite measure consisting of both a

behavioural and an attitudinal dimension, commitment is usually considered in

attitudinal terms alone (Pritchard, Havitz and Howard, 1999, p.334). Researchers have

proposed that commitment represents the attitudinal component of customer loyalty

and that commitment is a necessary condition in order for loyalty to occur (Bloemer

and de Ruyter, 1998, p.500; Bloemer, de Ruyter and Peeters, 1998, p.277; Pritchard

and Howard, 1997). The very term loyalty implies commitment rather than just

repetitive behaviour such as repeat purchase (Assael, 1992, p.89; Schulz, 1998, p.11). The concept of commitment has been proposed as central to the definition of loyalty (Oliver, 1997, p.392):

> *Customer loyalty* is a deeply held commitment to rebuy or repatronize a preferred product or service consistently in the future, *despite* situational influences and marketing efforts having the potential to cause switching behavior.

Although they emanate from different research traditions, the concepts of commitment and loyalty are very closely related (Liljander and Strandvik, 1995, p.151; Gundlach *et al*, 1995, p.79). In the industrial marketing literature, the concept of commitment has been defined primarily in terms of the relationship between a manufacturing firm and its suppliers. *Relationship* commitment has been variously defined as an enduring intention by the parties to develop and maintain a stable long-term relationship (Gundlach *et al*, 1995, p.79), the parties' intention to act and their positive attitudes to each other (Liljander and Strandvik, 1995, p.151), and an implicit or explicit pledge of relational continuity between the exchange parties (Dwyer, Schurr and Oh, 1987, p.19).

In the services marketing literature, commitment has also been defined primarily in terms of *relationship* commitment, for example, as the attitudinal intention to continue the relation (Liu, 1998, p.33) or an enduring desire to maintain a valued relationship (Moorman, Zaltman and Deshpande, 1992; Morgan and Hunt, 1994, p.23) This enduring aspect of commitment has also been identified as 'resistance to change' (Pritchard *et al*, 1999, p.337).

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Two primary characteristics of commitment emerge from the previous discussion, namely that it is an enduring attitude and a favourable attitude. Customer commitment is therefore defined as a *customer's enduring favourable intention towards a firm*. As used in this thesis, customer commitment refers to the commitment of the customer to the total offering of a company, rather than commitment only to a relationship, and is considered to represent the attitudinal dimension of customer loyalty.

## Temporal dimension

The temporal dimension is often assumed but not explicitly stated in conceptualisations of customer loyalty. However, Bloemer and de Ruyter (1998, p.500) include the words 'over time' in their definition of store loyalty, and Gundlach *et al* (1995, p.79) include a temporal component in their definition of customer commitment. Customers cannot be said to be truly 'loyal' if they have only purchased once in the past and do not intend to purchase in the future. Therefore, the dimension of time, both past and future, is essential to the concept of loyalty and is included as the third dimension.

## A customer loyalty matrix

Dick and Basu (1994) developed a matrix of customer loyalty based on its attitudinal and behavioural dimensions. The authors view both relative attitude and repeat patronage on a continuum from low to high leading to four types of customer loyalty (see Figure 2.1). In an empirical study of travel service patrons using the Dick and

Basu loyalty matrix, Pritchard and Howard (1997) confirm that that these four types of

loyalty proposed in theory actually exist in practice.


## Figure 2.1 Relative attitude-repeat patronage matrix

**Repeat Patronage**

|  | High | Low |
|---|---|---|
| **High** | True Loyalty | Latent Loyalty |
| **Low** | Spurious Loyalty | No Loyalty |

**Relative Attitude**

Source:  Dick and Basu (1994) "Customer Loyalty: Toward an Integrated Conceptual Framework,"
*Journal of the Academy of Marketing Science*, p.101


## No loyalty

The first type of customer loyalty is called 'no loyalty', which is a combination of low

relative attitude and low repeat patronage. Customers with no loyalty have a low or

non-existent level of commitment to a firm and have a low or non-existent level of

repurchase. Typically, customers in this category either perceive no distinct

competitive advantage with the offering of the firm, or the offering is in an area of

little importance to the customer.

# Spurious loyalty

The second type of loyalty is called 'spurious loyalty', which is a combination of low relative attitude and high repeat purchase. Customers in this category have a low or non-existent level of commitment to the firm but a high level of repurchase. It has been suggested that, in the absence of a high level of commitment, a high level of repurchase can be attributed to some of the following factors: time or money constraints, lack of alternatives or high switching costs (Bitner, 1990, p.80; Liljander and Strandvik, 1995, p.157). Other researchers have called this category 'inertia loyalty' (Assael, 1992; Griffin, 1995, p.23; O'Malley, 1998, p.50), a situation in which customers repurchase out of convenience, familiarity, habit or lack of motivation.

Additionally, customers may appear to be loyal because there is a high level of repeat purchase due to some incentive, such as a frequent flyer or frequent guest programme (Donaldson, 1995, p.114). In reality, however, these customers may only be 'loyal' to the loyalty programme and not to the firm itself (Bolton, Kannan and Bramlett, 2000, p.106; Dowling and Uncles, 1997, p.75; McCleary and Weaver, 1991, p.45; O'Malley, 1998, p.52).

The existence of various bonds between a company and its customers is another potential source of spurious loyalty. Liljander and Strandvik (1995, p.152-154) outline ten types of bonds that can tie a customer to a company: legal, economic, technological, geographical, time, knowledge, social, cultural, ideological and psychological. Along similar lines, Berry and Parasuraman (1991, p.136-142) proposed a framework of retention strategies based on the development of financial,

social and structural bonds between a company and its customers. Usually, the purpose of a company employing these strategies is to increase the customer's dependence on the company, either by increasing the customer's costs in switching to another company or by erecting exit barriers (Bendapudi and Berry, 1997, p.32; Griffin, 1995, p.146). Customers may then be maintaining the relationship with the company because of constraints (they 'have to'), rather than because they are dedicated or committed (they 'want to') (Bendapudi and Berry, 1997, p.15).

Spurious customer loyalty can also develop as a result of a company's use of price promotions. The use of this strategy has 'brought to light, perhaps even created, a segment of chronic switchers, who routinely shop for the lowest price' (O'Brien and Jones, 1995, p.77). Customers who respond only to price seldom become truly loyal customers (Griffin, 1995, p.7).

Customers with spurious loyalty can be very vulnerable to switching. As mentioned previously, a retained customer is not necessarily a loyal customer, and if the customer's attitude level is low despite repeat purchase, s/he is often very open to switching when presented with the opportunity (Oliver, 1997, p.403). Researchers have warned against attempting to build customer loyalty mainly through the development of loyalty programmes, customer bonds and high switching costs apart from the development of a coherent value proposition (Dowling and Uncles, 1997; O'Brien and Jones, 1995; O'Malley, 1998; Sisodia, 1992, p.59). When customers are retained primarily due to constraints against leaving, the customers will leave as soon as the constraints no longer apply (Bendapudi and Berry, 1997, p.28).

A lack of conceptual distinction in the literature between retention and loyalty has resulted in researchers proposing that switching barriers can be a *cause* of loyalty (see Fornell, 1992, p.12). However, as the preceding discussion demonstrates, switching barriers can be a cause of customer retention and they can also be a cause of spurious loyalty, but switching barriers cannot be a cause of true loyalty, a state in which customers have a high level of repeat purchase *not* as a result of constraints but as a result of a high level of commitment to a firm.

## Latent loyalty

The third type of loyalty is called 'latent loyalty', which is a combination of high relative attitude and low repeat purchase. Customers in this category have a high level of commitment to a firm but a low level of repurchase. This is often due to situational factors having a stronger influence than high relative attitude on customer's behaviour (Dick and Basu, 1994, p.102; Griffin, 1995, p.24; O'Malley, 1998, p.50). 'Situational factors' could be obstacles to patronage such as lack of continuous availability, inefficient channels of distribution, inconvenient locations or hours of operation.

## True Loyalty

The last type of loyalty is called 'true loyalty', 'real loyalty' (Schulz, 1998, p.11), 'premium loyalty' (Griffin, 1995, p.24), or 'sustainable loyalty' (O'Brien and Jones, 1995, p.75; O'Malley, 1998, p.50), which is a combination of high relative attitude and high repeat purchase. Customers in this category have a high level of commitment and a high level of repurchase over time. True loyalty is the focus of this thesis.

## Definition of customer loyalty

In accordance with the preceding literature review, it is proposed that customer loyalty

is comprised of three dimensions: a behavioural dimension (actual repeat purchase),

an attitudinal dimension (an enduring favourable intention), and a temporal dimension

(in the past/ in the future). 'Actual repeat purchase' is operationalised as customer

retention, and 'an enduring favourable intention' is operationalised as customer

commitment (Figure 2.2). Customer loyalty is therefore defined as *a series of actual*

*repeat purchases in the past accompanied by a commitment to continue purchasing in*

*the future.* Expressed as a formula:

$$LOYALTY = \frac{retention + commitment}{time}$$

## Figure 2.2 Dimensions of customer loyalty

| Dimensions of Customer Loyalty |
| --- |
| **Behavioural**<br>repeat purchase (retention)<br><br><br>**Attitudinal**<br>enduring favourable intention (commitment)<br><br><br>**Temporal**<br>in the past/in the future (over time) |
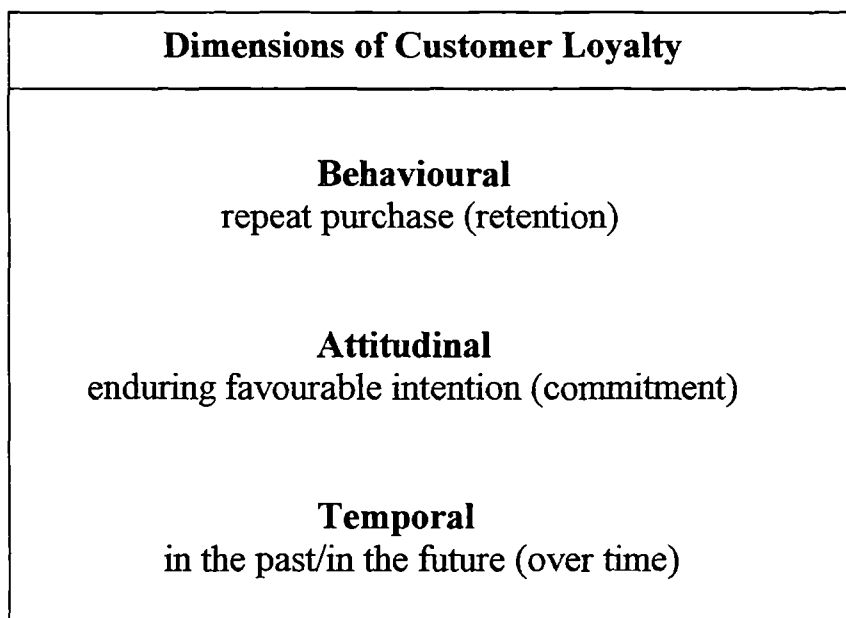
## Outcomes of customer loyalty

Several researchers have investigated the benefits to a company of loyal customers. Reichheld (1996a, p.43-49), for example, found that loyal customers tend to spend more over time, learn to be more efficient, recommend the business to others, and are willing to pay a price premium. Bowen and Shoemaker (1998, p.20-23), in a study of the business guests of luxury hotels, found that loyal guests said positive things about the hotel to others, provided information to the hotel, were less price sensitive and spent more money at the hotel. Using behavioural intentions as a surrogate for loyalty, Zeithaml, Berry and Parasuraman (1996) investigated the following customer behavioural outcome variables: saying positive things about a company to others, recommending the company to someone else, encouraging friends and relatives to do business with a company, considering the company the first choice and doing more business with the company. Bendapudi and Berry (1997) proposed that customers who are dedicated (committed) to a business relationship are less interested in searching out available alternatives, more acquiescent, more co-operative, interested in enhancing the relationship (for example, by purchasing additional services or providing information), identified with the company and promoted the company to others (through, for example, word-of-mouth or referrals) (Bendapudi and Berry, 1997, p.28-30). Figure 2.3 is a list of proposed outcomes of customer loyalty that are beneficial to a company.

This thesis therefore also proposes to investigate the relationship between meeting planner commitment to booking meetings at a particular four to five star hotel where

**Figure 2.3 Beneficial outcomes of customer loyalty**

| Beneficial Outcomes of Customer Loyalty |
|---|
| Affinity with company (like to) |
| Voluntary behaviour (don't have to) |
| Not looking to switch |
| Positive word of mouth |
| Excellent working relationships |
| Expanded usage ('share of wallet') |
| Future business |
| Price premium |
| Reduced price sensitivity |
| Provision of feedback |
| First choice |

they have booked the most meetings during the previous 12 months, and the attitudes and behaviours that the meeting planner demonstrates towards that hotel. The results will help confirm whether, indeed, committed customers exhibit the behaviours and attitudes that are thought to be associated with customer commitment (the attitudinal dimension of true loyalty).

## SECTION TWO: CUSTOMER SATISFACTION

The second section of the literature review provides a theoretical framework underlying the concept of customer satisfaction and an overview of the relevant

research. It includes a discussion of various conceptualisations of customer

satisfaction, a definition of customer satisfaction, the measurement of customer

satisfaction, and the relationship between customer satisfaction and customer retention

and loyalty. This section closes with the relevant hypotheses.

## Introduction

Although customers can be retained by a company for many reasons other than true

loyalty (such as the lack of alternatives, the erection of exit barriers or the offering of

incentives), these retained customers are extremely susceptible to switching as soon as

they have the opportunity if they are not completely satisfied (Jones and Sasser, 1995,

p. 95). When customers are no longer held hostage by a lack of alternatives or external

constraints, the impact of customer satisfaction becomes evident as a critical element

in the development of true customer loyalty, a state in which customers remain with a

firm not because they *have* to but because they *want* to (Bendapudi and Berry, 1997).

Any investigation into the antecedents of true customer loyalty should therefore

include a consideration of the role of customer satisfaction.

Beginning with early work on customer satisfaction by Cardozo (1965), the 1970's

marked the emergence of customer satisfaction as a legitimate field of inquiry (see

Barsky, 1992, p.52) with the first of a series of annual conferences on customer

satisfaction commencing in 1977 (Vavra, 1997, p.31). However, it was not until the

1980's that customer satisfaction became a topic of great interest among marketing

academics and practitioners, with more than 900 articles on the topic published

between 1982-1990 (Perkins, 1991). Today customer satisfaction is a central concept

of modern marketing thought and practice (Oh and Jeong, 1996, p.65) with most

larger and middle-sized companies measuring customer satisfaction (Eklof, Hackl and

Westlund, 1999, p.514). Traditional hard financial measures for a business are

increasingly being complemented by soft measures such as customer satisfaction

(Bowden, 1998, p.249; Kaplan and Norton, 1996a). In order to understand more fully

the modern economy and the firms that compete in it, the *quality* of economic output

as well as its *quantity* should be measured (Fornell, Johnson, Anderson, Cha and

Bryant, 1996, p.7). In order to meet this need, a whole new industry on satisfaction

research and consulting has come into existence (Mittal and Lassar, 1998, p.178).


## Conceptual models of customer satisfaction

The dominant conceptual model of customer satisfaction in the literature has been the

disconfirmation of expectations paradigm (Kristenensen, Martensen and

Gremptysetnholdt, 1999, p.602) as modelled and tested by Oliver (1980, 1981).

According to the disconfirmation of expectations paradigm, feelings of satisfaction

arise when consumers compare their perceptions of a product's performance to their

expectations (Oliver, 1980).


According to the disconfirmation of expectations paradigm, the development of

customer satisfaction is proposed to occur in three stages: the formation of

expectations, the perception of the actual level of received performance, and the

comparison of perceived performance against expectations (Oliver, 1980). If the level

of performance is perceived to fall below expectations, then negative disconfirmation

occurs and the consumer is dissatisfied. If the level of performance is equal to

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expectations, then confirmation of expectations occurs and the consumer is satisfied (Oliver, 1980). If the level of perceived performance exceeds expectations, then positive disconfirmation occurs and the customer is satisfied or even delighted (Oliver, Rust and Varki, 1997).

Other conceptualisations regarding the formation of customer satisfaction have included equity theory, which posits that parties to an exchange will feel equitably treated and thus satisfied if the ratio of their outcomes to inputs is fair (Oliver and DeSarbo, 1988; Oliver and Swan, 1989), and the value-precept disparity model which posits that satisfaction is an emotional response triggered by a cognitive-evaluative process in which the perceptions are compared to one's values (Westbrook and Reilly, 1983, p. 258). It has also been proposed that customers develop satisfaction or dissatisfaction responses by attributing their good or bad consumption experiences either to themselves or to other parties involved in the transaction (attribution theory) (see Oh and Parks, 1997, p.38). However, customer satisfaction research during the past twenty years has been virtually defined by the disconfirmation of expectations paradigm.

## Expectations

One source of considerable controversy regarding the disconfirmation of expectations paradigm has been the lack of consensus concerning the term 'expectations' as the standard of comparison by which customers form satisfaction judgements. Miller (1977, p.76-77) proposed four ways to conceptualise expectations: (1) ideal (the best level of performance, 'can be'), (2) predicted (the probable level of performance, 'will

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be'), (3) minimum (the least acceptable level of performance, 'must be'), and (4) normative (the hoped for level of performance, 'should be').

Some researchers have proposed that experience-based norms may more accurately reflect the standards by which consumers form satisfaction judgements (Cadotte, Woodruff and Jenkins, 1987; Woodruff, Cadotte and Jenkins, 1983). Experienced-based norms are deemed to be the customer's desired level of performance constrained by the performance they believe is possible as indicated by the performance of known brands (Cadotte *et al*, 1987, p.306). In terms of the measurement of expectations, researchers have pointed out the importance of considering the role of a customer's *desired* level of performance in addition to the *probable* level, noting that the failure to consider the extent to which a product or service fulfills a person's desires has led to logical inconsistencies, such as predicting that a consumer who expects and receives poor performance will be satisfied (Fornell, 1992, p.12; Spreng, MacKenzie and Olshavsky, 1996, p.15).

## Performance

In the classic disconfirmation of expectations paradigm, there are three antecedents to the formation of customer satisfaction; expectations, perceived performance and (dis)confirmation of expectations (Bolton and Lemon, 1999, p.175; Oliver, 1980). The controversy concerning the conceptualisation of the term 'expectations' has been discussed. However, an even greater threat to the disconfirmation of expectations paradigm has come not from theory, but from empirical evidence which suggests that the link between perceived performance and satisfaction is significantly stronger than

the link between expectations and satisfaction, or between disconfirmation and satisfaction (Yi, 1991).

In a study by Churchill and Surprenant (1982, p.502), the direct performance-satisfaction link accounted for 88% of the variation in satisfaction. Tse and Wilton (1988) provided theoretical and empirical support for including the direct effect of perceived performance on satisfaction and suggested that it may actually have a stronger influence than expectations in determining satisfaction (as quoted in Fornell, 1992, p.12). In addition, the findings of a 1989-1990 survey of 22,300 customers of 57 companies in Sweden revealed that perceived product quality (performance) was more important for satisfaction and retention than disconfirmation, and that expectations do not directly affect satisfaction as is often suggested in the satisfaction literature (Anderson and Sullivan, 1993). Furthermore, in a study of restaurant patrons comparing six forms of customer satisfaction measurement, the measurement of customer satisfaction as 'performance only' emerged as the most reliable and valid measure of customer satisfaction (Yuksel and Rimmington, 1998, p.70).

In a recent empirical study of management consulting services, the measurement of expectations or disconfirmation was not included in the conceptualisation of customer satisfaction. Rather, the researchers hypothesised that each perceived performance dimension would be directly related to satisfaction (Patterson and Spreng, 1997, p.419). The results of the study confirmed that each perceived performance dimension had a direct relationship to satisfaction (p.426).

In addition, in preparation for the development of a European Customer Satisfaction Index (ECSI), researchers empirically tested the impact of expectations on the formation of customer satisfaction across eight industries in Denmark using structural equation modeling to compare five alternative models of customer satisfaction (Kristensen, Martensen and Gremptysetnholdt, 1999). The best model structure for all eight industries turned out to be one in which only perceived quality (performance) affected customer satisfaction. All of the cases indicated that expectations was not an explanatory variable and had no substantive effect on satisfaction. As a result of the study, the authors recommended that expectations be dismissed from customer satisfaction measurement instruments in the future (Kristensen *et al*, 1999, p.603).

## Definition of customer satisfaction

In his most recent book, Oliver (1997, p.13) has redefined the concept of customer satisfaction as 'the judgement that a product feature, or the product or service itself, provides a pleasurable level of consumption-related fulfillment'. This revised definition does not include the comparison to a standard (expectations) which was a prominent aspect of Oliver's original, widely accepted definition of customer satisfaction.

Other researchers are now also omitting expectations from their definitions of customer satisfaction. For example, customer satisfaction is currently being defined as:

- the consumer's affective reaction to the overall experience of purchasing and using a product or service (Spreng *et al*, 1993, p.52),

- a consumer's post-purchase evaluation and affective response to the overall product or service experience (Patterson and Spreng, 1997, p.418), or

- a post-consumption evaluative judgement concerning a product or service (Heide *et al*, 1999, p. 202; Yuksel and Rimmington, 1998, p.61).

Two critical aspects that are common to these definitions are (1) that satisfaction relates to customers' attitudes and feelings ('affective reaction', 'evaluation', 'judgement') as opposed to their behaviour, and (2) that satisfaction is a post-consumption phenomenon (a consumer cannot be satisfied or dissatisfied *prior* to consumption) (Oliver, 1993; Patterson and Spreng, 1997, p.416). The researcher proposes, however, that satisfaction is *not* primarily a judgement (which, it is argued, would take satisfaction into the realm of value), but is rather an affective response to a judgement. Customer satisfaction is therefore here defined as *a pleasurable feeling of fulfillment resulting from a positive evaluation of the total consumption experience.* This definition of satisfaction as an emotional response to an evaluative judgement addresses the call in the literature to specify the relationship between value and satisfaction (Spreng *et al*, 1993, p.50). It also specifies what that emotional response is ('a pleasurable feeling of fulfillment') (see Oliver, 1997, p.13). In addition, this definition is specifically marketing oriented ('of the consumption experience'), as opposed to a generic conceptualisation of satisfaction.

In accordance with the above literature review, and particularly since the model associated with this thesis is a post-consumption model, the measurement of customers' perceptions of the level of performance is included, but measurement of

customer expectations is not. This is not to imply that customers do not have

expectations or that expectations are unimportant, but rather that current conceptual

theory and empirical evidence seem to indicate that the measurement of perceived

performance alone in post-consumption models of satisfaction is sufficient, and that it

is not necessary to include the measurement of customer expectations in such models.


## Levels of satisfaction

Customer satisfaction can be experienced and researched at various levels (Oliver,

1997). There is *individual attribute-level* satisfaction in which the customer can be

satisfied or dissatisfied with different aspects (or attributes) of a product or service.

For example, a meeting planner can be satisfied with the way the hotel checked in the

participants of a meeting, but dissatisfied with the quality of the food. Then there is

*individual transaction-specific* satisfaction, also called *encounter* satisfaction (Bitner,

1990; Boulding *et al*, 1993) in which the customer can be satisfied or dissatisfied with

a complete transaction. For example, a meeting planner can be satisfied with the way a

particular hotel handled a particular meeting (as opposed to another meeting that took

place at a different hotel). Additionally, there is *individual cumulative* satisfaction,

also called *overall, global* or *summary* satisfaction (Anderson, Fornell and Lehmann,

1994, p. 54; Bitner and Hubbert, 1994; Rust and Oliver, 1994; Teas, 1993), in which

the customer forms a satisfaction judgment taking into account all of their past

experiences with a particular firm. For example, a meeting planner might be satisfied

with the job that a particular hotel (or hotel company) has done in handling the

meetings that they have booked with that company in the past.

A further level, *microeconomic* satisfaction (Anderson and Fornell, 1994), deals with the average satisfaction level of an aggregation of a firm's customers. For example, this would refer to the average satisfaction level of meeting planners who use a particular hotel (or hotel company). *Macroeconomic* satisfaction (Anderson and Fornell, 1994) refers to the average satisfaction level of an aggregation of an industry's customers. For example, this would refer to the average satisfaction level of meeting planners as a group. *Societal* satisfaction investigates satisfaction as a societal phenomenon associated with a particular culture (Oliver, 1997).

This thesis deals with (1) *individual attribute* satisfaction (the level of satisfaction of meeting planners with individual hotel performance factors) and (2) *individual cumulative (overall)* satisfaction (the level of satisfaction of individual meeting planners with respect to the overall consumption experience at the hotel where they have booked the most meetings during the past 12 months).

## National customer satisfaction indexes

Research in the area of customer satisfaction over the past fifteen years has led to the development of national customer satisfaction indexes in several countries. These indexes are an attempt to complement traditional measures of the *quantity* of performance with measures of the *quality* of performance, to demonstrate the link between investments in quality and satisfaction and economic return from such investments, and to explain the relationship between customer satisfaction, value and loyalty (Fornell *et al*, 1996, p.7-8). The first index to be developed was the National Customer Satisfaction Barometer in Sweden in 1989 (see Fornell, 1992). The German

index (Deutsche Kundenbarometer) was established in 1991 (see Eklof, Hackl and Westlund, 1999, p.514) and the American Customer Satisfaction Index (ACSI) was established in 1994 (see Fornell *et al*, 1996). A European Customer Satisfaction Index (ECSI) is currently being developed with a pilot study planned in 1999 involving ten European countries (Kristensen, Martensen and Gremptysetnholdt, 1999). These indexes measure satisfaction at the *microeconomic* and *macroeconomic* levels across a wide range of product and service industries. One of the important findings of these indexes is that customer satisfaction is more significant in industries that have competitive market structures where customers have a choice between alternative offerings (Fornell, 1992, p.16), thus confirming the importance of customer satisfaction in the development of true customer loyalty.

## A customer satisfaction matrix

In a landmark study, Jones and Sasser (1995) proposed to investigate the relationship between customer satisfaction and customer loyalty. The markets that were chosen for the study, however, had either high switching costs (personal computers for business), significant barriers that impede customers from switching (hospitals), or a lack of alternatives (airlines in which routing is a virtual monopoly, and local telephone service which, at the time of the study, was a monopoly). The only market chosen for the study in which customers had low switching costs, lack of significant exit barriers, and many alternatives was the automobile industry. These markets were chosen because the authors wanted to investigate the impact of various competitive environments on the relationship between customer satisfaction and customer loyalty. However, as previously discussed, when customers are retained as a result of high

switching costs, significant exit barriers, or lack of alternatives, they are not 'truly' loyal but rather 'spuriously' loyal. Therefore, although the authors claim that the purpose of the study was to investigate the relationship between customer satisfaction and customer loyalty, in reality the study is an investigation of the relationship between customer satisfaction and customer retention (not customer loyalty).

The authors divided customers into four groups, depending on the relationship between their level of satisfaction and their level of loyalty (retention). An adaptation of their grouping is outlined and charted as a matrix based on customer satisfaction and customer retention in Figure 2.4.

- The first type of customer is called a 'terrorist', which is a combination of low levels of satisfaction and low levels of retention. Customers in this category are dissatisfied, have defected from the firm, and spread negative word of mouth. The terrorist is an example of 'no loyalty'.

- The second type of customer is called a 'hostage', which is a combination of low levels of satisfaction and high levels of retention. Customers in this category are retained but they are not satisfied and may also be spreading negative word of mouth. They may be held hostage by high switching costs, significant exit barriers or lack of alternatives. The hostage is an example of 'spurious loyalty'.

- The third type of customer is called a 'mercenary', which is a combination of high levels of satisfaction and low levels of retention. Although customers in this category are satisfied, they are always looking for a 'deal'. The mercenary is an example of 'latent loyalty'.

# Figure 2.4 Customer satisfaction-customer retention matrix

**Retention**

| | **High** | **Low** |
|---|---|---|
| **High** | Apostle | Mercenary |
| **Low** | Hostage | Terrorist |

**Satisfaction**

Source: Adapted from Jones and Sasser, (1995), "Why Satisfied Customers Defect," *Harvard Business Review*, (Nov/Dec), 88-99.

- The fourth type of customer is called an 'apostle', which is a combination of high levels of satisfaction and high levels of retention. Customers in this category are completely satisfied and spread positive word of mouth. The apostle is an example of 'true' loyalty.

## Customer satisfaction measurement

Despite the fact that customer satisfaction has been a central focus of marketing researchers and practitioners for the past twenty years, the measurement of customer satisfaction has not been without problems. Customer satisfaction measures have been called the weakest measures currently being used by companies (Heskett *et al*, 1994,

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p.171). Furthermore, the attainment of an improved customer satisfaction score can become an end in itself rather than a means of improving the future satisfaction of customers and developing their loyalty (Reichheld, 1996a, p.235). Some companies that measure customer satisfaction may not even act on the results (Dutka, 1994).

In addition, many satisfaction studies are done at an aggregate level despite the fact that examining the effect of individual performance attributes has potentially great utility for practising managers (Patterson and Spreng, 1997, p.415). Even though determining which specific satisfaction elements have the greatest impact is so important (Rust and Zahorik, 1993, p.193), the information contained in customer satisfaction surveys has a tendency to be too superficial to be of real value (Gunderson, Heide and Olsson, 1996, p.73; Jones and Sasser, 1995, p.91; Reichheld, 1996a, p.194).

Furthermore, because customer satisfaction is, by its very nature, a post-consumption phenomenon, the information obtained from customer satisfaction surveys is reactive (oriented to the past) rather than proactive (oriented to the future). Customer satisfaction is a lagging measure, reporting how well the organisation's strategy worked in the past but providing inadequate guidance on how to navigate to the future (Kaplan and Norton, 1996b, p.55). Although hindsight information can be helpful in correcting situations that caused past customer dissatisfaction in order to prevent future dissatisfaction (if sufficient detail is obtained to know the cause of the dissatisfaction), researchers are calling for additional measures to complement satisfaction that are more proactive in nature and can anticipate and prevent dissatisfaction *before* it occurs, as well as provide the benefits that customers value in

order to engender complete customer satisfaction and loyalty (Reichheld,1996b; Lowenstein, 1997).

Research in the measurement of customer satisfaction has also demonstrated that there is a significant difference in terms of customer retention and loyalty between those customers who give a satisfaction rating of four (on a scale of five) and those who give a satisfaction rating of five (Jones and Sasser, 1995, p.89). A study of the loyalty of luxury hotel guests revealed that approximately 50% of guests who rate their satisfaction a four plan to return, while this number jumps to 90% when they give a rating of five (Bowen and Shoemaker, 1997, p.49). In a study by Xerox, it was found that customers who gave a rating of five were six times more likely to repurchase than customers who gave a rating of four (Heskett *et al*, 1997, p.81). In a study of health services and car repair services, the authors found that a satisfaction rating of five compared to a rating of four reduces the switching predisposition from 58% to 19.5% for health services (an effective retention rate of 42% to 80.5%) and from 78.6% to 32.4% for car repair services (an effective retention rate of 21.4% to 67.6%) (Mittal and Lassar, 1998, p.183). Whereas researchers and practitioners had previously assumed that there was a simple linear relationship between satisfaction and loyalty (the higher the satisfaction, the higher the loyalty), recent research suggests that any drop from complete satisfaction translates into a significant drop in loyalty (Jones and Sasser, 1995, p.92).

## Beyond satisfaction to loyalty

On its own, therefore, even complete customer satisfaction is not enough to ensure repeat patronage (Griffin, 1995, p.1; Pritchard, Havitz and Howard, 1999, p. 333). As

a measure, customer satisfaction is equated with meeting minimum requirements (Marr and Crosby, 1993, p.20). Satisfaction is a fundamental requirement (Drew and Bronkhorst, 1996, p.19), a necessary, but insufficient, condition to produce long-term customers (Jones and Sasser, 1995; Liu, 1998; Reichheld, 1996b; Taher, Leigh and French, 1996, p.217).

More than merely satisfying customers is needed in order to build a loyal customer base. Satisfied customers are not necessarily loyal customers. Customers who are only satisfied are prone to switching suppliers when a better offer comes along (Droge, Halstead and Mackoy, 1997, p.19; Kotler, Bowen and Makens, 1996, p.345; Keaveney, 1995). Indeed loyalty requires a commitment from the customer that mere satisfaction can not bring (Mittal and Lassar, 1998, p.193). Furthermore, whereas satisfaction is an attitude (*a pleasurable feeling of fulfillment*), loyalty is comprised of both an attitudinal dimension ('commitment') and a behavioural dimension ('retention') over a period of time. Therefore, it has been proposed that measures of satisfaction should be augmented with measures of loyalty (Mittal and Lassar, 1998, p.193; Vavre, 1997, p.29). At Banc One, for example, an effort is being made to establish various measures of customer loyalty to be factored in to the organisation's widely known Management Information and Control System (Heskett, Sasser and Schlesinger, 1997, p.36). Firms need to go beyond mere customer satisfaction to focus on developing customer commitment and loyalty (Ulrich, 1989, p.19).

## Hypothesis

In accordance with the preceding literature review, the following hypothesis is proposed:

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H1:    Customer satisfaction has a significant positive impact on customer

       commitment.


# SECTION THREE: CUSTOMER PERCEIVED VALUE

The third section of the literature review provides a theoretical framework underlying

the concept of customer perceived value and the relevant research. It includes a

discussion of the nature of value in a marketing context, a definition of customer

perceived value, and a consideration of the relationship between customer perceived

value, customer satisfaction and customer commitment. It closes with the relevant

hypotheses.


## Introduction        *relationship*

The creation and delivery of superior customer perceived value is considered to be the

force that drives customer satisfaction (Anderson *et al*, 1994, p.54; Gale, 1994;

Heskett *et al*, 1994) and the key to earning customer repeat purchase and loyalty

(Reichheld, 1996a, p.16, 69; Patterson and Spreng, 1997, p.416). Customer perceived

value is also considered to be a key strategic variable in the explanation of customer

commitment (Patterson and Spreng, 1997, p.416).


Customer value has been called an emerging strategic imperative (Vantrappen, 1992,

p.53) and the next major source for competitive advantage (Woodruff, 1997). Value is

one of the most powerful trends currently shaping marketing and business strategy

(Zeithaml and Bitner, 1996, p.31; Christopher, 1996, p.55) and one of the top

customer priorities for the 1990's and beyond (Heskett *et al*, 1997, p.23; Sweeney,

Soutar and Johnson, 1999, p.78; Zeithaml and Bitner, 1996, p.32). Interest in this issue

has gone 'from a groundswell to a tidal wave' (USA Today, Sept. 29, 1992, p. B1-2 as

cited in Zeithaml and Bitner, 1996, p.320).


Recently, Hilton Hotels Corporation adopted the Hilton Balanced Scorecard which

measures Hilton's creation of value and includes a measure of customer loyalty

(Huckestein and Duboff, 1999, p.29). In addition, companies such as AT&T are

shifting the emphasis of their research objectives from customer satisfaction to

customer value (Higgins, 1999, p.42). Even the focus of the prestigious Baldridge

Award (a national award established in 1987 by the United States Congress in order

to increase national competitiveness) has expanded from improving quality to

providing ever-improving value to customers (The Malcolm Baldrige National Quality

Award, 1987, 1999). In addition, the Marketing Science Institute and the American

Marketing Association have identified value as one of the most pressing issues

meriting research (Marketing Science Institute, 1998-2000; American Marketing

Association, 1999).


## The nature of value

Despite the importance of customer perceived value to the field of marketing,

researchers have given surprisingly little attention to central questions regarding the

nature of value (Holbrook, 1994, p.22; Nguyen and LeBlanc, 1998, p.54). In the

literature, the most common conceptualisation of value is that it is a ratio or trade-off

of quality and price (Anderson, Fornell and Lehmann, 1994, p.56; Gale, 1994, p.xiv;

Patterson and Spreng, 1997, p.415; Zeithaml, 1988). In a seminal article on the nature of consumer value, Holbrook (1994, p.27) defines value as an 'interactive relativistic preference experience'. The following is an attempt to explore the nature of value using Holbrook's paradigm in order to arrive at a more comprehensive conceptualisation of customer perceived value than is common in the literature.

## Interactive

Holbrook proposes that value is neither solely objective (residing in the object) nor solely subjective (residing in the subject), but rather is an *interaction* of the subject with the object (p.27). Applying this conceptualisation of value to marketing, it means that value does not reside solely in the company's offering (objective) nor solely in the company's customers (subjective), but rather is an interaction of the customer with the company's offering.

Holbrook proposes that objectivity and subjectivity run along a continuum, and that value requires both an objective and a subjective orientation (p.33). Applying the objectivity/subjectivity continuum to the field of marketing, product marketing has been extremely object oriented (product focused), whereas services marketing has been extremely subject oriented (customer focused).

## Relativistic

Holbrook posits that the formation of value judgements by consumers is influenced by

comparative factors (against other objects), personal factors (among individuals), and

situational factors (within a context) (p.33-37). As applied to marketing, comparative

factors would include the alternative offerings of other companies, personal factors

would include the differences in customers, and situational factors would include the

differences in conditions. The following is an exploration of these three factors.

(1) *Comparative factors* (alternative offerings): At the decision-making stage of the

consumption process, customers usually compare the potential value of a company's

offering to that of the available alternatives. In a post-consumption situation, on the

other hand, the level of performance of the chosen alternative would be more

significant to customers (Liu, 1998, p.8; Spreng *et al*, 1993, p.50; Woodruff, 1997,

p.141). Benchmarking, the practice of measuring a firm's products, services and

practices against the competition (Zeithaml and Bitner, 2000, p.245), entails the

potential danger that companies may focus on each other rather than focusing on what

is important to their customers (Senge, 1990, p.333). The result is that their offerings

end up being mirror images of each other (Kim and Mauborgne, 1999, p.41). Some

international hotel chains have fallen into this trap, as evidenced by the fact that when

general managers from ITT Sheraton in Asia were shown pictures of hotel rooms from

their own chain and three competitors, most of them could not identify the brand of

one room - not even their own (Bowen and Shoemaker, 1998, p.13).

Furthermore, research has shown that differences exist between what managers think

their customers value and what customers say they value (Parasuraman, Berry and

Zeithaml, 1985). Many companies do not know which services individual customers

(or groups of customers with similar needs) really want (Anderson and Narus, 1995, p.75). According to a recent study, lodging managers often do not have a clear understanding of what constitutes customer value and the ways in which the attributes of their business contribute or fail to contribute to the creation of such value (Voss, Blackmon, Chase and Roth, 1998). Yet improvements that are not valued by the customer are questionable investments (Fornell, 1992, p.18). Companies are therefore encouraged to consider which dimensions of value their target customers care about (Treacy and Wiersema, 1993). A customer focus is simply a way of trying to ensure that what is offered by the company is likely to correspond to what the target customer wants to buy (Albrecht, 1992, p.21; Ravald and Gronroos, 1996, p.21; Wood, 1997, p.182; Woodruff, 1997, p.139). A common mistake is to provide a point of differentiation that is not valued by the customer (Aaker, 1992a, p.202). A customer focus is also a means of avoiding situations referred to as the 'Peanut Syndrome', in which costs increase to give customers something that they do not care about (Gummeson, 1991). Delivering the benefits that customers truly desire has been designated as the top trait of the world's strongest brands (Keller, 2000, p.148).

(2) *Personal factors* (differences in customers): Value has been called an amorphous concept that means different things to different customers (Zeithaml and Bitner, 1996, p. 33). The salient components of value often vary from customer to customer (Sheth *et al*, 1991; Zeithaml, 1988). For example, one customer may value convenience while, to another, volume or quality is most important (Zeithaml, 1988). Recent research has demonstrated that the elements of value to a leisure hotel guest are

different from the elements valued by a business guest or a meeting guest (Dube and

Renaghan, 2000, p.72).

(3) *Situational factors* (differences in conditions): Value is a dynamic concept

(Parasuraman, 1997, p.155) and aspects of a customer's perception of value may

change according to the particular situation. Suppose, for example, that a meeting

planner is booking two different meetings at the same hotel; one, a luxury incentive

and the other, a cost-effective seminar. Some aspects of value for the meeting planner

would be the same, but some would be different. Furthermore, the attributes that

customers use to judge value, or the relative importance of the attributes, may change

according to the stage of the consumption process (Parasuraman, 1997, p.155;

Vantrappen, 1992, p.59). For example, recent research has shown that the types of

attributes that create customers' perceptions of value at the purchase decision-making

stage are not the same as those that create perceptions of value during the consumption

stage (Dube and Renaghan, 2000, p.69). If value is relativistic, it means that the

creation of customer perceived value is an on-going, dynamic process in which a

company must stay close to the customer in order to be able to ascertain which

offerings, which customers, and which conditions are the most relevant and profitable

to pursue (Reichheld, 1996a).

## Preferential

Holbrook suggests that value is a judgement of preference by the consumer in

accordance with some set of standards or criteria (p.29). He expands our

understanding of the nature of value by identifying eight types of standards (or

criteria) by which customers form value judgements, and categorising them according

to whether they are intrinsic to the product or extrinsic, self or other oriented, active or

reactive in nature (p. 39). Holbrook's eight criteria ('values') are (1)

efficiency/convenience (extrinsic, self-oriented, active), (2) excellence/quality

(extrinsic, self-oriented, reactive), (3) politics/success (extrinsic, other-oriented,

active), (4) esteem/reputation (extrinsic, other-oriented, reactive), (5) play/fun

(intrinsic, self-oriented, active), (6) esthetics [sic]/beauty (intrinsic, self-oriented,

reactive), (7) morality/virtue (intrinsic, other-oriented, active), and (8) spirituality/

faith (intrinsic, other-oriented, reactive) (p.45). More than one of the criteria ('values')

can be operating during a consumption experience, and they are not necessarily

equally weighted in the customer's overall evaluation of whether the consumption

experience was of value to them. In functioning simultaneously, the various criteria

can also have a complementary or conflicting impact on a customer's perception of the

value of the company's total offering (Sheth, Newman and Gross, 1991, p.163; Smith,

1996, p.148).

Considering the focus both academically and in the business world on the issue of

quality (and particularly service quality), it is of interest to note that according to

Holbrook's paradigm quality (excellence) is viewed as a sub-construct of value; one,

but not the only, criteria by which customers make value judgements. It is also of

interest to note that Holbrook categorises quality as *extrinsic* to the product (in other

words, quality as perceived by the customer).

It has been noted in the literature that a critical aspect of customer value theory that

has not yet been fully developed concerns the sources from which customers derive

value (Parasuraman, 1997, p.160). It is necessary at this point to distinguish between

*criteria* of value and *sources* of value. *Criteria* of value are those standards by which a

customer makes value judgements (Holbrook, 1994, p.29), and thus represent

primarily a customer-oriented perspective of value. *Sources* of value, on the other

hand, are characteristics or attributes (Sheth, Newman, and Gross, 1991, p.160), or

features (Parasuraman, 1997, p.160) of a company's offering, and thus represent

primarily a product-oriented perspective. *Criteria* of value and *sources* of value

therefore represent essentially the same concept viewed from two different

perspectives. Whereas Holbrook speaks about *criteria* of value (the standards by

which customers make value judgements), other authors speak about *sources* of value

(the features of a company's offering by which customers derive value) (Parasuraman,

1997; Sheth, Newman, and Gross, 1991; Spreng *et al*, 1993, p.51).


Sheth, Newman and Gross (1991, p.160) identify five potential sources of customer

perceived value: (1) functional / utilitarian, (2) social / image, (3) emotional / arousal,

(4) epistemic / variety, and (5) conditional / situational value. Some of these *sources*

of value (characteristics of the chosen alternative) (Sheth *et al*, 1991, p.160) overlap

with Holbrook's *criteria* of value (standards of customer evaluation). For example,

social / image (Sheth *et al*, 1991, p.161) closely relates to esteem / reputation

(Holbrook, 1994, p.48) and epistemic / variety (Sheth *et al*, 1991, p.161) closely

relates to play / fun (Holbrook, 1994, p.48). Neither list of potential sources (criteria) of customer perceived value is exhaustive (Smith, 1996, p.149). As previously stated, some of these types of value may be very important in one situation and not at all important in another. One of the purposes of this research, therefore, is to investigate a more comprehensive range of sources of value to the customer than is typical in the literature (i.e. product or service quality) and, in particular, to investigate what the primary sources of value are to the meeting planner who books meetings at 4 to 5 star hotels.

## Experiential

By 'experience' Holbrook proposes that it is only as the subject (the customer) interacts with the object (the offering) that the *potential* value of the object (its excellence, beauty, efficiency, etc.) becomes *actual* (p.37-39). Holbrook's definition of value as an 'interactive relativistic preference experience' presents the essence of value as an 'experience' whereas, in this thesis, customer perceived value is not conceptualised as an experience but, rather, as the customer's judgement about (evaluation of) the experience.

Furthermore, although Holbrook states that his definition deals with the nature of *consumer* value (p. 21), there is nothing in his definition that relates value specifically or inherently to a consumption (buyer/seller) experience. One could fulfill each aspect of Holbrook's definition of consumer value and yet the value experienced could be completely unrelated to the field of marketing. For example, if I value a friendship, it is *interactive* (between me and the friend), it is *relativistic* (it is this friend with me

personally in this situation), it is *preferential* (the value that I find in the friendship is

according to my standards of evaluating friendships), and it is *experiential* (the

potential value of friendship has been realised by my interaction with my friend).

In addition, although Holbrook begins his article by acknowledging that consumer

value is a marketing activity that involves an exchange of value in which the customer

must give up something of value in return for something of greater value (p. 22), his

eight criteria (success, reputation, ethics, faith, convenience, quality, fun and beauty)

represent only the *positive* criteria by which customers make value judgements. His

paradigm does not include the *negative* criteria that customers must consider in a

marketing exchange. In other words, his conceptualisation of consumer value includes

the benefit side of the value equation but not the sacrifice side. Figure 2.5 is a model

adapted from Holbrook's table of 'A Typology of Value in the Consumption

Experience'.

Despite the fact that Holbrook's conceptualisation of the nature of consumer value

does not include a consideration of the *negative* criteria by which consumers form

value judgements, it nonetheless provides scope for a broadened understanding of the

benefits sought by consumers (Smith, 1996, p.149). Holbrook makes a major

contribution to the predominant view of value in the marketing literature by expanding

the conceptual domain and thereby challenging the notion that the primary, if not only,

positive (beneficial) dimension of value that is important to customers is quality or,

more specifically, product or service quality.

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# Figure 2.5 Value judgement formation process

**Value Judgement**
**(positive criteria versus negative criteria)**
**"Value"**

| Politics (success) | Esteem (reputation) | | |

| Efficiency (convenience) | Excellence (quality) | | |

| Morality (virtue/ethics) | Spirituality (faith/ecstasy) | | |

| Play (fun) | Esthetics (beauty) | | |

| *Positive* Criteria of Value Formation | *Negative* Criteria of Value Formation |
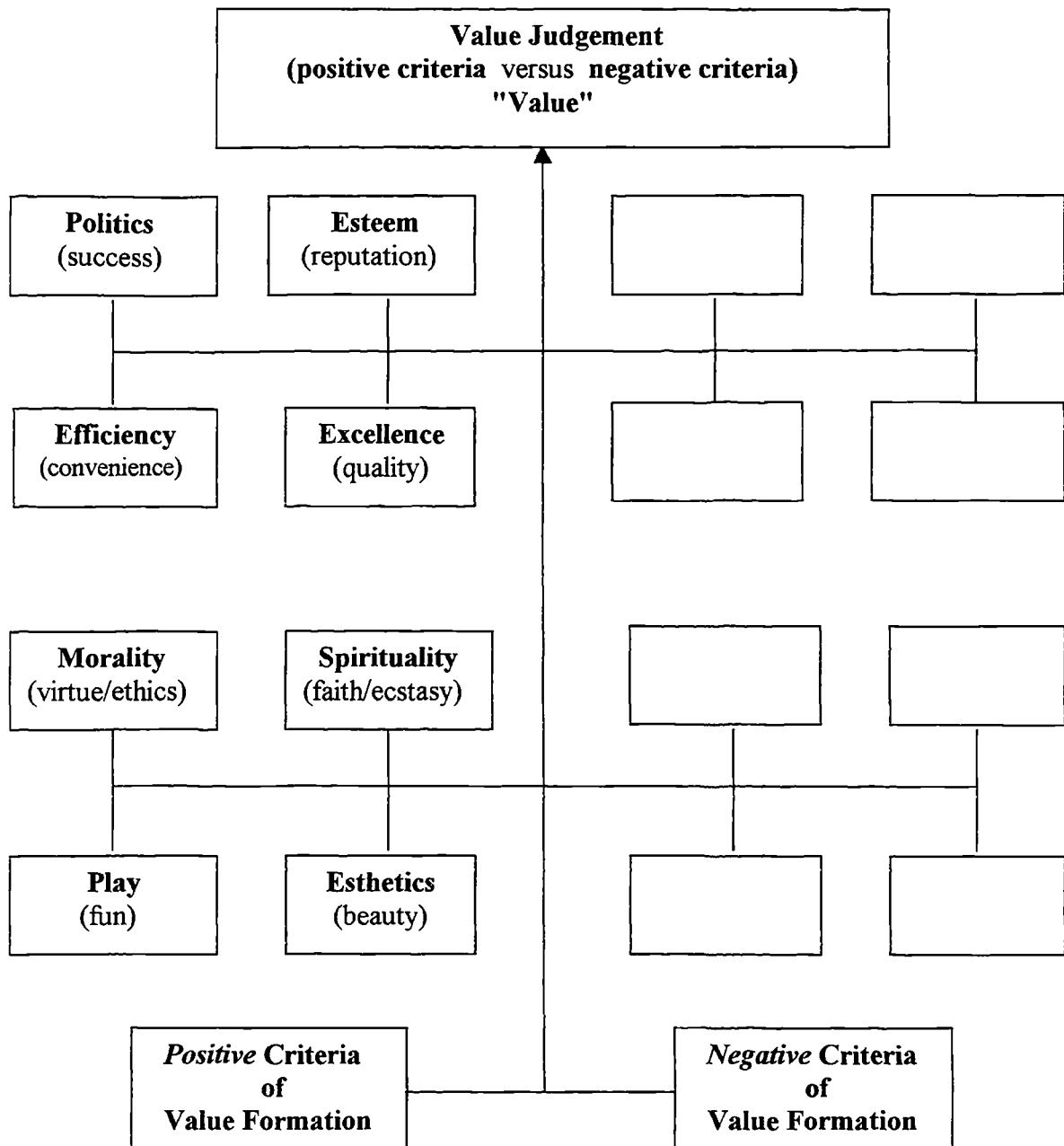
Source: Adapted from Holbrook, Morris B. (1994). "The Nature of Customer Value: An Axiology of Services in the Consumption Experience." p. 45 in Rust, Roland T. and Oliver, Richard L., (ed.), Service Quality: New Directions in Theory and Practice.

# A marketing context

In an often-quoted exploratory investigation of consumer perceptions of juices by

Zeithaml, customers provided four main conceptualisations of value: (1) value is low

price, (2) value is whatever I want, (3) value is quality for the price, and (4) value is

what I get for what I give (Zeithaml, 1988, p.13). Based on this qualitative

investigation, Zeithaml posits that value is 'the customer's overall assessment of the

utility of a product based on perceptions of what is received and what is given' and

represents a 'tradeoff of the salient give and get components' (Zeithaml, 1988, p.14).

This conceptualisation of value includes a consideration of both the negative side of

the value equation (what must be given up or sacrificed by the customer) as well as the

positive side (what is received by the customer). According to this paradigm, value is

a positive function of what is received and a negative function of what is sacrificed

(Oliver, 1996, p.143).

The findings of Zeithaml's exploratory research that the salient 'give' and 'get'

components of value vary from customer to customer are in agreement with

Holbrook's conceptualisation of value as 'relative'. From a 'give' perspective, Zeithaml

found that some customers were concerned about price while, to others, time or effort

was most important. Therefore, Zeithaml proposes that the sacrifice component of

value should not be limited to monetary price alone, but should include a

consideration of other relevant customer sacrifices (such as time or effort) (p.17).

From the 'get' perspective, some customers were concerned with quality while, to

others, volume or convenience was most important. Therefore, the benefit component

of value should not be limited to quality alone, but should include a consideration of

other relevant customer benefits (p.14). By including a consideration of customer

sacrifices (what a customer must give up), Zeithaml's conceptualisation of value is

specifically marketing oriented.


## Definition of customer perceived value

The use of the term 'customer value' in the marketing literature can be quite confusing

(Wyner, 1998). Some researchers use it to represent the value of the company's

offerings to the customer (e.g. Woodruff, 1997), whereas other researchers use it to

represent the value of the customer to the company (e.g. Gale, 1994). In this thesis,

therefore, the term 'customer perceived value' is used to refer to the value of the

company's offering to the consumer, and the term 'customer value' is used to refer to

the value of the customer to the company.


Adding a marketing dimension to Holbrook's definition of value, customer perceived

value is here defined as *an interactive, relativistic, preferential judgement of the*

*benefits and costs of the total consumption experience by the customer.* As previously

discussed, the salient 'get' (benefit) and 'give' (cost) components often vary from

customer to customer and from situation to situation. The actual relationship between

benefits and costs in the mind of the customer, and which benefits and costs are most

important to them remains unclear. This study is an attempt to clarify some of these

issues empirically in the domain of meeting planners who book meetings at upscale

hotels.

# Customer perceived value, satisfaction, and commitment

What is the relationship between customer satisfaction and customer perceived value? Are both constructs directly related to customer commitment or does one construct mediate, either partially or completely, the effect of the other? The results of the majority of recent empirical research on the relationship between customer satisfaction, customer perceived value and customer commitment (repurchase intentions / loyalty / retention) support the modeling of customer perceived value as an antecedent of customer satisfaction. The researcher found only one instance in which satisfaction was modeled as an antecedent of value (see Nguyen and LeBlanc, 1998, p.59). In all other instances, value was modeled as an antecedent of satisfaction, with satisfaction influencing loyalty (retention/ repurchase intentions) directly. The major question appears to be whether the impact of value on loyalty is mediated *partially* or *completely* through satisfaction.

According to the developers of the Balanced Scorecard which links financial and non-financial performance measures to a company's vision and strategy, value has a direct influence on both customer satisfaction and customer retention, as well as an indirect influence on customer retention through satisfaction (Kaplan and Norton, 1996b, p.62). The results of an empirical study of the luxury segment of the hotel industry using structural equation modeling also indicate that perceived value affects repurchase intentions both directly, and indirectly through customer satisfaction. However, the path from satisfaction to repurchase intentions was much stronger than the path from value to repurchase intentions (Oh, 1999, p.76). The findings of a recent empirical study on the relationship between customer perceived value, customer

satisfaction and perceived switching costs for business-to-business services also indicate that the effect of customer perceived value on repurchase intentions is partially mediated by a customer's level of satisfaction, with customers' perceptions of value influencing repurchase intentions directly as well as indirectly (Liu, 1998, p.124).

On the other hand, according to their theoretical model of relationship value, Liljander and Strandvik (1995, p.143) propose that the effect of value on loyalty is completely mediated through satisfaction. No direct path from value to loyalty was proposed. The developers of the Service Profit Chain which links profit and growth to loyalty, satisfaction and value also propose that the impact of value on customer loyalty is completely mediated through satisfaction with no direct path from value to loyalty (Heskett, Sasser and Schlesinger, 1997, p.22). However, neither of these two theoretical models was tested empirically.

The results of a recent empirical study of the relationship between perceived value, satisfaction and repurchase intentions using structural equation modeling indicate that the effect of perceived value on repurchase intentions is completely mediated through satisfaction (Patterson and Spreng, 1997, p.414). In addition, according to the latest structural equation models of the national American Customer Satisfaction Index (Fornell, Johnson, Anderson, Cha and Bryant, 1996) and the proposed European Customer Satisfaction Index (Kristensen, Martensen and Gremptysetnholdt, 1999), the effect of customer perceived value on customer loyalty is mediated entirely through customer satisfaction with no direct effect of value on loyalty.

## Beyond quality to value

It has been proposed that even if customers are highly satisfied, they may not necessarily repurchase but will also consider the value to them of the available options (Neal, 2000). It is therefore proposed that researchers go beyond a consideration of service quality and customer satisfaction, and include a consideration of customer perceived value (customer benefits and customer costs) in future models of the antecedents of customer loyalty. In this thesis, the influences of satisfaction and value on each other and on customer commitment are considered simultaneously.

## Hypotheses

In accordance with the preceding literature review, the following hypotheses are proposed:

H2a:   Customer perceived value has a significant positive impact on customer commitment.

H2b:   Customer perceived value has a significant positive impact on customer satisfaction.

H2c:   Customer perceived value has a significant positive indirect impact on customer commitment via customer satisfaction.

## SECTION FOUR: ANTECEDENTS OF VALUE &SATISFACTION

The fourth section of the literature review presents the relevant research relating to the antecedents of customer perceived value and customer satisfaction. It includes a discussion of product quality, service quality, relationship quality, extra benefits,

problem resolution and customer costs. The relevant hypotheses are presented with each antecedent.

## Introduction

As can be seen from the discussion in Section Three, value is a complex construct whose dimensionality requires more systematic investigation (Liu, 1998, p.7; Sinha and DeSarbo, 1998, p.236; Woodruff, 1997, p.142). Many researchers acknowledge that value includes benefits other than quality, and costs other than price. A more complete conceptualisation of the value construct includes total benefits received as well as total sacrifices given (Liljander and Strandvik, 1995; Patterson and Spreng, 1997; Sweeney, Soutar and Johnson, 1997, 1999; Buzzell and Gale, 1987; Zeithaml, 1988). However, companies are generally unclear about what leads to customer perceived value or how to provide the value that customers seek (Dube and Renaghan, 2000, p.63; Liu, 1998, p.8). In addition, very little empirical research has been conducted on buyers' perceptions of value (Patterson and Spreng, 1997).

Furthermore, as Spreng, Dixon and Olshavsky (1993, p.50) point out, most customer satisfaction models include an explicit consideration of satisfaction with customer benefits, but not with customer sacrifices. This thesis therefore attempts to address this issue by including an explicit consideration of customer satisfaction with both benefits and sacrifices.

The following section is an examination of the components of the benefit and the cost side of the value equation from the customer's perspective. The benefit side includes

those elements that the customer desires to receive, and includes a discussion of the literature on product quality, service quality, relationship quality, extra benefits and problem resolution. The cost side includes the sacrifices the customer makes in order to obtain those benefits, and includes a discussion of the literature on direct and indirect customer costs. It has been recommended that research is needed to operationalise the value dimensions in a generic form so that comparisons can be made across industries (Sweeney, Soutar and Johnson, 1997, p.46).

## Product quality

Up until the 1950's, Western companies were world leaders in product quality (Hunt, 1993, p.23; Reeves and Bednar, 1994, p.421). In 1950, W. Edwards Deming, an American whose ideas were not well received in his home country, was invited to Japan by the Union of Japanese Scientists and Engineers (JUSE) to lecture on the applicability of using quality control in manufacturing companies (Hunt, 1993, p.264). In Japan, Deming's ideas were well received. By the mid-1970's, Japanese competition had intensified with the production of innovative, higher quality goods and began to overtake the West, particularly in the electronic and automotive industries and, by the end of the 1970's, the American quality crisis had reached major proportions (Garvin, 1987, p. 101-104; Juran, 1995, p.582).

In 1987, the United States Congress established the Malcom Baldridge National Quality Award in order to increase national competitiveness by improving quality. The Award incorporates many of Deming's ideas. In 1992, Ritz-Carlton was the first hospitality company to win this award which they won again in 1999. During the

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1980's, the countries of Western Europe also began to use a set of standards, the

International Standards Organisation's ISO 9000, as the basis for judging the adequacy

of quality control systems of companies (Juran, 1995, p.595). ISO 9000 is the

recognised quality standard in over 90 countries (Nield and Kozak, 1999, p.41).

## Definitions

The quality movement brought important performance improvements but, too often,

reinforced an internal orientation (Woodruff, 1997, p.139). The definition of quality

that characterises this product-oriented, internal focus is that quality is conformance to

specifications (e.g. Levitt, 1972). This definition of quality lies at the objective end of

the objectivity/subjectivity continuum (Reeves and Bednar, 1994, p.423). Although

total quality management (TQM) gurus such as Deming, Feigenbaum and Juran

emphasised the importance of considering customer needs when specifications are

being established, TQM tools and techniques gave little practical help in achieving this

objective (Reeves and Bednar, 1994, p.73).

The term, product, has been defined in different ways by different authors. One widely

accepted definition is that a product is:

> anything that can be offered to a market for attention, acquisition, use, or
>
> consumption that might satisfy a want or need. It includes physical objects,
>
> service, places, organizations, and ideas (Kotler, Bowen and Makens, 1996,
>
> p.274).

This definition is very broad and, one should note, includes services. A product has

also been called the 'core output of any type of industry' (Lovelock, 1996, p.3).

Authors who use the term 'product' in this way generally use the term 'goods' to distinguish between the tangible and intangible aspects of a company's offering (e.g. Lovelock, 1996, p.3). In the services marketing literature, the term 'tangibles' is used in the SERVQUAL scale (a scale developed to measure customers' perceptions of service quality) to refer to the product dimension including, for example, physical facilities, equipment and the appearance of personnel (Parasuraman, Zeithaml and Berry, 1988, p.23). The term 'servicescapes' has also been employed in the services marketing literature to refer to the physical surroundings in service settings (Bitner, 1992; Mattila, 1997; Wakefield and Blodgett, 1996). In this thesis, the term product is used to refer to the tangible elements with which the customer (meeting planner) interacts, such as the hotel's accessibility, setting, facilities, furnishings, equipment and cleanliness. Product quality is defined as *the excellence of the tangible elements of the total consumption experience as perceived by the customer.*

## Product quality research

Most of the early marketing research was almost completely product-oriented. In an often-quoted article, Garvin (1984) outlined eight dimensions of product quality: performance, durability, conformance to specifications, features, name, reliability, serviceability, and 'fit and finish'. As the service sector began to grow, Levitt (1972) argued that the service sector should apply product marketing techniques to service marketing. In a seminal paper, Shostack (1977, p.73), on the other hand, criticised marketing as being 'overwhelmingly product-oriented' and 'having failed to create relevant paradigms for the service sector'. With the development of services marketing as an independent academic field, the pendulum swung and product quality ended up

not receiving the attention it deserved (Turley and Fugate, 1992, p.43). However, service marketing researchers are now proposing that the marketing mix for services should be expanded to include the physical environment (Ward, Bitner and Gossett, 1989).

Recent research has demonstrated that the physical environment plays a pivotal role in customers' perceptions in the service sector and, specifically, in luxury hotels (Mattila, 1997, p.4). In addition, because services are intangible and therefore more difficult to evaluate than products, customers often use the physical environment as tangible cues (or evidence) to infer quality (Bitner, 1992, p.57; Mattila, 1997, p.4; Palmer, 1994, p.34; Shostack, 1977, p.77). According to a recent study conducted by the Center for Hospitality Research at Cornell University of best practices in the US lodging industry, physical aspects of the hotel (convenient location, guestroom design and amenities) were identified as the primary drivers of customer perceived value for meeting planners (Dube *et al*, 1999, p.344-347). The General Manager of the Four Seasons in New York (identified in the same study as the Overall Best-Practice Property Champion in Physical Property) believes that 10-20% of the average daily rate charged is a direct result of the design and beauty of the hotel (Dube *et al*, 1999, p. 280). As the legendary Los Angeles hotelier and owner of the Beverly Wilshire hotel stated, "The product must be right before any attempt is made to build an image" (Courtright, 1981).

However, product offerings are easily copied and can be quite similar (Maloles, 1997, p.12). Product differentiation in the hotel industry has become increasingly difficult

(Reid and Sandler, 1992, p.68). Once considered as a competitive advantage, product

quality is now being called 'the ante into the game' (Henkoff, 1994, p.48). Therefore,

hotels need to continuously solicit customer feedback as a means of ensuring that its

products meet the needs of the targeted market segment (Dube *et al*, 1999, p.156).


## Hypotheses

In accordance with the previous literature review, the following hypotheses are

proposed:

H3a:    Perceived product quality has a significant positive impact on customer

satisfaction.

H3b:    Perceived product quality has a significant positive impact on customer

perceived value.


## Service quality

The leading economies of the western world have seen a dramatic increase in the

growth of the service sector. For example, from 1986 to 1996, the service sector in the

US grew from 69.3% to 75.5% and, in the UK, from 55.3% to 61.3%  (OECD, 1998).

In addition, deregulation has brought increased competition into many service

industries, such as the airlines, financial services and telecommunications (Berry and

Parasuraman, 1993, p.17). Despite the changing nature of the economy and the fact

that the US economy was dominated by services as early as the mid-1940's (Fisk,

Brown and Bitner, 1993, p.66), the development of a new model for managing,

marketing and studying *services* which was independent of the established industrial

model for managing, marketing and studying *products* was a slow and difficult

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process (see Berry and Parasuraman, 1993; Shostack, 1977; Schlesinger and Heskett, 1991). In the late 1970's, service marketing was being called an unchartered frontier, and a new structural definition of services was being called for (Shostack, 1977, p.73).

Also in the late 1970's, a fierce academic debate arose over whether the marketing of services was essentially different from the marketing of products (see Fisk, Brown and Bitner, 1993). Today, the important differences in the characteristics of services compared to products - their intangibility, inseparability, heterogenity and perishability - are unquestioned, and services marketing is now an established, independent field (Fisk, Brown and Bitner, 1993, p.63; Zeithaml, Parasuraman and Berry, 1985, p.33).

Because services are by nature intangible whereas products are not, they are also more difficult for customers to evaluate. Whereas products are high in search qualities (attributes which a consumer can determine prior to purchase), services are high in experience qualities (attributes which can only be discerned after purchase or during consumption) and credence qualities (characteristics which the consumer may find impossible to evaluate even after purchase and consumption) (Zeithaml, 1981). In addition, services are impossible to return. Thus, the purchase of a service is inherently riskier than the purchase of a product, and personal sources of recommendation (word-of-mouth) are depended on more heavily (Zeithaml, 1981, p.193). The impact of positive word-of-mouth from loyal customers therefore takes on increased significance in service industries.

A further difference between products and services is that, in the consumption of a

service, the customer does not obtain ownership of a tangible good but rather

'consumes' an experience or a result (Lovelock, 1996, p.3; Shostack, 1977, p.74). In

fact, it has been said that the essential nature of a service is that it is a process rather

than an object (Berry, 1980; Shostack, 1987, p.34; Zeithaml and Bitner, 2000, p.2).


## Definitions

Because the nature of a service is different from the nature of a product, defining

quality from a service perspective is different from defining quality from a product

perspective. Whereas *product* quality has traditionally been defined primarily from an

objective, product-oriented perspective as, for example, conformance to specifications,

*service* quality has been defined primarily from a subjective, customer-oriented

perspective as, for example, meeting or exceeding customer expectations (Reeves and

Bednar, 1995, p. 73). Objective quality (with its internal focus on the product) has also

been called 'internal quality management', and subjective quality (with its external

focus on the customer) has been called 'external quality management' (Gummesson,

1992, p.180). The following two quotes are representative of the customer-oriented

subjective perspective of defining quality that dominates the service quality literature:

- Only customers judge quality; all other judgements are essentially irrelevant

  (Zeithaml, Parasuraman and Berry, 1990, p.16),

- What counts is quality as perceived by the customers (Gronroos, 1990b, p. 37).


However, one result of defining service quality from an exclusively subjective

perspective has been considerable confusion in the service quality literature as to the

difference between the constructs of service quality and customer satisfaction (Oberoi and Hales, 1990, p.704; Parasuraman *et al*, 1994). In this thesis, service quality is defined from both an objective perspective ('the excellence of the delivery process') as well as from a subjective perspective ('as perceived by the customer').

The term *service* is used to refer to the intangible delivery process elements with which the customer (meeting planner) interacts, such as the efficiency of the hotel's reservation system, the use of prior meeting information, the accurate recording of meeting details, the level of staff expertise, the consistency of service delivery, the meeting of agreements, the accuracy of bills, etc. Service quality is here defined as *the excellence of the delivery process elements of the total consumption experience as perceived by the customer.*

## Service systems and standards

Depending on the level of complexity and divergence (uniqueness), service processes can be broken down into logical steps and sequences in order to develop service systems and standards, and thus provide a more consistent level of service quality (Shostack, 1987). Service processes can also be categorised according to the level of tangibility and customisation (see Reeves and Bednar, 1995). Hotel meeting services that are more tangible and standardised might include, for example, meeting or banquet room set-ups. Services that are more intangible and standardised might include reservations, front-desk procedures and checkout. An example of tangible, customised service might be menu selection. A hotel meeting service that is more

intangible and customised might be the use of information from prior meetings to help organise an upcoming function.

## The dimensionality of service quality

The dimensionality of service quality is an issue that is currently unresolved in the literature. Gronroos (1984) proposed a model of service quality that consists of two dimensions: (1) technical quality (the outcome of what a customer gets) and (2) functional quality (the process of how he gets it). This model has been used quite frequently in research (e.g. Richard and Allaway, 1993; Sweeney, Soutar and Johnson, 1997). Researchers have also proposed a three-dimensional model of service quality comprised of (1) 'physical quality' which includes facilities, the physical environment and any physical aspects of the service experience (thus paralleling 'product quality' in this thesis), (2) 'interactive quality' which includes the interaction of the customer with either mechanical or human resources of the company as well as with other customers, and (3) 'corporate quality' which is the company's image (Lehtinen and Lehtinen, 1991). An alternative 3-dimensional model of service quality includes input, process and output dimensions (Johnson, Tsiros and Lancioni, 1995).

Currently, the most well known model of service quality is SERVQUAL, which was developed by Parasuraman, Zeithaml and Berry (1988). This model has been applied quite extensively in the hotel industry (e.g. Armstrong, Mok, Go and Chan, 1997; Getty, 1996; Getty and Thompson, 1994; Knutson, Stevens, Wullert, Patton and Yokoyama, 1991; Knutson, Stevens, Patton and Thompson, 1992; Martin, 1995; Mount, 1997a; Patton, Stevens and Knutson, 1994; Saleh and Ryan, 1991; Wuest, Tas

and Emenheiser, 1996) as well as in many other service industries. Although

SERVQUAL is the most widely used model of service quality, it has also been widely

criticised (e.g. Babakus and Boller, 1992; Brown, Churchill and Peter, 1993; Carman,

1990; Cronin and Taylor, 1992, 1994; Teas, 1993, 1994). One of the main areas of

criticism concerns the dimensionality of service quality (Brown, Churchill and Peter,

1993; Cronin and Taylor, 1992, 1994; Carman, 1990). The SERVQUAL model

originally contained ten service quality dimensions (reliability, responsiveness,

competence, access, courtesy, communication, credibility, security,

understanding/knowing the customer and tangibles) but, using factor analysis, it was

subsequently reduced to five dimensions (tangibles, reliability, responsiveness,

assurance and empathy) (Parasuraman, Zeithaml and Berry, 1988, p.23). However, the

five dimensions identified in the SERVQUAL scale have not been found to generalise

across usage contexts (Babakus and Boller, 1992; Carman, 1990; Oliver, 1993, p.70).

A critical review of nineteen studies that used the SERVQUAL model between 1985

and 1995 found that eight of the studies had five service quality dimensions, seven had

six to twelve service quality dimensions and two were unclear. In addition, two of the

studies using structural equation modeling found a poor fit with a five-dimensional

model of service quality (see Asubonteng, McCleary and Swan, 1996, p.68-73).

Parasuraman, Zeithaml and Berry (1994, p.113) acknowledge that the five proposed

service quality dimensions of the SERVQUAL scale are intercorrelated and overlap to

some degree.

In an empirical study investigating the dimensionality of the SERVQUAL model in

four different service settings, Carman (1990, p.37) found that the SERVQUAL scale

failed to exhibit the same 5-factor structure in any of the cases. In another empirical investigation of the dimensionality of the SERVQUAL model using structural equation modeling, Cronin and Taylor (1992, p.61) found that the 5-component structure was not confirmed in any of the research samples. The authors then assessed the unidimensionality of the 22 SERVQUAL items and, other than one item which did not load on a single factor and was subsequently dropped, their results indicate that service quality can be treated as unidimensional (Cronin and Taylor, 1992, p.61). The results of an empirical study of an electric gas and utility company using SERVQUAL also indicate that, apart from the confounding effect of negatively worded questions, service quality can be viewed as essentially a unidimensional construct (Babakus and Boller, 1992, p.264). In addition, although their intent was to empirically investigate the problems associated with conceptualising service quality as a difference score, Brown, Churchill and Peter (1993, p.137) also found that the five SERVQUAL dimensions did not replicate, and that the 22 items might better represent a unidimensional construct.

Investigating the dimensionality of service quality is not the purpose of this thesis and is outside its scope. However, in accordance with the preceding literature review, service quality, as a whole, is considered in this thesis as one of the possible elements of value to meeting planners who book meetings at luxury hotels. This is not to imply that service quality is necessarily a unidimensional construct (although much of the current literature points in this direction as a viable alternative) but, rather, that the issue of its dimensionality is currently unresolved.

# Conceptual overlap

Another area of considerable controversy regarding the SERVQUAL model is the conceptualisation of service quality as the mathematical difference (gap) between customers' expectations about the performance of a service provider and their assessment of the actual performance received (Parasuraman, Zeithaml and Berry, 1988, p.15). Although nearly all researchers agree that service quality and customer satisfaction are distinct constructs, this conceptualisation of service quality is virtually identical to the most widely accepted conceptualisation of customer satisfaction as the (dis)confirmation of expectations (Oliver, 1980). A study comparing twelve of the major service quality and customer satisfaction models from 1980-1995 revealed that the set of service quality models and the set of customer satisfaction models did not differ systematically from each other (Iacobucci, Ostram, Braig and Bezjiam-Avery, 1996, p.18). This conceptual overlap has contributed to the confusion regarding the distinction between the two constructs (Parasuraman *et al*, 1994, p.112).

The debate has been extensive (see, for example, Anderson and Fornell, 1994; Bitner and Hubbert, 1994; Cronin and Taylor, 1992; Liljander and Strandvik, 1995; Oliver, 1993; Parasuraman, Zeithaml and Berry, 1994; Rust and Oliver, 1994; Taylor and Baker, 1994; Teas, 1993). Reviewing the entire controversy in detail is beyond the scope and outside the purpose of this thesis. However, two particular issues are relevant. The first regards the measurement of customer expectations, and the second relates to the causal direction between the constructs of service quality and customer satisfaction.

## Expectations versus performance

A significant amount of discussion has centered on the meaning of the expectations concept (Boulding, Kalra, Staelin and Zeithaml, 1993; Parasuraman, Zeithaml and Berry, 1988; Teas, 1993). Does 'expectations' mean what *should* happen, what *will* happen, what is *desired*, what is *adequate*, what is *ideal* or what is the *norm*? Teas (1993, p.18) questions the validity of conceptualising service quality as the gap between customers' expectations and perceptions of service performance, particularly in terms of the ambiguity surrounding the expectations concept. He empirically tests two alternative service quality models (evaluated performance and normed quality) and concludes that the evaluated performance model demonstrates greater construct validity (p.31). Cronin and Taylor (1992, p.64) propose that the SERVQUAL conceptualisation of service quality is based on a flawed paradigm. According to the results of their empirical test of four service quality models, the weight of the evidence clearly supports the use of performance-based measures of service quality.

Other marketing literature also offers considerable support for the superiority of performance-based measures of service quality (see Bolton and Drew, 1991; Cronin and Taylor, 1992, p.56). Researchers agree that some measure of customer perceived performance is important in assessing service quality (Robinson, 1999, p.24). Zeithaml, Berry and Parasuraman (1996, p.40) have stated that a perceptions-only conceptualisation is appropriate if the primary purpose of measuring service quality is to attempt to explain the variance in some dependent construct. In this thesis, therefore, the measurement of customer perceptions of service performance is included and customer expectations are not. As previously stated, this is not to imply

that customers do not have expectations or that expectations are unimportant, but rather that current conceptual theory and empirical evidence seem to suggest that the measurement of perceived performance alone in post-consumption models is sufficient, and that it is not necessary to include the measurement of customer expectations.

## Causal direction

The second relevant issue relates to the causal direction of the constructs of service quality and customer satisfaction. An empirical study of the relationship between perceived quality, customer satisfaction and behavioural intentions compared two models using structural equation modeling (Gotlieb, Grewal and Brown, 1994). In model one, the paths between quality and customer satisfaction were reciprocal. In model two, satisfaction was an antecedent of quality. Model one fit the data well. However, only the path from quality to satisfaction was significant, the reciprocal path from satisfaction to quality was not. In another study of the relationship between quality, satisfaction and recommending behaviour that also employed structural equation modeling, the authors found that the only path that was *not* significant was the path from customer satisfaction to overall quality (Getty and Thompson, 1994), while the path from quality to satisfaction was significant. Furthermore, although Parasuraman *et al* (1988) originally proposed that customer satisfaction is an antecedent of service quality, they have recently suggested that service quality may sometimes be an antecedent of customer satisfaction (Parasuraman *et al*, 1994, p.112). In this thesis, therefore, service quality is posited to be one of the antecedents of

customer satisfaction (see also Liljander and Strandvik, 1995, p.145; Oliver, 1993,

p.78, 1997, p.403; Taylor, 1997, p.137; Zeithaml and Bitner, 1996, p.123).

## Objectivity and subjectivity

Another difference between the constructs of service quality and customer satisfaction

is that customer satisfaction is a personal response in which it is necessary for the

service to be directly experienced by the customer, whereas a customer can make

quality judgements about a service provider based on, for example, word-of-mouth,

advertising or ratings without ever having personally experienced the service (Oliver,

1993, p.65; Zeithaml and Bitner, 1996, p.124). It has been said that customer

satisfaction can be seen as an *insider* perspective based on the customer's own

personal experiences, whereas service quality can be seen as an *outsider* perspective

based on knowledge about a service provider obtained through word-of-mouth or

advertising, with or without actual personal experience (Liljander and Strandvik, 1994

as quoted in Storbacka *et al*, 1994, p.24). In other words, the focal point of customer

satisfaction is the customer and his personal response to the service offering, whereas

the focal point of service quality is the service offering itself (as perceived by the

customer).

Thus, combining service quality and customer satisfaction in one model provides both

an objective perspective (specifics regarding service attributes) as well as a subjective

perspective (the customer's personal response to the service offering). Some of the

major differences between service quality and customer satisfaction are outlined in

Figure 2.6.

# Figure 2.6 Service quality versus customer satisfaction

| Service Quality | Customer Satisfaction |
| --- | --- |
| Antecedent | Consequent /mediating |
| Objective and subjective | Subjective |
| Reputation and/or personal experience | Personal experience |
| Customer's judgement of excellence | Customer's fulfillment response |

## Service quality, satisfaction and value

Although, in the past, service quality researchers have focused on studying service quality in isolation, integrated models now need to be developed (Gronroos, 1993, p.61- 62; Oh and Parks, 1997). Recent research has begun to attempt linking service quality, customer satisfaction and customer perceived value in one model (Andreassen and Lindestad, 1998; Bolton and Drew, 1991; Nguyen and LeBlanc, 1998; Oh, 1999; Patterson and Spreng, 1997). However, additional research is needed to better grasp the relationship that exists between service quality, customer satisfaction and value (Nguyen and LeBlanc, 1998). The current state of knowledge in this area is still in its infancy (Taylor, 1997, p.152).

Bolton and Drew (1991, p.383) were some of the first researchers to investigate the relationship between service quality and value using structural equation modeling. Their findings suggest that value is a richer, more comprehensive measure of customers' overall evaluation of a service than service quality. In addition, they

recommended that the construct of customer satisfaction be integrated into future structural equation models along with service quality and value (p.384).

The service-profit chain model (which was developed from the analysis of successful service organisations) establishes relationships between service quality, employee satisfaction, customer perceived value, customer satisfaction and loyalty (Heskett *et al*, 1994, p.166). It proposes that:

- profit and growth are stimulated primarily by customer loyalty;

- customer loyalty is a direct result of customer satisfaction;

- customer satisfaction is largely influenced by the value of services provided to customers;

- value is created by satisfied, loyal and productive employees; and

- employee satisfaction results primarily from high quality services.

However, the service-profit chain model was not empirically tested.

In an empirical study of the relationship between value, satisfaction and repurchase intentions for business-to-business professional services, service quality was included as one of six performance dimensions of value (Patterson and Spreng, 1997, p.427). Each of the six performance dimensions (including service quality) had a significant effect on value and satisfaction (p.426).

An empirical study by Oh (1999) was one of the first to integrate service quality, customer satisfaction and perceived value in one model in the hospitality industry. The primary focus of this study was to provide initial evidence for an integrated approach

to service quality and customer satisfaction research. The results suggest that customer perceived value is an important construct to be considered in future service quality and customer satisfaction studies. In addition, it was recommended that the constructs of perceived value, service quality and customer satisfaction be more clearly defined in future research.

## Hypotheses

In accordance with the preceding literature review, the following hypotheses are proposed:

H4a:   Perceived service quality has a significant positive impact on customer satisfaction.

H4b:   Perceived service quality has a significant positive impact on customer perceived value.

## Relationship quality

The proposition that a company's relationship with its customers is important is not a new idea (Gummesson, 1997, p.55; Petroff, 1997, p.29). However, the growth of the service sector and increased recognition of the potential relational benefits for both the firm and the customer have given this old idea a new significance (Berry, 1995a). In addition, the use of technology to replace personal interaction between the customer and the company has increased the potential value of such interaction (Schlesinger and Heskett, 1992, p.166). There has therefore been a call in the literature for greater attention to the role of relationships, especially in service industries (Bendapudi and Berry, 1997, p.16; Crosby, Evans and Cowles, 1990, p.69; Dwyer *et al*, 1987;

Gronroos, 1990a; Gummesson, 1997; Scanlan and McPhail, 2000, p.494). The growing importance of this topic is also evidenced by the fact that the Marketing Science Institute (MSI) selected relationship marketing as one of its three main topics for the years 1996-1998 (Gruen, 1997, p.35) and special issues on the topic were recently published by two leading journals, the Journal of the Academy of Marketing Sciences (Fall 1995) and Psychology and Marketing (December 1997).

In many service industries, particularly where product and service offerings may be virtually identical, relationship quality can be a significant means for gaining competitive advantage (Gwinner, Gremler and Bitner, 1998, p.101; Reichheld, 1993; Schulz, 2000). The services literature recognizes the importance of personal interaction in creating satisfied customers (Crosby et al, 1990, p.68; Parasuraman et al, 1985; Rosen and Surprenant, 1998). The quality of buyer-seller interactions can also have an immense impact on future buying behaviour and on word-of-mouth (Gronroos, 1990a, p.4). Crosby, Evans and Cowles (1990, p.75), for example, found that relationship quality as perceived by the customer had a significant influence on customers' anticipation of future business. Liljander and Strandvik (1995) discuss the value of relationship quality in service settings. According to their paradigm, customers compare what they 'get' from a consumer relationship (benefits) with what they 'give' (sacrifices), and this comparison leads to a perception of relationship value (p.146). A strong, positive relationship between a firm and its customers can thus provide an opportunity for differentiation and can add value above and beyond that which is provided by the goods and services on one hand, and price on the other (Gronroos, 1997, p.332; Gwinner et al, 1998, p.102; Ravald and Gronroos, 1996, p.22; Sheaves and Barnes, 1996, p.220; Tzokas and Saren, 1997, p.111).

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The results of two case studies by Rosen and Surprenant (1998, p.113) indicate that it is important to include a consideration of critical relationship benefits, as distinct from product or service benefits. Kaplan and Norton (1996b, p.62) include customer relationships in addition to product and service attributes and image as dimensions of customer perceived value leading to customer satisfaction in their 'Balanced Scorecard'. Patterson and Spreng (1997) found that 'relationship' was one of six performance dimensions influencing customer satisfaction and perceived value in business-to-business services. In addition, the results of an empirical investigation of the social content of interaction between employees and customers indicated that 'personalisation' (employees are polite, courteous, friendly, pleasant and know you personally) is an important determinant of customer satisfaction and patronage behaviours, such as willingness to recommend and decreased propensity to switch (Mittal and Lassar, 1996). The authors also suggest that current measures of service quality may not adequately cover this component.

It has also been noted in the literature that three of the five dimensions of service quality measured by the SERVQUAL scale (responsiveness, assurance and empathy) actually measure aspects of relational performance (relationship quality) (Bitner, Booms and Tetreault, 1990, p.72; Czepiel, 1990, p.17; Hocutt, Chakraborty and Mowen, 1997, p.457). Therefore, especially in service industries, customers' evaluation of their relationship with the company should be considered *in addition to* their evaluation of the product and service dimensions (Henning-Thurau and Klee, 1997, p.751). More than selling the tangible product or the intangible service, hoteliers

must focus on managing long-term relationships with customers (Dev and Ellis, 1991, p.30).

As organisations shift more resources from acquiring customers to retaining customers, customer value dimensions that drive customers' commitment to continue doing business with a company will take on added importance (Woodruff, 1997, p.149). In addition to product and service quality, therefore, the impact of relationship quality should be included in models of customer satisfaction and perceived value. This thesis thus extends the discussion on satisfaction and value by including a consideration of the impact of relationship quality in the model of customer loyalty.

## Relationship marketing

The vast majority of the literature on business relationships focuses on relationship *marketing* (see, for example, Berry, 1983, 1995a; Bendapudi and Berry, 1997; Gronroos, 1995, 1997; Gummesson, 1997; Gwinner *et al*, 1998; Liljander and Strandvik, 1995; Morgan and Hunt, 1994; Rosen and Surprenant, 1998; Sheth and Parvatiyar, 1995; Tzokas and Saren, 1997). As Peter Drucker said in 1964, 'the basic purpose of any business is not to sell a product but to create and keep customers' (as cited in Petrof, 1997, p.29). The thinking of Levitt (1983) that 'buyer-seller relationships do not end after the initial sale is made' also brought the topic of relationship marketing to the forefront. The term 'relationship marketing' is attributed to Berry (1983) and has been variously defined as:

• attracting, maintaining and enhancing customer relationships (Berry, 1983, p.25);

- all marketing activities directed towards establishing, developing and maintaining successful relational exchanges (Morgan and Hunt, 1994, p.22);

- a process in which a firm builds long-term alliances with current and potential clients in such a way that the buyer and seller both work towards a common set of specific goals (Evans and Lasking, 1994);

- the process of planning, developing and nurturing a relationship climate that will promote a dialogue between a firm and its customers which aims to imbue an understanding, confidence and respect of each others' capabilities and concerns when enacting their role in the marketplace and society (Tzokas and Saren, 1997, p.107);

- to establish, maintain, enhance and commercialize customer relationships (often but not necessarily always long term relationships) so that the objectives of the parties involved are met (Gronroos, 1990a, p.5); and

- to build and maintain a base of committed customers who are profitable for the organization (Zeithaml and Bitner, 2000, p.139).

Not only is the range of definitions of relationship marketing quite broad, but the domain of relationship marketing is also quite broad including, for example, the marketing channels literature (e.g. Dwyer *et al*, 1987), the industrial marketing literature (e.g. Gummesson, 1987), and the services marketing literature (i.e. Gronroos, 1990a). Morgan and Hunt (1994) outline ten different types of business relationships within four categories: (1) supplier partnerships (goods and services); (2) lateral partnerships (competitors, nonprofit organisations, government); (3) buyer partnerships (ultimate customers and intermediate customers); and (4) internal

partnerships (functional departments, employees, business units). Gummesson (1997, p.58-59) suggests thirty relationships of importance to the firm beyond the relationship with the customer. In addition, relationship marketers have used a wide range of strategies, such as database marketing, mass customisation and membership reward programmes, in an effort to strengthen business relationships (Tzokas and Saren, 1997). The focus of this thesis, however, is not relationship *marketing* but relationship *quality* (the quality of the relationship between the company and the customer) as perceived by the customer.

In a business setting, the potential for relationships to form occurs during service encounters (or 'moments of truth'), which is any time the customer interacts with the people who represent the service provider (Crosby *et al*, 1990, p.68; Sheaves and Barnes, 1996, p.217). Every interaction should be seen as an opportunity to add value (Griffin, 1995, p.39). A common complaint of customers is the inability or unwillingness of service providers to maintain stability in their customer contact employees (Heskett *et al*, 1997, p.106). In this thesis, the term *relationship* is used to refer to the personal elements with which the customer (meeting planner) interacts during a consumption experience, such as fairness, trust, teamwork, stability and appreciation. Relationship quality is defined as *the excellence of the personal interaction elements of the total consumption experience as perceived by the customer.*

## Transactional versus relational exchange

Marketing exchange can be seen as a continuum with a 'transaction' orientation on one end of the spectrum and a 'relational' orientation on the other (Gronroos, 1995,

p.252). In its purest form, a 'transaction' is a one-time exchange of value between two parties with no prior or subsequent interaction (Webster, 1992, p.6). A 'relationship' exists when an individual exchange is assessed not in isolation but as a continuation of past exchanges likely to continue into the future (Czepiel, 1990, p.15). Figure 2.7 outlines the major differences between transactional and relational exchange.

## Figure 2.7 Transactional versus relational exchange

| Transactional Exchange | Relational Exchange |
| --- | --- |
| Impersonal | Personal, social |
| Discrete, one-off event(s) | Connected, ongoing process |
| Short-term orientation | Long-term orientation |
| Customer acquisition focus | Customer retention focus |

Not all industries, all market segments within those industries, nor all individual customers within those market segments are suitable for the establishment of strong customer relationships (Berry, 1995, p.238; Levitt, 1983; Mittal and Lassar, 1996; Reichheld, 1993). Some industries, market segments and customers can be adequately served by means of a series of discrete transactions (Palmer, 1994, p.43). However, in other business settings, the quality of the personal relationships established with customers can be the key to success (Czepiel, 1990, p.16).

Certain conditions have been shown to be more conducive to relational exchange. For example, service industries, because of their riskiness (due to the relative lack of

objective means of evaluation prior to consumption and the inability to 'undo' poor service), their ongoing nature, and their inherently greater interpersonal focus, are particularly suitable for relational exchange (Bendapudi and Berry, 1997, p.16; Czepiel, 1990; Gronroos, 1995). In addition, within service industries, when the service is complex and customised, there is a high degree of customer involvement and a considerable financial investment, the value of strong customer relationships becomes even more important (Berry, 1995, p.237; Bitner, 1995, p.249; Crosby *et al*, 1990, p.69; Gwinner *et al*, 1998, p.109; Halinen, 1996, p.330; King and Garey, 1997, p.40; Palmer, 1994, p.163; Sheaves and Barnes, 1996, p.218). Mittal and Lassar (1996) demonstrated empirically that the influence of 'personalisation' (personal interaction) was greater in *people* processing service industries (e.g. health care) than in *possession* processing service industries (e.g. auto repair). Each of these conditions that are conducive to relational exchange (risky, ongoing, interpersonal, complex, customised, high customer involvement, considerable financial investment, people processing service) is applicable to the meeting planner who books meetings at luxury hotels.

## Relationship benefits

The benefits to service providers of having developed strong relationships with their customers are relatively well documented, for example, a stable supply of future revenue, positive word-of-mouth and referrals, decreased marketing and operating costs, more satisfied and productive employees, and insulation from price competition (Dwyer *et al*, 1987, p.14; Reichheld, 1993, 1996; Reichheld and Sasser, 1990; Schlesinger and Heskett, 1991; Sheaves and Barnes, 1996, p.220). Furthermore, as a

relationship becomes more valuable to a customer, it has been proposed that customer commitment increases (Liljander and Strandvik, 1995; Liu, 1998, p.33). Therefore, good working relationships can represent a formidable barrier to entry by the competition and provide a powerful competitive advantage for a company (Dwyer *et al*, 1987, p.14; Heskett *et al*, 1990, p.160).

However, in order for a business relationship to prosper, both the company and the customer must perceive it to be beneficial (Berry, 1995; Czepiel, 1990; Levitt, 1983, p.91). The benefits to the customer of strong working relationships have not been as extensively researched as the benefits to the company (Bitner, 1995, p.246). Proposed customer benefits have included reduced transaction costs (in time, money and energy), reduced uncertainty and risk, reduced need to search for new information, and reduced stress (Bejou, 1997, p.729; Bendapudi and Berry, 1997, p.20; Bitner, 1995, p.250; Crosby *et al*, 1990, p.69; Storbacka *et al*, 1994, p.26). The findings of a recent empirical study examining the benefits customers receive as a result of long-term relational exchanges with service firms identified three types of relational benefits: (1) confidence (reduced risk and anxiety, trust in service provider); (2) social (personal recognition, familiarity with employees); and (3) special treatment (price breaks, customisation, faster service) (Gwinner *et al*, 1998). The results of another empirical study of the antecedents and consequences of building relationships with business travel customers in the luxury hotel segment indicated that the most important variables in the development of customer commitment were (1) the level of their trust in the hotel, and (2) the benefits they receive (e.g. expediency, customisation, appreciation, recognition) (Bowen and Shoemaker, 1997, p.39 and p.42). The results of a further empirical study on the critical relational attributes for business guests of 4

and 5 star hotels found (1) personalisation, (2) social bonding, (3) reliability and (4) familiarisation to be the most significant factors in the improvement of customer retention (Scanlan and McPhail, 2000, p.491).

However, sometimes customers may stay in business relationships because of constraints and/or a lack of alternatives (they 'have' to), not because they value the relationship and desire to maintain it (they 'want' to) (Bendapudi and Berry, 1997; Jones and Sasser, 1995). Liljander and Strandvik (1995, p.152-154) outline ten types of bonds that can tie a customer to a company: legal, economic, technological, geographical, time, knowledge, social, cultural, ideological and psychological. A company can also attempt to bind a customer to itself by means of economic, social or structural ties (Berry and Parasuraman, 1991, p.136-142). Merely retaining customers, however, is not the same as building relationships with them. A strong, positive working relationship between the service provider and the customer can have a profound effect on customer perceptions of value (Bounds, Yorks, Adams and Ranney, 1994, p.175). The objective, therefore, is to build a positive working relationship from the perspective of the customer, not only from the perspective of the firm (Sheaves and Barnes, 1996, p.217).

As discussed, although relationship quality is not significant in every business setting, it is proposed that the role of relationship quality could be a significant source of value and satisfaction for meeting planners who book meetings at luxury hotels. Hotels that host many meetings are increasingly providing one contact person at the hotel who acts as a liaison between the meeting planner and the various departments of the hotel (sometimes called a convention service manager or a conference planning manager) to

make just such a relational benefit available to the meeting planner (Cabanas, 1992, p.49). Previous research indicates that this position is one that is highly valued by meeting planners (Rutherford and Umbreit, 1993).

## Hypotheses

In accordance with the preceding literature review, the following hypotheses are proposed:

H5a:   Perceived relationship quality has a significant positive impact on customer satisfaction.

H5b:   Perceived relationship quality has a significant positive impact on customer perceived value.

## Extra benefits

In this thesis, the term 'extra benefits' is used to refer to *the additional advantages that customers may receive as a result of their association with a company*, such as frequency programmes, VIP treatment, customisation and the overall effects of image perceptions. Extra benefits are viewed as a means (direct or indirect) of acknowledging the value of a customer to a company and rewarding his/her special status (Barlow, 1998). They are also a means of providing value and satisfaction to a customer beyond that provided by the products, services or relationships that a company offers.

A recent article in the Wall Street Journal (Binkley, 2000) describes the current battle that is being waged between major hotel corporations such as Bass, Hilton, Marriott

and Starwood to attract the lucrative frequent business traveler market by offering

extra benefits such as hospitality events (i.e., parties, pro-am golf tournaments), VIP

upgrades and enhanced frequent stayer programmes (p.A1). As a Hilton representative

said, "We all have nice rooms. We're all in great locations. We all have great

service... how can I stand out here?" (p.A1). Following the launch of its upgraded

Preferred Guest programme in 1999, Starwood doubled the number of its guests who

stayed more than 25 nights in one year (p.A12).

## Frequency programmes

One of the most common extra benefits provided by a company to its customers is the

frequency program, or loyalty scheme, such as an airline's frequent flyer programme

or a hotel's frequent stayer programme. Frequency programmes have recently received

considerable attention in both trade and academic journals (see, for example, Dowling

and Uncles, 1997; O'Brien and Jones, 1995; O'Malley, 1998). O'Malley (1998, p.51)

outlines four primary objectives of such programmes: (1) to reward loyal customers,

(2) to generate information, (3) to manipulate customer behaviour, and (4) to combat a

competitive scheme.

The original frequent flyer programme was established by American Airlines in the

early 1980's (Lovelock, 1996, p.199), with hotel chains setting up their own

programmes modeled on those of the airlines soon thereafter (Binkley, 2000, p.A1;

Toh, Rivers and Withiam, 1991, p.47). Reward programs have become common in

both the transportation and hospitality industries (Bolton, Kannan and Bramlett, 2000,

p.95). Some hotel companies (for example, Hilton and Hyatt) now also have frequency

programmes geared specifically for meeting planners

(hilton.com/hhonors/points/meeting; hyatt.com/meetings/dividend).

Although most hotel chains offer frequent stayer programmes, usually in partnership

with airline and car rental companies (Powers and Barrows, 1999, p.371), there is

considerable controversy concerning their value, not only to the company but also to

customers (McCleary and Weaver, 1991, p.39; O'Malley, 1998). In a study of frequent

business travelers, for example, the existence of a frequent stayer programme was

rated 6$^{th}$ (out of 7 factors) in importance in their hotel selection criteria (Toh, Hu and

Withiam, 1993, p.70). The results of a recent study of the membership programme of a

credit card company also found that being a member of the loyalty program did not

have a direct positive effect on customer retention (Bolton, 2000, p.103). Both

industry and academia are questioning whether loyalty programmes really create extra

value for customers beyond that derived from the product or service (Dowling and

Uncles, 1997, p.71; O'Brien and Jones, 1995; O'Malley, 1998), or whether these

programs are merely encouraging customer loyalty to the loyalty program (Bolton,

Kannan and Bramlett, 2000, p.106; Dowling and Uncles, 1997, p.75; McCleary and

Weaver, 1991, p.45; O'Malley, 1998, p.52).

## VIP treatment

VIP treatment, such as guaranteed rooms, room upgrades, express check-in, late

check-out, complimentary gifts or hospitality events, may be integrated into a hotel's

frequency programme or be offered separately, sometimes as part of a corporate rate

program (Lewis and Chambers, 1989, p.433). Some VIP treatment (for example, room

upgrades for important meeting participants) may be included as part of a meeting package (see interconti.com/meetings/solutions).

The findings of a recent empirical study investigating the benefits customers receive as a result of engaging in long-term relational exchanges with service providers indicated that special treatment benefits were perceived as the least important benefits that customers receive (Gwinner *et al*, 1998). However, the authors point out that 'the relatively low importance ratings do not categorically argue against properly structured special treatment (reward) programs' (p.110).

In a study of luxury hotel business guests, the loyalty creating effect of 18 possible benefits was investigated (Bowen and Shoemaker, 1998, p.20). The top two benefits were: (1) the hotel provides upgrades, and (2) you can check-in and check-out at a time that suits you. However, the existence of a frequent guest programme appealed strongly to only a small percentage of customers.

## Customisation

For their regular customers, many service providers customise their service to meet particular customer needs (Gwinner *et al*, 1998, p.105). Customisation (the ability to tailor the service to the preferences of the customer) can offer great potential for service providers (Sisodia, 1992, p.59). Before the days of industry consolidation and information technology, local innkeepers knew their regular guests individually and kept records of guests' preferences and needs, either in their heads or by means of hand-written guest history cards (Dev and Ellis, 1991, p.30). In the past, hotels often

remained under the same family ownership for generations, with guests and employees remaining for their lifetimes. In larger hotels, management was often promoted from within the ranks. As a result of this longevity, hotel staff came to know the regular guests and strong relationships were formed over time.

However, industry consolidation, information overload, high employee turnover, and decreased guest contact has caused this intimate guest knowledge to disappear (Dev and Ellis, 1991, p.31). Today, the use of database systems to track customer preferences is a powerful tool that allows companies to identify their customers, differentiate them, interact with them and customise their offerings (Berry, 1995; Grossman, 1998, p.13; Heskett, Sasser and Hart, 1990; Sisodia, 1992, p.54).

In a study of luxury hotel business guests, the benefit that 'the hotel uses information from your prior stays to customise services for you' was rated number 3 out of 18 benefits deemed to engender customer loyalty (Bowen and Shoemaker, 1998, p.20). A recent study by the Center for Hospitality Research at Cornell University also found that customised service was an important source of value to hotel guests (Dube and Renaghan, 2000, p.70). Some hotel companies (Benchmark, for example, which specialises in resort conference hotels) keep comprehensive histories of meeting needs so that basic background information need be supplied by the meeting planner only once (Cabanas, 1992, p.48).

The tracking of customer preferences not only allows a company to customise its offerings, but also to anticipate regular customers' needs (Sisodia, 1992, p.59). In a research study sponsored by Cornell University's Center for Hospitality Research, the

Balsams Grand Resort Hotel, a privately owned resort, was listed as a 'Functional Best-Practice Champion' for their guest history system (Dube *et al*, 1999, p.41). Because the resort is located in northern New Hampshire far from most urban areas, management recognised that it would need a high ratio of return guests if it were to be successful. The institution of its guest history system allowed the hotel to customise its guest services and also to anticipate customer wishes. Today, 85% of the hotel's occupancy consists of either former guests or new guests who have come as a result of the referral of former guests.

## Image

Apart from *direct* benefits (the actual product, service and relationship quality that a company provides), customers may also receive *indirect* benefits such as a sense of security or a sense of pride from doing business with a company that has a good reputation. Does it make any difference to meeting planners whether a hotel has a good reputation with other meeting planners, is perceived as a 'good citizen' in the community, is environmentally concerned? Does it matter to meeting planners whether they can take pride in booking meetings at a particular hotel or with a particular chain? Do these issues influence meeting planner perceptions of value, their level of satisfaction, their commitment to booking meetings at a hotel? Or are these issues irrelevant? This thesis attempts to answer these questions.

## Relationship to value, satisfaction and loyalty

Researchers have warned against attempting to build customer loyalty mainly through the development of loyalty programmes, customer bonds and promotional schemes

apart from the development of a coherent value proposition (Dowling and Uncles, 1997; O'Brien and Jones, 1995; O'Malley, 1998, p.55; Reichheld, 1993, p.64). If employed, such loyalty schemes must be considered as only one of the elements of a coherent value proposition (O'Malley, 1998, p.55). As a hospitality marketing representative said, "The reward is not enough" (Bruns, 1998). How important is a hotel's provision of extra benefits to meeting planner satisfaction and perceptions of value? There is very little empirical research on the impact of extra benefits on customer satisfaction, perceptions of value or loyalty, particularly in the meeting market. This thesis attempts to fill that void.

## Hypotheses

In accordance with the preceding literature review, the following hypotheses are proposed:

H6a:  Perceived extra benefits have a significant positive impact on customer satisfaction.

H6b:  Perceived extra benefits have a significant positive impact on customer perceived value.

## Problem resolution

Although some companies consider customer problems to be a nuisance and investments in customer problem resolution to be a waste of resources, other companies, such as Ritz-Carlton, are realising the value of implementing proactive problem resolution strategies (Berry and Parasuraman, 1992a; Hart, Heskett and Sasser, 1990; Partlow, 1993). How a company responds to problematic customer

situations can have a tremendous impact on customer attitudes and intentions (Webster and Sundaram, 1998, p.153). Research has demonstrated that the use of effective recovery strategies can convert a problematic situation into a favourable one, restoring or even enhancing customer satisfaction, commitment and loyalty (Hart, Heskett and Sasser, 1990, p.148; Kelly, Hoffman and Davis, 1993; Tax, Brown and Chandrashekaran, 1998, p.86). Recently, Hampton Inn hotel chain achieved the highest customer retention rate in the industry, partially as a result of their strategy to ensure that customer problems are dealt with effectively (Ettorre, 1994). Ineffective recovery strategies, on the other hand, can exacerbate a situation and drive the customer to a competing firm (Smith, Bolton and Wagner, 1999, p.356).

Unfortunately, customers often become even *more* dissatisfied by a company's inadequate or inappropriate response (or lack of any response at all) than by the original problem itself (Bitner, Booms and Tetreault, 1990; Feinberg, Widdows, Hirsch-Wyncott and Trappey, 1990). Bitner, Booms and Tetreault (1990, p.80) called this situation a 'double deviation', in that both the initial event and the recovery attempt are failures. Unsatisfactory problem resolution is a leading cause of customer switching behaviour (Berry and Parasuraman, 1991; Hart, Heskett and Sasser, 1990; Keaveney, 1995; McDougall and Levesque, 1998, p.28; Zeithaml, Berry and Parasuraman, 1990) with about half of business responses to customer complaints actually strengthening customers' negative feelings toward the company (Berry and Parasuraman, 1991; Hart, Heskett and Sasser, 1990, p.150; Tax, Brown and Chandrashekaran, 1998, p.72).

However, the results of research on customers' response to a company's *effective* recovery effort are mixed. Zeithaml, Berry and Parasuraman (1996) found that customers who experienced no service problems had a more positive attitude toward the firm than customers who experienced a problem that was satisfactorily resolved. Bolton and Drew (1992) found that service failures may weaken the customer-company bond even when the problem was satisfactorily resolved. McDougall and Levesque (1998) found that customers held negative future intentions toward the service provider regardless of the recovery strategy used. Other research, however, has found that an effective recovery strategy may lead to the paradoxical situation in which the customer has more positive feelings toward the company after a problem has been corrected than if the transaction had been performed correctly the first time (Abrams and Pease, 1993; Hocutt, Chakraborty and Mowen, 1997; McCollough and Bharadwaj, 1992). Although it is generally more difficult to execute an effective recovery in the case of serious failures, recent research seems to indicate that it is possible to recover from almost any failure, regardless of its type or magnitude (Hoffman, Kelley and Rotalsky, 1995, p.58).

How a company deals with customer problems and complaints is therefore vitally linked to the satisfaction and loyalty of its customers (Tax and Brown, 1998, p.75). Customer problems represent opportunities for a company to create goodwill by the way in which these problems are handled (Berry and Parasuraman, 1992a; Hart, Heskett and Sasser, 1990, p.151; Johnston and Fern, 1999, p.70) and even service delivery system failures can be remembered as highly satisfying if they are handled properly (Bitner, Booms and Tetreault, 1990, p.80). Certainly, the issue of customer problem resolution deserves more attention from both practitioners and academicians

(Webster and Sundaram, 1998, p.153). In addition, the mixed research results suggest that further study is required to determine the relationship between customer's perceptions of problem resolution and their satisfaction and loyalty (McDougall and Levesque, 1998, p.31).

## Problem resolution versus service recovery

Much of the literature in this area focuses on service recovery, an issue closely related to problem resolution. Service recovery has been defined as:

- an attempt by an organization to offset the negative impact of a failure or breakdown (Zemke and Schaaf, 1989);

- an exchange in which the customer experiences a loss due to the failure and the organization attempts to provide a gain in the form of a recovery effort, to make up for the customer's loss (Smith, Bolton and Wagner, 1999, p.357); and

- the actions an organisation takes in response to a service failure (Gronroos, 1988).

However, because the present research is integrative in nature, it addresses problems that a customer may encounter not only with the service, but also with other aspects of a company's offering, such as product, relationship or cost issues. Furthermore, the concept of problem resolution is more all-encompassing than service recovery in that it includes the addressing of customer difficulties that are not necessarily the result of a company's failure or mistake (Hart, Heskett and Sasser, 1990, p.152). In a study by Johnston (1995) using critical incident technique to investigate what constitutes 'failure' in the minds of customers, customers were asked to think of a time when they were very satisfied and a time when they were very dissatisfied with the service they

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received. Some of the incidents were associated with the service system (20%), others with physical goods (27%), and others with the customer's body (27%) or actions (25%). The results of the study suggest that, from a customer's point of view, a 'failure' is any situation where something has gone wrong, irrespective of responsibility. The author concludes that situations which are not necessarily the responsibility of the organisation can provide opportunities to generate high levels of customer satisfaction. Other researchers agree that organisations should view 'failure' as an opportunity to create satisfied customers (Heskett, Sasser and Hart, 1990; Berry and Parasuraman, 1992a). Problem resolution is therefore defined as *the efforts of a company to respond positively in the solution of customer difficulties encountered during the total consumption experience (irrespective of the source of causality) as perceived by the customer.*

## Problem resolution strategies

Despite the importance of service recovery (problem resolution) strategies in keeping customers, a survey by Armistead and Clark (1994) found that there was little evidence of such practices in companies. The typical service delivery system is completely unprepared to deal with exceptions and fails to anticipate that things can go wrong (Hart, Heskett and Sasser, 1990, p.150; Zemke and Schaaf, 1990). In fact, many problems are the result of faults that have actually been designed into the system (Schlesinger and Heskett, 1991).

Since the majority (70-95%) of dissatisfied customers do not complain to the company (although they will tell friends and family about their dissatisfying consumption

experiences), companies cannot afford to be complacent and assume that non-complaining customers are satisfied (Harari, 1992; Hart, Heskett and Sasser, 1990; Singh and Wilkes, 1996; Spreng, Harrell and Mackoy, 1995). A study by Tax and Brown (1998, p.77) identified four key reasons why customers don't voice their complaints to a company: (1) they believe the organisation will not be responsive, (2) they are uncertain about their rights, (3) they are concerned about the time and effort involved to complain, and (4) they anticipate negative ramifications. It is therefore essential that companies not be passive or reactive but, rather, adopt a proactive approach toward the resolution of customer problems (Berry, 1995b; Smith, Bolton and Wagner, 1999, p.359; Weiser, 1995, p.113).

The results of several studies indicate that no single recovery strategy is effective in all situations but, rather, strategies should reflect the context of the situation (Johnston and Fern, 1999, p.81; McDougall and Levesque, 1998, p.27). Some of the most common recovery strategies are apology, assistance and compensation (see Figure 2.8). However, research indicates that customers are concerned not only with the outcome of problem resolution, but also with the process and the manner in which the problem is handled (Hocutt, Chakraborty and Mowen, 1997, p.458; Smith, Bolton and Wagner, 1999, p.357; Tax, Brown and Chandrashekaran, 1998, p.62). A quick response to customer problems (Johnston and Fern, 1999, p.81; Smith, Bolton and Wagner, 1999, p.359) as well as employee helpfulness, responsiveness, flexibility and a caring attitude are valued by customers (Johnston, 1995, p.220).

According to a study by Bitner, Booms and Tetreault (1990, p.80), the largest proportion of unsatisfactory outcomes in service encounters (42.9%) from a

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**Figure 2.8 Types of recovery strategy outcomes**

| OUTCOMES | Kelley, Hoffman & Davis (1993) | Johnston (1995) | McDougall & Levesque (1998) | Tax, Brown & Chandrashekaran (1998) | Smith, Bolton & Wagner (1999) |
|---|---|---|---|---|---|
| apology (acknowledgement) | x | x | x | x | x |
| assistance (correction, action) | x | x | x | | x |
| compensation (i.e. refund, replace) | x | | x | x | x |
| explanation (information) | | x | | | |

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customer's point of view is due to employee's inability or unwillingness to respond in service delivery system failure situations. Despite the fact that research has indicated the value of empowering front-line personnel to handle routine service failures (Bowen and Lawler, 1995; Hocutt, Chakraborty and Mowen, 1997, p.461), employees often lack the responsibility and the authority to deal with customer problems (Hart, Heskett and Sasser, 1990; Tax and Brown, 1998, p.81). According to Patrick Mene, head of Ritz-Carlton's TQM program, empowering employees means giving them the responsibility and the authority to identify and solve customer problems on the spot (Partlow, 1993, p.23). At Ritz-Carlton, two-time winner of the coveted Malcolm Baldridge Award, any employee who receives a customer complaint 'owns' the complaint and is expected to break away from their normal routine to bring that problem under control. In addition, each individual employee is allowed to spend up to $2,000 to satisfy a guest. Hart, Heskett and Sasser (1990) propose the following steps in the implementation of an effective customer problem resolution strategy:

- measure the cost of effective service recovery,

- listen closely to the customer,

- anticipate potential customer problems,

- act fast,

- train employees,

- empower the front line, and

- provide customer feedback.


However, even companies with the best strategic plans and the tightest quality control procedures cannot avoid problems in all interactions with customers (Webster and

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Sundaram, 1998, p.153). Yet if problems are opportunities and an inevitable part of the service process, then many opportunities will exist for organisations to create satisfied, loyal customers through their proactive problem resolution strategies (Johnston, 1995, p.219). Effective problem resolution is therefore seen as a potential source of value and satisfaction to the customer whereby the company turns a customer cost into a customer benefit.

## Hypotheses

In accordance with the preceding literature review, the following hypotheses are proposed:

H7a:  Effective problem resolution has a significant positive impact on customer satisfaction.

H7b:  Effective problem resolution has a significant positive impact on customer perceived value.

## Customer costs

The essence of marketing is an exchange of value in which the customer must give up something of value in return for something of greater value (Holbrook, 1994, p.22; Kotler, 1991, p.4). The value construct therefore includes a consideration not only of the benefits received by the customer, but also of the sacrifices the customer must make in order to obtain those benefits (Liljander and Strandvik, 1995; Patterson and Spreng, 1997, p.430; Sweeney, Soutar and Johnson, 1997, 1999; Zeithaml, 1988, p.10). Furthermore, an explicit consideration of satisfaction with *sacrifices* should be

included along with the consideration of customer satisfaction with *benefits* (Spreng, Dixon and Olshavsky, 1993). This thesis therefore includes a consideration of both the negative side of the value equation (what must be given up or sacrificed by the customer) as well as the positive side (what is received by the customer). Customer costs are defined as *the sacrifices a customer makes in order to receive the benefits of the total consumption experience.*

The sacrifice component of the value construct includes both direct, monetary customer costs that are associated with the consumption experience (pricing considerations), and also indirect, non-monetary costs, such as time, effort or psychological costs (for example, risk or hassle) (Dube *et al*, 1999; Spreng, Dixon and Olshavsky, 1993, p.50; Zeithaml and Bitner, 2000, p.434). In a recent study of hotel guests, the recommendation was made that researchers include a consideration of factors beyond mere financial sacrifice (price) in future studies (Oh, 1999). As previously stated, because services are high in experience qualities (attributes which can only be discerned after purchase or during consumption) and credence qualities (characteristics which the consumer may find impossible to evaluate even after purchase and consumption), the indirect cost of customer perceived risk is greater for services than for products (Zeithaml, 1981, p.37). In a study of retail shoppers, Sweeney, Soutar and Johnson (1999, p.9) included the role of customer perceived risk as an antecedent of value along with price, product quality and two dimensions of service quality (technical and functional). The results of the study indicate that the effect of perceived risk on customers' 'willingness to buy' was entirely mediated through customers' perceptions of value.

There is an abundance of literature on the role of price from a strategic perspective and from a marketing perspective. However, in this thesis, the role of price is considered from a customer perspective. In the customer's evaluation of a service offering, price can function in several different ways: (1) as an indicator (cue) of quality, (2) as a reference point (too high / too low / within range), and (3) as a component of value (Lewis and Shoemaker, 1997, p.45). In the eyes of the customer, therefore, price can act simultaneously as an attraction (a higher price signalling higher quality) and a repellent (as the sacrifice component of value) (Zeithaml and Bitner, 2000, p.435). This mixed role of price from the customer's perspective is confirmed by research. The results of a study by Sweeney, Soutar and Johnson (1999, p.99), for example, indicate that price has a negative influence on value, but a positive effect on perceived product quality. Dodds, Monroe and Grewal (1991) also found that price has a negative influence on value and 'willingness to buy', but a positive influence on perceived product quality.

In an empirical study modeling the relationship between perceived value, satisfaction and repurchase intentions using structural equation modeling, Patterson and Spreng (1997) defined value as a function of multiple benefits and sacrifices. The benefit component of value was grouped into six underlying dimensions: outcome, service, relationship, methodology, problem identification and global networks. However, despite acknowledging the importance of customer costs as an antecedent to value and criticising existing models for ignoring any sacrifice component, the researchers did not attempt to capture the sacrifice component of value explicitly, but rather assumed that 'the sacrifice (cost) component of value is held constant' (p. 418). The sacrifice component of value was included within the value construct itself as 'value for money'

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(p. 424). However, the researchers recommend that future studies of a similar nature should consider including financial and non-financial 'sacrifice' components to explain perceived value better (p. 430). This study therefore extends past research by including a consideration of the impact of customer costs explicitly (as a separate dimension of the value construct), and by including the impact of both monetary and non-monetary customer costs (sacrifices).

## Hypotheses

In accordance with the preceding literature review, the following hypotheses are proposed:

H8a:   Perceived customer costs have a significant negative impact on customer satisfaction.

H8b:   Perceived customer costs have a significant negative impact on customer perceived value.

# CHAPTER 3: RESEARCH METHODOLOGY

This chapter describes the methodology used in this study. The first section sets forth the objectives of the study. The second section explains the development of the questionnaire. The third section presents the sample used for the study. The fourth section details the data collection procedures. The fifth section overviews the methods of data analysis, and the final section describes the in-depth interview procedure.

## OBJECTIVES OF THE STUDY

The primary purpose of this study is to investigate the nature of the relationship between customer perceived value, customer satisfaction and customer commitment for meeting planners who book meetings at 4 and 5 star hotels, and to develop and test an integrated post-consumption model of customer loyalty based on these components. In addition, the study investigates the relative impact of individual hotel performance attributes on customers' perceptions of value and satisfaction, and the potential difference (gap) between what the hotel actually provides and what the customer deems to be important. Finally, the drivers and the outcomes of customer commitment are investigated.

This study is integrative in nature and uses a multi-method research strategy in the belief that each of the various research strategies employed provides insights from a different perspective, with synthesis occurring at the final stage of the analysis (Morgan, 1983, p.380 as cited in Gill and Johnson, 1991, p.147). It is desired that the results of the study be both theoretically and operationally relevant. Therefore, both

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quantitative and qualitative methodologies are employed. Quantitative research seeks to quantify the data using some form of statistical analysis and generalise the results from the sample to the population of interest (Malhotra, 1996, p.164). Qualitative research, on the other hand, seeks 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, 1983, p.9). Qualitative research, such as the in-depth semi-structured interview, can add totally new dimensions to issues under study (Clark, Riley, Wilkie and Wood, 1998, p.101). The in-depth semi-structured interview methodology can provide a deeper understanding of the customer-provider relationship from the customer's perspective, and has largely been ignored in the literature (Gwinner, Gremler and Bitner, 1998, p.103).

Prior to the investigation, a valid and reliable quantitative and qualitative measure of customer commitment needed to be developed. The quantitative measure was in the form of a large sample, self-administered questionnaire containing demographic information, ratings of venue selection criteria, attribute ratings, levels of customer satisfaction, customer perceived value and customer commitment, and outcomes of customer commitment. The qualitative measure was in the form of a small sample of in-depth semi-structured interviews, thus providing scope for further investigation. The following discussion outlines the methods involved in achieving these objectives.

## QUESTIONNAIRE DEVELOPMENT

Following an extensive review of the relevant literature focusing on customer loyalty and commitment as well as customer satisfaction and customer perceived value, a

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series of open-ended exploratory one-on-one interviews were held by the researcher with senior level management from the meeting, conference center and hotel industry in order to help clarify the proposed content and format of the questionnaire to be developed. Six meeting planners (three corporate and three association), one Convention and Visitor Bureau sales director, four hotel general managers, one senior vice president of a conference hotel chain and three hotel sales and marketing directors were interviewed in person by the researcher in the UK and USA over a three month period. The literature review and open-ended interviews generated an item pool designed to measure the components of customer commitment, overall satisfaction and perceived value, as well as the hypothesised antecedents of these components, including product quality, service quality, relationship quality, extra benefits, problem resolution and customer costs. Items were selected based primarily on their proposed relevance to meeting planners' evaluation of 4 to 5 star (upscale) hotels. One particularly useful source of items was a study of loyal customers of luxury hotels by Bowen and Shoemaker (1997). From the literature review and the open-ended interviews, a theoretical model of customer loyalty was developed, as well as a draft questionnaire to test the model.

The questionnaire was divided into three parts. Part One requested background information about the meeting planner (name of position, role, years of experience, percent of time spent planning meetings, number of meetings per year and gender) and a question about the importance of various sources of information in the selection of a new hotel venue.

Part Two, which contained the bulk of the questions, focused on the meeting planner's evaluation of the hotel's performance, and the attributes that had the greatest impact on his/her level of commitment. The questionnaire items in Part Two were divided into six categories (product quality, service quality, relationship quality, extra benefits, problem resolution and customer costs), ordered to flow sequentially, and listed in a central column. Care was taken that each item addressed only one issue, that the items were worded as simply and briefly as possible, and that negatively worded items were avoided (see Hinkin, Tracey and Enz, 1997, p.102). A 7-point bipolar numeric Likert-type scale ranging from *strongly agree* (1) to *strongly disagree* (7) was attached to the left-hand side of the column, and a similar scale ranging from *not very important* (1) to *extremely important* (7) was attached to the right-hand side of the column. Meeting planners were asked to think about the 4 or 5 star hotel where they had booked the **most** meetings during the past 12 months, and respond to the items on the left-hand side of the column as they related to that hotel. They were then asked to indicate how important each item, if provided by **any** 4 or 5 star hotel, would be to their level of commitment to booking meetings at that hotel.

Many survey instruments consider the importance levels among all attributes to be equal (Barsky, 1992, p.60). However, several researchers have stressed the need to include the importance of attributes to reflect that fact that not all aspects are of equal importance to customers (Czepiel and Rosenberg, 1977, p. 408; LaTour and Peat, 1979; Patterson and Spreng, 1997, p. 423). The purpose of measuring attribute importance in this study is to identify areas of opportunity for hotels to improve their value proposition to the meeting market and increase the level of customer commitment to booking meetings at their hotel. Knowing the importance ascribed to

attributes by customers can offer valuable information to managers (Barsky, 1992, p. 61; Yuksel and Rimmington, 1998, p.70). Researchers who advocate inclusion of importance measures in survey instruments emphasise the conceptual and realistic role that the relative importance of attributes plays in human evaluative behaviour, whereas those who dismiss inclusion tend to emphasise statistical and methodoligical efficiency (Oh and Parks, 1997, p.53). In this study, attribute importance is measured both directly through self-report by meeting planners of the importance of attributes to their level of commitment, and indirectly through regression analysis.

In order to identify the outcomes of customer commitment, Part Three asked meeting planners to consider eleven statements and to circle the number (on a scale of 1 to 7) that best expressed their relationship with the hotel where they had booked the most meetings during the past twelve months. The option of responding 'Doesn't Apply' was also provided. Finally, meeting planners were asked to rate (on a scale of 1 to 5) their level of overall satisfaction, value received and commitment to booking meetings at that hotel in the future.

Researchers have called for the inclusion of *actual* customer behaviour, such as repeat purchase, in loyalty research (Storbacka *et al*, 1994, p.21; Zeithaml *et al*, 1996, p.46). By asking meeting planners to respond in terms of the hotel where they had booked the most meetings during the past 12 months, the behavioural dimension (*actual* repeat purchase) and the temporal dimension (over time) of customer loyalty were captured in the questionnaire.

The overall satisfaction measure agrees with the work of Hallowell (1996) and Teas (1993) who propose that customer satisfaction can be examined at either the transaction-specific or global level. Studies have traditionally measured the construct of overall customer satisfaction with a single item measure (Bitner, 1990; Bolton and Drew, 1991; Cronin and Taylor, 1992).

An often overlooked yet necessary step in the scale development process is pre-testing items for content validity in order to ensure that the items represent reasonable measures of the constructs (Hinkin, Tracey and Enz, 1997, p.104). The questionnaire was therefore pre-tested and evaluated by two meeting planners, one conference sales director, one marketing director of a Convention and Visitors Bureau, two academicians familiar with the hotel industry and one academic statistician specialising in marketing research. Respondents were encouraged to identify unclear items and suggest changes. The pretest sample provided helpful comments that were incorporated into subsequent revisions of the questionnaire, resulting in the retention of 63 items. A copy of the cover letter that was sent to meeting planners and the final questionnaire can be found in Appendix A.

## SAMPLE

In order to enhance the external validity of the study, a natural service setting (instead of a student or laboratory setting) was used (Liu, 1998, p.73). It has been argued that research in natural settings is critical for the future of consumer behaviour research (Sweeney, Soutar and Johnson, 1999, p. 86; Wells, 1993b). The theoretical model was tested in the meeting market segment of 4 to 5 star hotels with data collected from a

convenience sample of meeting planners from the UK and USA. Four to five star hotels were selected because they are able to provide the full range of products and services that meeting planners require and therefore are the preferred venue for meetings and conventions. Meeting planners were selected for the sample because they act as intermediaries between the association or corporation sponsoring the meeting and the hotel, and thus play an instrumental role in the venue selection process.

Since meeting planners have the choice of using a number of hotels, it was believed that the nature of competition in the upscale international meeting market combined with the nature of on-going relationships between meeting planners and convention service managers would provide a good basis for the measurement of customer loyalty. Furthermore, because the meeting market entails complex, risky and highly customer intensive transactions, it was believed that this market would provide an excellent research setting. In addition, restricting the sample to this homogeneous population minimised extraneous sources of variation (Morgan and Hunt, 1994, p.27). Little research has been done in the area of intermediaries in a service context and research in this area is much needed (Mehta and Durvasula, 1998, p.40; Parasuraman, 1998, p.309).

## DATA COLLECTION

A leading UK meeting industry association and a leading USA conference centre hotel group agreed to mail the questionnaire to a sample of qualified meeting planners on the researcher's behalf. Because sufficiently large sample sizes are required for

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structural equation modeling, the sample size requirements were critically influenced

by this method of analysis. Anderson and Gerbing (1988) suggest that a minimum of

150 is required for structural equation modeling. However, as the number of items

increases, it may be necessary to increase the number of respondents (Hinkin, Tracey

and Enz, 1997, p.108). A self-administered questionnaire and a cover letter were sent

to 320 meeting planners in the UK in cooperation with the leading UK meeting

industry association, and to 780 meeting planners in the USA in cooperation with the

hotel group, making a total of 1,100 questionnaires sent out. A cover letter addressing

the purpose of the research and the importance of the respondent's participation was

printed on university stationary. Personal and company data was guaranteed

anonymity. Meeting planners were asked to complete the questionnaire and return it in

a self-addressed envelope provided for the study. If respondents desired a copy of the

results, they were invited to include a business card with their returned questionnaire.


The mailing lists of both groups were considered confidential and were not made

available to the researcher. Therefore no follow-up letters were sent. Because the

researcher was not attempting to generalise an established model to a new population

or project a descriptive statistic from a sample to some larger population, the

possibility of non-response bias is a non-issue in research such as this (Morgan and

Hunt, 1994, p.28). No difference between early and late respondents was detected.

Two hundred and twenty-five questionnaires were returned, of which twelve were

incomplete and seven were systematically marked at the extreme point of the scale (7).

These respondents were excluded, making a total usable return of 206 questionnaires.

The response rate was 20%, a level common in surveys of this kind (Bowen and

Shoemaker, 1998, p.18; Malhorta, 1996).

# METHODS OF ANALYSIS

It was desired that this research would provide not only theoretical results, but also results that could find practical application. Therefore, a multi-method research strategy was employed. According to Clark, Riley, Wilkie and Woods (1998, p.39):

> The use of more than one research method to examine a particular phenomenon may improve understanding of that phenomenon and each technique may reveal facets of the phenomenon that would not be yielded by the use of alternative methods.

Four major methods of analysis were employed:

1. *frequency analysis* was used to evaluate the descriptive data concerning the meeting planners, the sources of information in the selection of new hotel venues, and the outcomes of customer commitment;

2. *gap analysis* was used to evaluate differences (gaps) between the performance and the importance ratings of the attributes, with the results being presented graphically in quadrant charts;

3. *regression analysis* was used to evaluate the drivers of customer commitment (those individual performance attributes that have the greatest impact on customer commitment); and

4. *structural equation modeling* was used to evaluate any causal relationships between customer commitment, customer satisfaction and customer perceived value (including product quality, service quality, relationship quality, extra benefits, problem resolution and customer costs), and to test the hypotheses.

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## IN-DEPTH INTERVIEWS

Due to a lack of qualitative research, particularly in the field of marketing, there has

been a call in the literature for such research (Gummesson, 1997, p.57; Riley, 1996,

p.37). Therefore, in order to complement the quantitative research findings and to

gain greater in-depth understanding of meeting planner requirements, their perceptions

of hotel performance and the resulting attitudes and behaviours, a series of in-depth

semi-structured interviews were undertaken. The purpose of the interview method is to

gain understanding and meaning, rather than to generalise findings to a specific

population (Easterby-Smith, Thorpe and Lowe, 1991, p.71; Riley, 1996, p.27).


A small sample of qualified corporate and association meeting planners was selected

in both the UK and USA. A total of four British and four American meeting planners

were interviewed by the researcher either in person or by phone using the semi-

structured format. The interviews lasted from 45 minutes to 1 hour and 15 minutes

each. The outline for the semi-structured interviews was based on the theory

underlying the development of the questionnaire. A copy can be found in Appendix B.

# CHAPTER 4: RESEARCH FINDINGS

This chapter presents the results of the study and analyses the major findings. The chapter consists of five main sections. The first section presents descriptive data that was analysed using frequency statistics, and includes findings concerning professional information requested from meeting planners, the importance of various sources of information in the selection of a new hotel venue, and the behavioural and attitudinal outcomes of customer commitment. The second section is a gap analysis of the difference between performance and importance ratings of hotel attributes with a view to uncovering areas of potential opportunity for hotels to enhance their value proposition to the meeting market and increasing customer commitment to booking meetings at their hotel. In order to easily translate the gap results into action, they are presented in the form of quadrant charts (Martilla and James, 1977). The third section is an investigation of the drivers of customer commitment using regression analysis. Drivers of customer commitment are those performance attributes whose ratings disproportionately affect customer commitment (Vavra, 1997, p.385). The fourth section presents the findings of the structural equation modeling which was used to investigate any causal relationships between customer commitment, customer satisfaction and customer perceived value (including product quality, service quality, relationship quality, extra benefits, problem resolution and customer costs). In this section, the results of the hypothesis tests are also presented. Finally, the results of the in-depth semi-structured interviews are discussed.

# DESCRIPTIVE DATA

Table 4.1 summarizes the sample characteristics of the meeting planners surveyed. Of

the 206 usable returns, about a third of the respondents were in-house corporate travel

planners (34.5%) and approximately another third were association meeting planners

(28.3%), thus providing a good mix of meeting planners from both corporations and

associations. A small percentage of the respondents were freelance meeting planners

(7.1%) or corporate travel managers (5.8%), and only a few were travel agents (0.4%).

In addition, approximately one fourth of the respondents listed 'other' job titles

(23.9%) for example, conference manager, event executive, promotional manager,

convention coordinator and executive assistant. As can be seen from the wide range of

titles and the relatively high percentage (23.9%) of respondents who marked 'other',

the title of this position varies to a great degree.


The majority of respondents consider themselves to be either the 'decision maker'

(59.3%) or the 'influencer' (55.3%), highlighting the importance of the role of the

meeting planner in the hotel selection process (respondents could choose more than

one word to describe their role). In addition, many of the respondents consider

themselves to be the 'buyer' (27%). Most of the respondents have been in their present

position for more than 5 years (70.4%) and spend less than half their time planning

meetings (63.3%). The majority (81%) plan 25 or fewer meetings per year. Taken

together, this indicates that the typical survey respondent has a powerful influence on

the buying decision, has been in his/her position for more than five years, but planning

meetings is only part of his/her job. Most of the respondents were female (70.8%).

## Table 4.1 Sample characteristics of meeting planners

1. **Which name best describes your position?**

| | |
|---|---|
| In-house corporate travel planner | 34.5% |
| Association meeting planner | 28.3% |
| Other | 23.9% |
| Free lance meeting planner | 7.1% |
| Corporate travel manager | 5.8% |
| Travel agent | 0.4% |
| TOTAL | 100% |

2. **Which word(s)\* best describe your role as meeting planner?**

| | |
|---|---|
| Decision maker | 59.3% |
| Influencer | 55.3% |
| Buyer | 27.0% |
| Other | 4.0% |

3. **How long have you been in your present position?**

| | |
|---|---|
| More than 10 years | 38.5% |
| 6-10 years | 31.9% |
| 2-5 years | 24.3% |
| Less than 2 years | 5.3% |
| TOTAL | 100% |

4. **What percentage of your time do you spend planning meetings?**

| | |
|---|---|
| Less than 25% | 35.4% |
| 25-49% | 27.9% |
| 50-75% | 14.1% |
| More than 75% | 22.6% |
| TOTAL | 100% |

5. **How many off-site meetings do you plan per year?**

| | |
|---|---|
| Less than 10 | 52.2% |
| 10-25 | 28.8% |
| 26-50 | 10.2% |
| More than 50 | 8.8% |
| TOTAL | 100% |

6. **What is your gender?**

| | |
|---|---|
| Male | 29.2% |
| Female | 70.8% |
| TOTAL | 100% |

\*More than one word could be chosen

## Convention service manager

Table 4.2 presents the percentage of hotels that provide a staff member (sometimes called a convention service manager) who is responsible for communicating meeting requirements to the various hotel departments and rates the importance of such a position to meeting planners. The overwhelming majority (96.19%) of the hotels where meeting planners have booked the most meetings during the past 12 months provide such a staff member. The convention service manager acts as the principle contact person between the meeting planner and the hotel to ensure that all prior

## Table 4.2 Hotels with a convention service manager

| Hotels with a convention service manager<br>(n = 226) | | |
|---|---|---|
| Rating | Frequency | Percent |
| 1 (no) | 8 | 3.81 |
| 2 (yes) | 202 | 96.19 |
| Frequency missing = 16 | | |
| **Importance of convention service manager to planners** | | |
| Rating | Frequency | Percent |
| 1 (not very important) | 0 | 0.00 |
| 2 | 0 | 0.00 |
| 3 | 1 | 0.47 |
| 4 | 4 | 1.88 |
| 5 | 11 | 5.16 |
| 6 | 51 | 23.94 |
| 7 (extremely important) | 146 | 68.54 |
| Frequency missing = 13 | | |

meeting arrangements and last minute changes are promptly accommodated. The results of this study indicate that this position is very important to meeting planners and has a strong influence on their level of commitment to booking meetings at a hotel, with 92.48% (23.94% + 68.54%) of respondents circling either 6 or 7 on a 7-point scale (1=not very important and 7=extremely important). These results support the findings of previous research on the importance of this position to the meeting planner (Rutherford and Umbreit, 1993) and suggest that hotels that do not offer a staff member in this position to the meeting market would be at a distinct competitive disadvantage.

## Choosing a new hotel

Table 4.3 ranks the importance to meeting planners of various sources of information in their choice of a new hotel venue. The results of this study indicate that the most important sources of information to meeting planners when choosing a new hotel venue are the reputation of the hotel (with a mean of 6.19 on a 7 point scale), prior use of the brand (5.51), awards/star ratings (5.03) and word of mouth (4.91). It is interesting to note that each of the top four sources of meeting planner decision-making information is image-related, and that two of the highest scoring items (reputation of hotel and word of mouth) are also some of the least tangible and most personal. This finding that, in the selection of a new venue, meeting planners rely heavily on third party, subjective, non-hotel financed assessments of a hotel supports the findings of previous research that personal sources of information are critical in the decision-making process of meeting planners (Vogt, Roehl and Fesenmeier, 1994).

These external sources of information appear to be a more credible form of communication to meeting planners than internal (company financed) sources of information, such as advertising (with a mean of 3.62), trade shows (with a mean of 3.56) or hotel promotional videos (with a mean of 3.00). These findings support the results of a study by the Center for Hospitality Research at Cornell University that a hotel's reputation and brand name are important factors in the decision-making

## Table 4.3: Importance of sources for choosing a new hotel venue

| Source of information | Mean* |
|---|---|
| Reputation of hotel | 6.19 |
| Prior use of brand | 5.51 |
| Awards/star ratings | 5.03 |
| Word of mouth | 4.91 |
| Hotel sales representative | 4.53 |
| FAM trips | 4.25 |
| National sales office | 4.22 |
| Reservation systems | 3.93 |
| Convention & Visitors Bureaux | 3.92 |
| Special promotion | 3.88 |
| Advertising | 3.62 |
| Trade shows | 3.56 |
| Guide books | 3.55 |
| World wide web | 3.35 |
| Hotel videos | 3.00 |
| Travel agency | 2.72 |
| CD-ROM presentations | 2.68 |
| * On a 7 point scale | |

process (Dube and Renaghan, 2000, p.64), and thus confirm the influential role of image-related factors in the decision-making process, when customers do not yet have any personal experience with a hotel (Andreassen and Lindestad, 1998, p.11). These findings also suggest that image-related factors are therefore important antecedents of customer acquisition. Positive word of mouth and a good reputation cannot be 'purchased' by a hotel. They must be earned through providing excellent value to satisfied customers who will pass on the good news to others.

## Outcomes of customer commitment

Previous studies have found that loyal customers exhibit certain behaviours and attitudes that are beneficial to a company (Bendapudi and Berry, 1997; Bowen and Shoemaker, 1998; Reichheld, 1996b). The purpose of this section of the research was to identify which behaviours and attitudes are outcomes of customer commitment (the attitudinal dimension of loyalty). Only the results from meeting planners who considered themselves to be 'committed' (5 on a 5-point scale) to booking meetings at the hotel where they had booked the most meetings during the past 12 months were used for this section of the research (n=60). Figure 4.1 outlines the behaviours and attitudes that previous studies have shown to be associated with customer loyalty (commitment), along with the items by which they were operationalised in the questionnaire. In accordance with the findings of recent research, negatively worded items were avoided (Hinkin, Tracey and Enz, 1997, p.102). Therefore, three of the items were worded positively and then reverse coded (for example, on a scale of 7, a score of 7 becomes a 1). Table 4.4 presents a summary of the outcomes of customer

# Figure 4.1 Operationalisation of outcomes of customer commitment

| Outcomes of commitment | Operationalisation in questionnaire |
|---|---|
| Affinity with company | I like to book meetings at this hotel. |
| Voluntary behaviour | I have to book meetings at this hotel.* |
| Not looking to switch | I am looking to switch hotels.* |
| Positive word of mouth | I speak positively to others about this hotel. |
| Excellent working relationships | I have an excellent working relationship with the staff at this hotel. |
| Expanded usage ('share of wallet') | I use this hotel for occasions other than meetings. |
| Future business | I intend to continue booking meetings at this hotel. |
| Pay price premium | I am willing to pay a higher price than competitors charge for the benefits I receive at this hotel. |
| Less price sensitive | The primary reason I book meetings at this hotel is because it offers the lowest prices.* |
| Provide feedback | If I encounter a problem at this hotel, I let someone at the hotel know about it. |
| First choice | When booking meetings in the area, this hotel is my first choice. |
| *reverse coded | |

## Table 4.4 Summary of outcomes of customer commitment

(n = 60)

| Item | Top Box (7) | Top 2 Boxes (6 and 7) |
|---|---|---|
| First choice of hotel in area | 80% | 95% |
| Like to book meetings there | 77% | 95% |
| Intend to continue booking there | 70% | 80% |
| Provide feedback to hotel | 68% | 97% |
| Provide positive word of mouth | 68% | 92% |
| Excellent working relationships | 67% | 88% |
| Use hotel for other occasions | 28% | 45% |
| Willing to pay more | 22% | 42% |
| Primary reason is low price* | 2% | 7% |
| Have to book meetings there* | 2% | 5% |
| Looking to switch* | 0% | 0% |

*reverse coded

commitment according to the results of this study. The complete list of results can be found in Appendix C.

The findings of this study indicate that the vast majority (95%) of committed meeting planners consider the hotel where they had booked the most meetings during the past 12 months to be their first choice of hotels when booking meetings in that area. In addition, committed meeting planners are not looking to switch to another hotel (0% marked either the Top Box or the Top 2 Boxes). The vast majority (95%) also said they 'like' to book meetings at that hotel, with only 5% saying they 'have' to book meetings at that hotel. In addition, the majority (80%) said they intend to continue booking meetings there. If these results are taken together (the hotel is the customer's first choice, customers are not looking to switch hotels, they like booking meetings there and intend to continue booking meetings there), we can see that customer commitment is a formidable protective barrier against competitive advances from other hotels.

Furthermore, the majority (92%) of committed customers said they speak positively to others about the hotel to which they are committed. Given the importance of the reputation of the hotel and positive word of mouth as sources of information for meeting planners in choosing a new hotel venue (see previous section), the fact that nine out of ten committed meeting planners speak positively to others about their first choice hotel is a very important outcome of customer commitment and one that can be extremely beneficial to hotels in terms of customer acquisition.

The vast majority (97%) of committed meeting planners also said that if they encounter a problem at the hotel, they let someone know about it, and 88% said they had excellent working relationships with the hotel where they had booked the most meetings during the past 12 months. The meeting market is highly complex and when problems occur once a meeting is underway, immediate resolution is required. The existence of a proactive partnership-type of relationship between the meeting planner and the hotel, therefore, where lines of communication are open and working relationships are strong, is a critical outcome of commitment that benefits both the hotel and the meeting planner. It is not surprising that 96% of the hotels where meeting planners have booked the most meetings during the past 12 months have a staff member who is responsible for communicating meeting requirements to the various hotel departments, and that 92% of the committed meeting planners felt that the existence of such a staff member is very important (6 or 7) to their level of commitment.

However, the findings with regards to committed meeting planners being willing to pay a price premium, being less price sensitive, and using the hotel for occasions other than meetings (increased 'share of wallet'/expanded usage) were not as strong. Still, approximately half of the committed meeting planners (42%) are willing to pay a price premium for the benefits they receive at the hotel they are committed to. A small segment of meeting planners (7%) state that the primary reason they book meetings at their preferred hotel is because it offers lower prices. Therefore, even in the upscale (4 to 5 star hotel) meeting market, although about half of the committed meeting planners are able and willing to pay a price premium for high quality hotel products and services, there is also a small segment of the market that is constrained by price

considerations. Approximately half (45%) of the committed meeting planners also say they use the hotel for occasions other than meetings.

In summary, the findings of this study on the outcomes of customer commitment lend support to the results of previous studies and the generally accepted argument that committed customers (meeting planners) (1) have a 'first choice' company (hotel), (2) are not looking to switch, (3) have an affinity with the company ('like' to / voluntary), (4) intend to continue doing business with the company, (5) spread positive word of mouth, (6) provide feedback to the company, and (7) have excellent working relationships with the company (Bendapudi and Berry, 1997; Bowen and Shoemaker, 1998; Reichheld, 1996b; Zeithaml, Berry and Parasuraman, 1996). In addition, approximately half of the committed meeting planners use the hotel for occasions other than meetings ('expanded usage') and are willing to pay a price premium. Only a small percentage of committed meeting planners are primarily motivated by low price.

## GAP ANALYSIS WITH QUADRANT CHARTS

The purpose for undertaking a gap analysis in this study was to uncover specific areas of opportunity for hotels to enhance their offering (value proposition) to the meeting market and thus increase the level of meeting planner commitment to booking meetings at their hotel. The gap analysis tells us where hotels are falling short in the eyes of meeting planners.

The gap analysis employed in this study is comprised of three components: a performance component, an importance component, and a difference component. The

performance component is a rating of how well a service provider (4 to 5 star hotel) performs on individual attributes (i.e. The hotel's setting is pleasant) according to the customer (meeting planner). The importance component is a rating of how significant (important) the individual attributes are to the customer's level of commitment (self-report importance rating). The difference component is the mathematical difference (gap) between the performance and the importance ratings.

$$GAP = performance - importance$$

Attributes with large gaps indicate potential areas of opportunity for hotels to increase their performance in that area, particularly if the attribute is important to meeting planners.

Hotel performance was measured by a 7-point Likert scale anchored by 'Strongly Disagree' and 'Strongly Agree'. The following instructions were given to the meeting planner:

> For each of the items in the centre column below, please think about the 4 or 5 star hotel where you have booked the **most** meetings during the past 12 months and indicate the extent to which you agree or disagree with each statement as it relates to this hotel.

By asking meeting planners to respond in terms of the hotel where they had booked the **most** meetings during the past 12 months, the behavioural dimension (retention) and the temporal dimension (over time) of customer loyalty were captured in the questionnaire.

The importance of the attributes to the meeting planner was measured by a 7-point

Likert scale anchored by 'Not Very Important' and 'Extremely Important'. The

following instructions were given to the meeting planner:

> For each of the items in the centre column below, please indicate how
>
> important each item, if provided by **any** 4 or 5 star hotel, would be to your
>
> **level of commitment** to booking meetings at that hotel.

## Areas of potential opportunity

In order to identify areas of potential opportunity for enhancement of the hotel

industry's offering to the meeting market, all 63 attributes (items) were ranked

according to which ones had the largest difference (gap) between the performance and

importance scores. A graph of the items with the largest negative gaps is presented in

Table 4.5. The complete results of the gap analysis can be found in Appendix D. The

items with the largest gaps (performance – importance) were reasonable prices (-0.99),

no hidden costs (-0.91), hassle-free business (-0.88), post-event review (-0.83),

accurate bills (-0.80), employee authority (-0.76), agreements met (-0.71),

understandable bills (- 0.71), error rectification (-0.71), accurate recording (-0.68),

staff reliability (-0.68), and problems resolved well (-0.68).

The three items with the largest gaps (reasonable prices, no hidden costs, and hassle-

free business) were all related to customer costs. Two additional items (accurate bills

and understandable bills) were related to billing. The large gaps on these items

indicate that customer cost and billing issues are prime areas of opportunity for hotels

to enhance their offering (value proposition) to the meeting market.

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**Table 4.5 Top twelve gap items**

## (Performance-Importance)
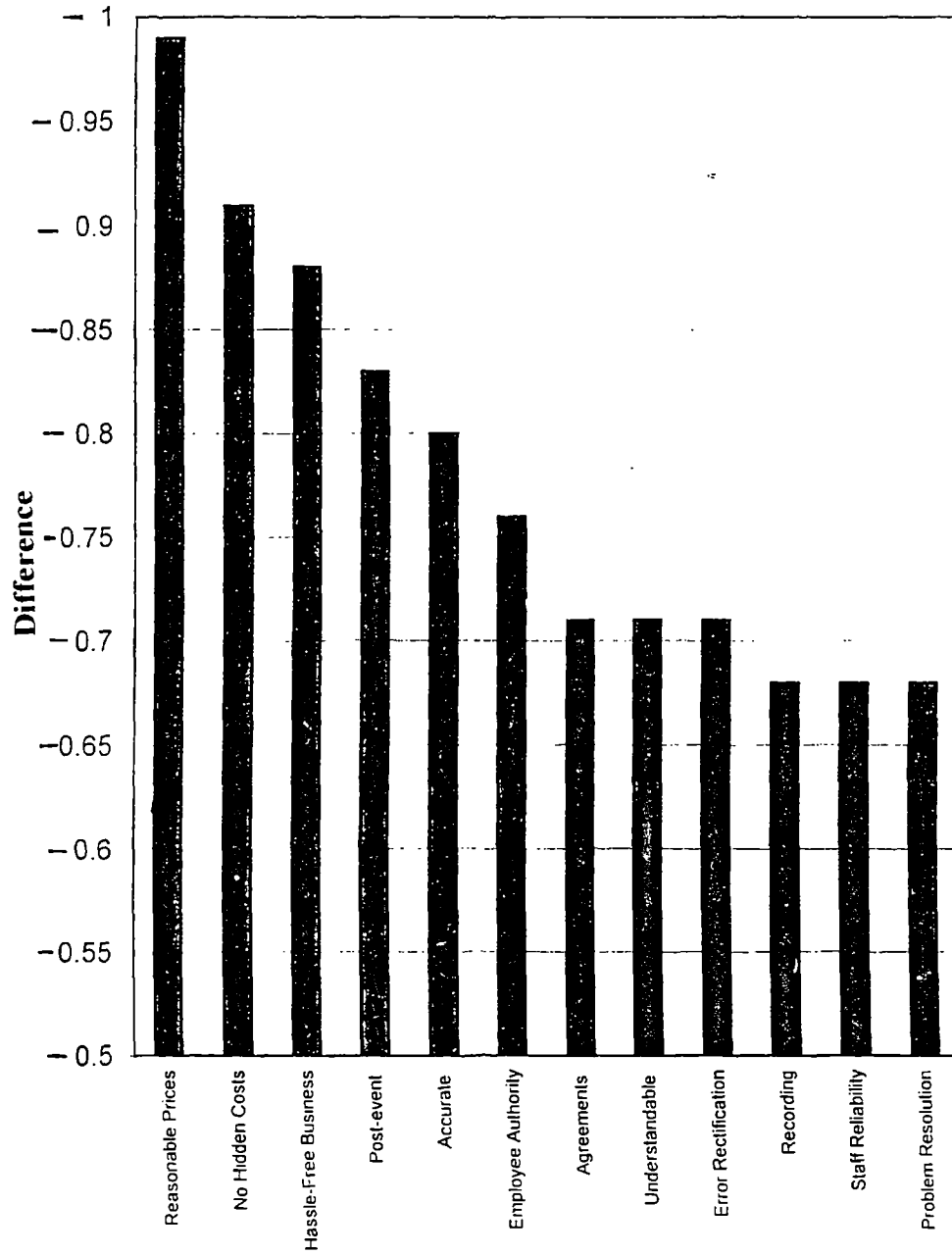
In addition, three of the largest gaps were on items related to problem resolution

(employee authority, error rectification and problems resolved well). The area of

problem resolution therefore also emerges as an area of great potential opportunity for

hotels to improve their offering to the meeting market.

A surprising finding was the very large gap on 'post-event review', particularly as this

item was ranked as one of the least important of all 63 items. Although the post-event

review does not appear to be in the forefront of meeting planners' minds in terms of

importance, the very large gap indicates that it may nevertheless be an area of

potential opportunity for management consideration and exploration.

The remaining three items (agreements met, accurate recording, and staff reliability)

are all related to meeting planners being able to depend on the hotel to get the job

done. This area therefore also emerges as one of great potential opportunity for hotels

to improve their offering to the meeting market. The above findings are explored in

greater detail in the following section on quadrant charts.

## Quadrant charts

The purpose of employing quadrant charts in this study was to help identify critical

operating issues by visually representing the gaps between attribute 'performance' and

'importance' ratings on all 63 items so that managers can more easily determine where

to take remedial action and allocate resources to overcome deficiencies (Mount,

1997a, p.111; Vavra, 1997, p.311). Managers are often hindered by the lack of clear

guidance on where to focus their efforts and limited resources (Huckestein and

Duboff, 1999, p.32). Hilton Hotels has effectively used quadrant charts (called

'priority reports') in their measurement of customer loyalty in order to assist their

managers in this task (Huckestein and Duboff, 1999, p.33).


One goal of this thesis was to present findings that are both theoretically and

operationally relevant, thereby addressing the call in the literature for such research

(Patterson and Spreng, 1997). The gap analysis and quadrant chart sections of this

study are operational and descriptive in nature. In order to be operationally relevant, it

was necessary to keep the list of attributes as broad as possible, thus resulting in an

extensive list of items (63). In order to present the items more clearly, they were

subdivided into categories (product quality, service quality, relationship quality, extra

benefits, problem resolution and customer costs). These categories were arrived at as a

result of the literature review, field interviews with representatives of the hotel and

meeting industry, and more than 25 years of senior management experience by the

researcher in the hotel industry. It was decided *not* to obtain the categories by means

of factor analysis which, by its very nature, would have eliminated many of the items.


The purpose of employing gap analysis and quadrant charts in this study was *not* to

determine which attributes (i.e. The hotel is easily accessible) represent which

constructs (i.e. Product Quality), nor to determine possible relationships between

constructs. These purposes are addressed in the structural equation modeling section,

which is theoretical and statistical in nature.

The quadrant charts used in this study are an adaptation of a system first developed by Martilla and James (1977). 'Importance' scores are plotted on the horizontal axis and 'difference' scores are plotted on the vertical axis. The chart is subdivided into four 'quadrants' by drawing a vertical line at the mean 'importance' score of the attributes (which in this study was 5.96 on a scale of 7) and a horizontal line at the mean 'difference' score of the attributes (which in this study was -0.39). In addition, Albrecht and Bradford (1990) recommend including a 'gray zone' near the mean. The gray zone falls in between the mean 'difference' score line (which in this study was -0.39) and a second horizontal line at '0', where 'performance' equals 'importance'. Figure 4.2 presents the layout of quadrant charts used in this study.

(1) *Good work*: The upper right hand portion of the chart includes attributes that are of high importance to meeting planners (an 'importance' score greater than the overall mean of the 'importance' scores), and are perceived as being performed well by the hotel (the 'difference' score is positive; in other words, 'performance' ≥ 'importance'). This portion of the chart is also sometimes called 'critical strength' or 'competitive strength' (see Barsky and Labagh, 1992; Huckestein and Duboff, 1999; Martilla and James, 1977; Mount, 1997b). The indication is that the hotel is excelling on these items and should continue to invest the effort and resources that are being allocated to the attributes in this portion of the chart due to the level of their importance to the meeting planner.

(2) *Focus here*: The lower right hand portion of the chart includes attributes that are of high importance to meeting planners (an 'importance' score greater than the overall mean of the 'importance' scores), but are perceived by meeting planners as

*not* being performed well by the hotel (the 'difference' score is negative and is lower than the overall mean of the 'difference' scores). This portion of the chart is also sometimes called 'concentrate here', 'fix it now', or 'competitive vulnerability' (see Huckestein and Duboff, 1999; Martilla and James, 1977; Mount, 1997b). The indication is that effort and resources should be put forth by the hotel to improve performance on attributes in this portion of the chart first.

## Figure 4.2 Layout of quadrant charts
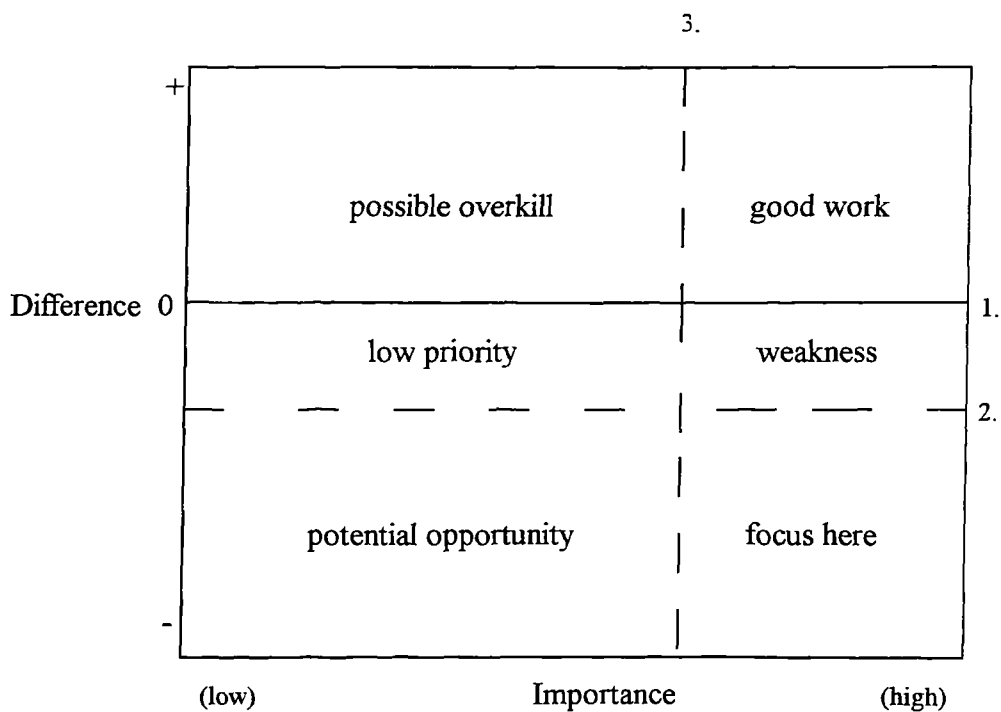


1. No difference ('performance' = 'importance')
2. Overall mean of the 'difference' scores (-0.39)
3. Overall mean of the 'importance' scores (5.96)

(3) *Possible overkill*: The upper left hand portion of the chart includes attributes that are of low importance to meeting planners (an 'importance' score less than the

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overall mean of the 'importance' scores), but are perceived by meeting planners as being well performed by the hotel (the 'difference' score is positive; in other words, 'performance' ≥ 'importance'). This portion is also sometimes called 'irrelative superiority' or 'insignificant strength') (see Barsky and Labagh, 1992; Martilla and James, 1977; Mount, 1997b). The interpretation is that too many resources might be expended on attributes in this category that may be better allocated elsewhere.

(4) *Potential opportunity*: The lower left hand portion of the chart includes attributes that are of low importance to meeting planners (an 'importance' score less than the mean of the 'importance' scores), and are perceived by meeting planners as *not* being performed well by the hotel (the 'difference' score is negative and is lower than the mean of the 'difference' scores). This portion is also sometimes called 'relative indifference', 'potential threat' or 'low priority' (see Barsky and Labagh, 1992; Huckestein and Duboff, 1999; Martilla and James, 1977; Mount, 1997). Although the combination of low 'performance' and low 'importance' scores might indicate that effort and resources should not be allocated to improving the performance rating since these attributes are seen as unimportant, if the gap is very large it is also *possible* that the attributes in this portion of the graph represent an unrealised opportunity. However, resources should first be reallocated from the 'possible overkill' or 'low priority' categories in order to improve performance on attributes in the 'focus here' and 'weakness' categories.

(5) *Weakness*: This 'gray zone' falls in between 'good work' and 'focus here'. It includes attributes that are important to meeting planners (an 'importance' score greater than the overall mean of the 'importance' scores). However, the hotel's

'performance' score on these items is only slightly less than the 'importance' score (the 'difference' score is negative but is higher than the overall mean of the 'difference' scores). Resources should first be allocated to improving performance on attributes in the 'focus here' category, then in the 'weakness' category.

(6) *Low priority*: This 'gray zone' falls in between 'possible overkill' and 'potential opportunity'. It includes attributes that are *not* important to meeting planners (an 'importance' score less than the overall mean of the 'importance' scores). In addition, the hotel's 'performance' score on these items is only slightly less than the 'importance' score (the 'difference' score is negative but is higher than the overall mean of the 'difference' scores). Increased expenditure of effort and resources to improve attribute performance in this category is not a high priority.

The quadrant chart with the corresponding gap results for each category will be presented in turn. It is important to keep in mind that these results were obtained from meeting planners for the hotel where they booked the **most** meetings over the past 12 months. Hotels that meeting planners don't use very often could have substantially greater gaps between the hotel's performance on these attributes and their importance to meeting planners' level of commitment.

## Product quality

Table 4.6 presents the quadrant chart for the product quality items. On the whole, the gap results of this study indicate that hotels are performing relatively well in terms of the product they are offering to the meeting market, as is evidenced by the fact that no product quality item was located in the 'focus here' section of the chart. Of the eleven

**Table 4.6 Quadrant chart of product quality**
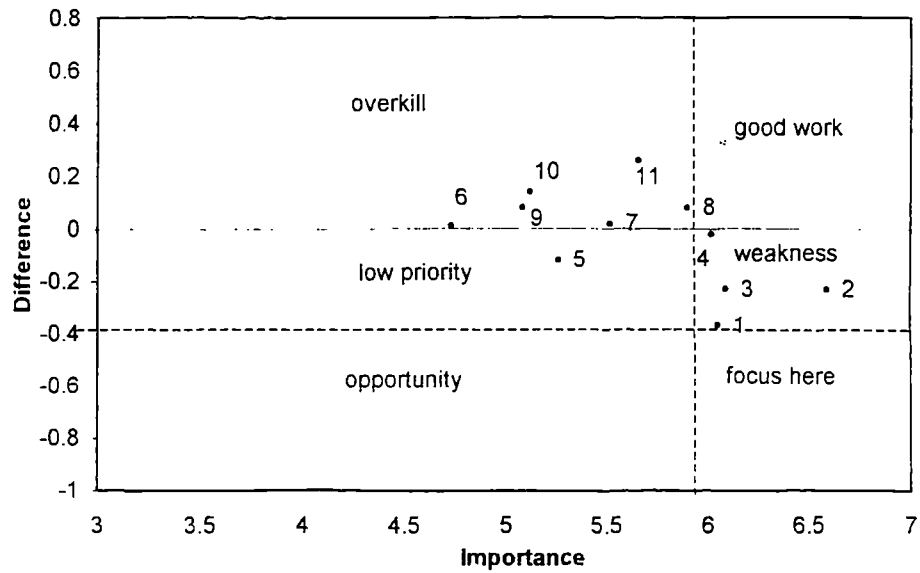


1.Hotel accessibility
2.Clean facilities
3.Meeting room furnishing
4.Guest room furnishing
5.Technical equipment
6.Unique facilities

7.Spacious guest rooms
8.Pleasant setting
9.Leisure facilities
10.Ample parking
11.Visually appealing

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product quality items, six ('unique facilities', 'spacious guest rooms', 'pleasant setting', 'leisure facilities', 'ample parking', and 'visually appealing') were located in the 'overkill' section, indicating that meeting planners felt that hotels were performing more than adequately in these areas. The gap results suggest that, in terms of attracting the meeting market, it would not be advantageous for management to invest additional resources into these specific areas at this time.

'Clean facilities' was the most important self-report product quality item to meeting planners (6.59 on a scale of 7) as well as the sixth most important item of all 63 items. In addition, 'clean facilities' was the item on which hotels performed the best of all items (6.36). However, 'clean facilities' was located in the 'weakness' section of the chart with a relatively small gap of –0.23. These gap results support the findings of many other studies that the cleanliness of a hotel is of top importance to its clients (Knutson, 1988; McCleary, Choi and Weaver, 1998, p.33; Oberoi and Hales, 1990, p.708; Riley and Perogiannis, 1990; Taninecz, 1990). The findings of this study indicate that even in 4 and 5 star hotels and despite the fact that cleanliness was the number one performance item, meeting planners believe that hotels could be kept even more clean.

'Meeting room furnishing' was also located in the 'weakness' section of the chart, exhibiting a small gap of –0.23. It was the second most important product quality item to meeting planners (6.09), indicating that improvements in this area could be considered once items in the 'focus here' and 'weakness' sections had been addressed. Some hotels are currently addressing this weakness by offering upgraded meeting room furnishings to their meeting clients through such programmes as Hilton's

Meeting 2000 which provides dedicated meeting rooms with up-to-date technical equipment and specially designed chairs.

'Guest room furnishing' was on the border of 'weakness' and 'good work' with an extremely small gap of -0.02. It was the fourth most important product quality item to meeting planners with a score of 6.02. This finding suggests that hotels are performing well in the area of guest room furnishing.

'Hotel accessibility' was on the border of 'focus here' and 'weakness', and displayed the largest gap (-0.37) of all the product quality items. In addition, it was the third most important product quality item to meeting planners (6.05). This finding suggests that travel costs and time involved in reaching a property are important considerations to meeting planners and an area in which hotels are falling short. This result also supports previous research findings that a convenient location is a dominant source of value to meeting planners (Dube *et al*, 1999, p.345).

'Visually appealing' was the product quality area in which hotels seem to be over-performing the most (+0.26) according to meeting planners. Meeting planner perceptions of the visual impact of hotel design indicate that hotel facilities may be over designed, possibly distracting from the business-like setting that meetings require. This could also be an indication of the conflict between the needs of the independent traveller and the needs of the meeting client.

'Unique facilities' was the product quality item that was the least important to meeting planners (4.73) and had an extremely small positive gap (+0.01). This finding suggests

that uniqueness in the hotel product and its amenities is not an important factor to

meeting planners and also that hotels are performing more than adequately in this area.

'Technical equipment' fell in the 'low priority' section of the chart, which was a

surprising result, considering the current focus on technology. This finding will be

discussed more thoroughly in Chapter 5 when the results from the various research

methodologies are synthesised.

## Service quality

Table 4.7 presents the quadrant chart for the service quality items. A very high

percentage (fifteen out of twenty) of the service quality items were located in the

'focus here' section of the quadrant chart. This suggests that service quality is an area

in which hotels need to focus their attention, a result that supports the findings of

many other hospitality studies (Armstrong, Mok, Go and Chan, 1997; Getty, 1996;

Getty and Thompson, 1994; Knutson, Stevens, Wullert, Patton and Yokoyama, 1991;

Knutson, Stevens, Patton and Thompson, 1992; Martin, 1995; Oh, 1999; Patton,

Stevens and Knutson, 1994; Saleh and Ryan, 1991, Wuest, Tas and Emenheiser,

1996).

The most important self-report service quality item to meeting planners was

'agreements met' with a score of 6.64 out of 7. This finding supports the results of a

study on UK conference hotels by Oberoi and Hales (1990, p.708) that one of the most

important factors to meeting planner satisfaction was that hotel staff carry out

arrangements as requested. Another recent study on meeting planners' perceptions of

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# Table 4.7 Quadrant chart of service quality



Quadrant chart plotting Difference (y-axis, -1 to 0,8) against Importance (x-axis, 3 to 7). Quadrant labels: overkill, good work, low priority, weakness, opportunity, focus here. Plotted points numbered 1–20.
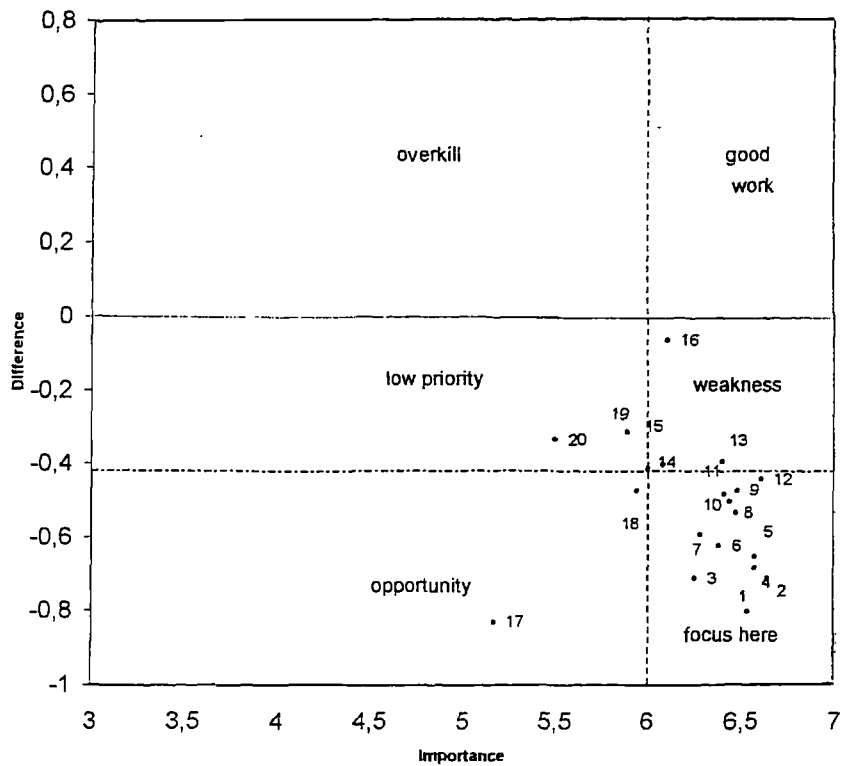
| | |
|---|---|
| 1. Accurate bills | 11. Staff expertise |
| 2. Agreements met | 12. On-time F & B functions |
| 3. Understandable bills | 13. Knowledgeable sales staff |
| 4. Accurate recording | 14. Efficient reservation system |
| 5. Attention to details | 15. Variety of food |
| 6. Prompt answers | 16. Professional appearance |
| 7. Efficient check-in/out | 17. Post-event review |
| 8. Consistent service delivery | 18. F & B creativity |
| 9. Food quality | 19. Continuous improvement |
| 10.Hotel safety | 20. Prior information used |

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hotel chain practices and benefits also found that the delivery of services as promised during the event was the most important aspect for meeting planners (Weber, 2000, p.34). In addition, 'agreements met' had a very large gap (-0.71), the seventh largest of all 63 items. A substantial discrepancy therefore seems to exist between what meeting planners have negotiated with the hotel and what is actually being delivered. Two further items that were located in the 'focus here' section of the chart, the 'accurate recording' of meeting requirements (-0.68) and employee 'attention to details' (-0.65), could both contribute to a hotel's difficulty in keeping its agreements with meeting planners. These findings highlight the importance for sales and convention staff to communicate and record meeting requirements accurately and to pay attention to details, both during their direct interactions with meeting planners and in their communication of these requirements with other hotel departments, in order that the agreements made with meeting planners can be met by the hotel.

'Accurate bills' was the fifth most important service quality item (6.53) and the eleventh most important item of all 63 items, lending support to the findings of a recent study that accurate billing procedures is one of the most important items to meeting planners (Weber, 2000, p.35). Two of the items with the largest gaps (fifth and eighth largest gaps of all 63 items) also concern issues related to billing, namely 'accurate bills' (-0.80) and 'understandable bills' (-0.71). Inaccuracy and lack of clarity in billing results in additional time and hassle, both for the hotel as well as for the meeting planner. Furthermore, it is in the hotel's interest that bills be accurate and understandable so that they can be quickly approved and paid. This is therefore an area that requires urgent attention.

Two service quality items, 'continuous improvement' and 'prior information used', were located in the 'low priority' portion of the graph, indicating that although hotels were not performing up to standard in these areas, they were not of high importance to meeting planners.

'Post-event review' was located in the 'potential opportunity' section of the chart. Of the twenty items in the service quality section, the post-event review was the least important to meeting planners (5.16). This may be due to the fact that the post-event review occurs once the meeting has already taken place. However, this item also had the largest gap (-0.83) in the service quality section, and the fourth largest gap of all 63 items. A recent study on meeting planner perceptions of hotel chain practices and benefits also found that post-convention meetings were low in both performance and importance (Weber, 2000, p.38). It is possible that the post-event review may represent an unrealised opportunity for the hotel to ensure that unresolved problems encountered during the meeting, as well as other meeting planner concerns such as inaccurate or unclear bills, could be addressed prior to the meeting planner's departure from the hotel. In addition to being an opportunity for the hotel to deal with unresolved meeting planner problems and concerns, the post-event review could also represent an opportunity for the hotel to further build its relationship with the meeting planner, uncover leads for future business and obtain valuable feedback about the hotel's own strengths and weaknesses as well as those of the competition.

According to the results of this study, the service quality area in which hotels were performing best was 'professional appearance' which displayed a very small gap of -0.06. Although this item was located in the 'weakness' section of the chart, it was

very near to 'good work'. This finding suggests that hotels are performing relatively well on the professional appearance of their staff.

## Relationship quality

Table 4.8 presents the quadrant chart for the relationship quality items. Four of the relationship quality items were located in the 'focus here' section of the chart: 'staff reliability', departmental teamwork', 'fair negotiations', and 'management accessibility'. 'Staff reliability' was the number one item in self-report importance to meeting planners of all the 63 items in the survey (6.72), which supports previous research concerning the importance of staff reliability to customers (Berry, Parasuraman and Zeithaml, 1994; Bloemer, de Ruyter and Peeters, 1998, p.283; Oberoi and Hales, 1990, p.708). There was also a very large gap (-0.68) on this item (the eleventh largest gap out of all 63 items). The results of this study indicate that being able to rely on the staff at a hotel is a critical element in the building of strong relationships with meeting planners. The unreliability of staff is also an issue that may be related to a hotel's difficulty in fulfilling the agreements it makes with meeting planners.

'Departmental teamwork', with an importance score of 6.35, displayed the second largest relationship quality gap (-0.60). The meeting business is very complex and requires the interaction of many different departments of a hotel. It is therefore critical that the various departments are able to communicate effectively with each other and work well together for the benefit of the meeting client. This result supports the finding of the present study that the existence of one contact person at the hotel (sometimes called the convention service manager) to co-ordinate the efforts of the

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# Table 4.8 Quadrant chart of relationship quality



Chart: X-axis "Importance" (3 to 7), Y-axis "Difference" (-1 to 0,8).

Quadrant labels: overkill, good work, low priority, weakness, opportunity, focus here.

Data points plotted: 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1
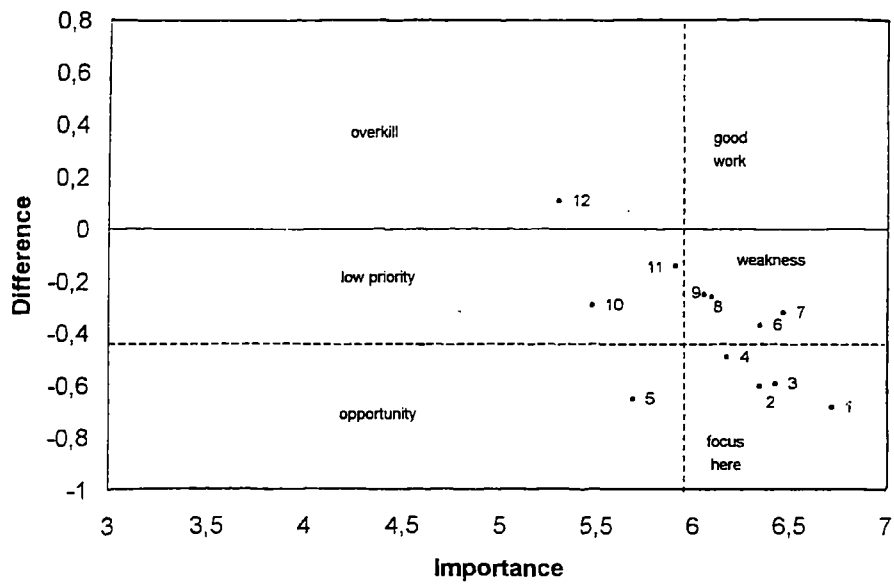
| | |
|---|---|
| 1.Staff reliability | 7. Courteous employees |
| 2.Departmental teamwork | 8.Relationships of trust |
| 3.Fair negotiations | 9.Business appreciated |
| 4.Management accessibility | 10.Low staff turnover |
| 5. MP advice sought | 11.Employees enjoy work |
| 6.Good working relationships | 12.Personalised greeting |

various departments is extremely important to meeting planners' level of commitment

to booking meetings at a hotel (see the section on 'Convention Service Manager' in

Chapter 4).

A large gap (-0.59) was also evident in 'fair negotiations' (with an importance score of

6.43), confirming current thought that perceived fairness from the customer's

perspective is an important aspect in the development of customer relationships

(Bowen and Shoemaker, 1997, p.35) and an area in which hotels could improve.

The final relationship quality item in the 'focus here' section of the chart was

'management accessibility' with an importance score of 6.18 and a large gap of -0.49.

The results of this study indicate that management needs to be available and

responsive to meeting planner needs during key points of interaction. This finding

confirms the results of previous studies of the importance to meeting planners of the

accessibility of critical hotel employees (Shaw, Lewis and Khorey, 1991). Very often,

the problems that occur during meetings need to be addressed immediately, and the

availability of someone with the authority to deal with those problems on the spot is

critical to the development of a hotel's relationship with their meeting clients.

Four items were located in the 'weakness' category ('courteous employees', good

working relationships', 'relationships of trust', and 'business appreciated'). According

to the results of this study, these items exhibited smaller gaps and do not require

urgent attention. Two items were located in the 'low priority' category ('employees enjoy work' and 'low staff turnover').

'Personalised greeting' was the relationship quality item that was the least important to meeting planners (5.31). In addition, the hotels' performance exceeded importance in this area (+0.11). This finding seems to indicate that merely being greeted by name is not highly valued by meeting planners and that other factors, such as being reliable and fulfilling agreements, are more important in the development of a meeting planner's relationship with a hotel.

'Meeting planner advice sought' was the only relationship quality item located in the 'potential opportunity' section of the quadrant chart. It was also the area in which the hotels' performance was the lowest (5.04). In addition, the gap was very large (-0.65). Remembering that items in the 'focus here' section should be addressed first, a hotel could consider whether to more pro-actively seek the input of its meeting clients. For example, during the post-event review session (an area that also emerged as a potential opportunity) the advice of meeting planners could be sought concerning ways that hotels could improve their offering to the meeting market.

## Extra benefits

Table 4.9 presents the quadrant chart for the extra benefit items. The gap results of this study indicate that extra benefits were the least important items to meeting planners with an overall mean of 5.2. Of the extra benefits, 'space availability' had the highest rating (6.08) and was the only extra benefit item that was located in the 'focus here'

## Table 4.9 Quadrant chart of extra benefits
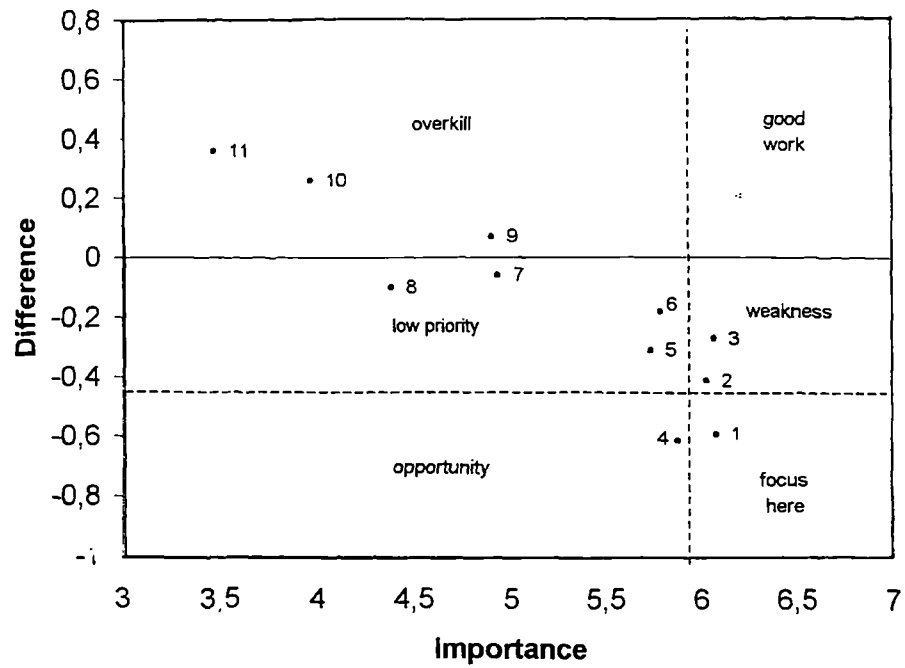


1.Space availability
2.Hotel reputation
3.Quality name/brand
4.Service customisation
5.MPs take pride

6. VIP upgrades
7. Environmental concern
8. Frequent stayer programme
9. Good citizen
10.Hospitality events
11.Gifts given

portion of the quadrant chart with a very large gap of –0.59. These results suggest that space availability is an area that hotels should investigate to see how they could address this need of the meeting market more effectively.

'Service customisation', although less important to meeting planners (5.88) than 'space availability' (6.08), had a very large gap (-0.61) and was located just outside 'focus here' in the 'potential opportunity' section of the chart. The results of this study suggest that the tailoring of services to specific meeting planner requirements, although not a high priority, may be an area of potential opportunity for hotels to consider once items in the 'focus here' and 'weakness' sections have been addressed.

Two items, 'hotel reputation' and 'quality name/brand', were located in the 'weakness' section. Both of these items relate to a hotel's image. The quality name/brand of the hotels displayed a small gap (-0.27) whereas the reputation of the hotels displayed a larger gap (-0.41), perhaps indicating that meeting planners feel that a shortfall in a hotel's reputation (via word-of-mouth, for example) is a more important factor than a hotel's brand name. This conclusion is supported by the study's finding that, in choosing a new hotel venue, the reputation of the hotel was the most important source of information to meeting planners (see p.132). Both of these findings (that the image of a hotel is an important factor in the decision-making process but that it is less significant in the post-consumption evaluative process) support the findings of other recent research (Sweeney, 1994).

Three items were located in the 'overkill' category ('gifts given', 'hospitality events' and 'good citizen'). By far, the least important item to meeting planners of all 63 items

was 'gifts given' with a mean of 3.47 out of 7. 'Gifts given' also had the largest

positive gap of all 63 items (+ 0.36), indicating that hotels are over-performing in this

area. Some meeting planners even wrote on the questionnaire that they would not

accept gifts and implied that it would be considered an indirect form of bribery. The

next least important item of all 63 items was 'hospitality events' with a mean of 3.97.

'Hospitality events' was also tied for the second largest positive gap (+0.26) of all 63

items. These results suggest that hotels could consider reducing the resources that are

allocated to hosting hospitality events and giving gifts to meeting planners.


Four items ('meeting planners take pride' in booking meetings at this hotel, 'VIP

upgrades', 'environmental concern' and 'frequent stayer programme') were located in

the 'low priority' section of the chart. Despite the considerable investment of hotel

resources and the interest from both academic literature and the popular press in

frequent stayer programmes, it was the third least important item to meeting planners

of all 63 items with a mean of 4.39. A recent study on meeting planners' perceptions

of upscale hotel chain practices and benefits also found that a chain's frequent stayer

programme was the least important benefit (Weber, 2000, p.34). 'VIP upgrades' for

special meeting guests, although they were still a low priority, were much more highly

valued by meeting planners (5.79) than frequent stayer programmes (4.39). Whether

the hotel was concerned with the environment or a good citizen in the community

ranked extremely low in importance to meeting planners (4.94 and 4.91 respectively).


## Problem resolution

Table 4.10 presents the quadrant chart for the problem resolution items. All four

problem resolution items ('problems resolved well', 'errors quickly rectified',

# Table 4.10 Quadrant chart of problem resolution
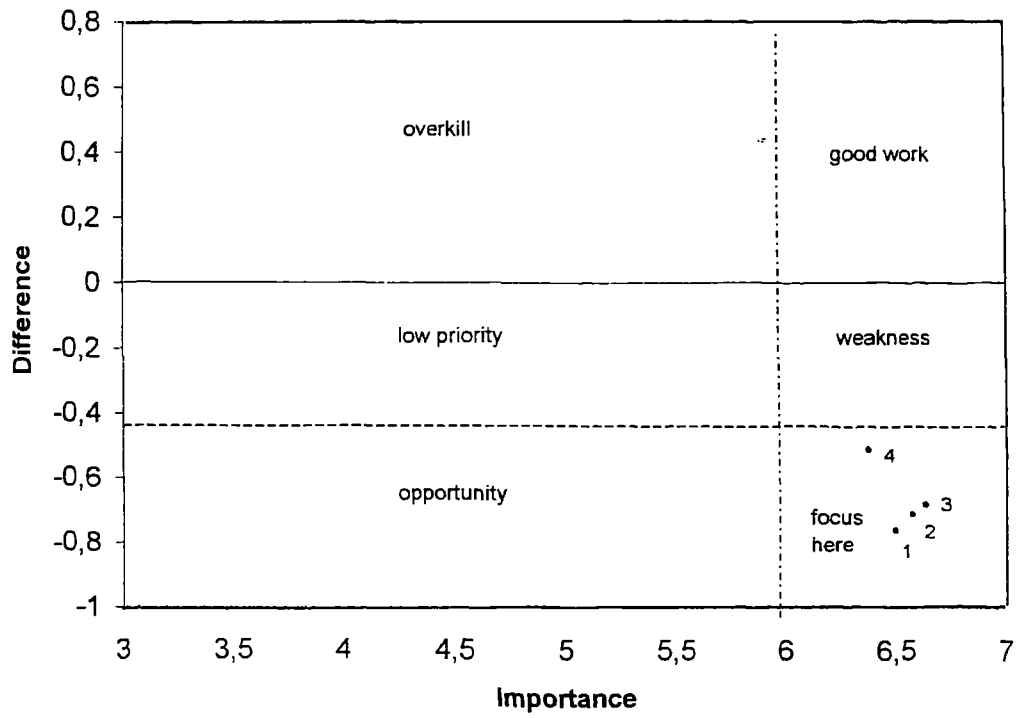


Quadrant chart with axes: vertical axis "Difference" from -1 to 0,8; horizontal axis "Importance" from 3 to 7.

Labels within chart: overkill, good work, low priority, weakness, opportunity, focus here. Points: 1, 2, 3, 4.

1 .Empowered employees     3. Problems resolved well
2 .Errors quickly rectified     4 .Problem solving attitude

'empowered employees' and 'problem solving attitude') fell in the 'focus here' section of the quadrant chart, with 'problem solving attitude' being the least important of the four items (6.38 compared to 6.64, 6.58 and 6.50 respectively). This finding seems to suggest that employees who are *empowered* to solve problems and rectify errors (i.e. deliver results) was a more important consideration to meeting planners than whether employees had a positive *attitude* about solving problems.

In addition, 'problems resolved well' was the fourth most important item to meeting planners of all 63 items and 'errors quickly rectified' was number seven in overall importance. Both of these items also exhibited some of the largest gaps of all 63 items, as did the item 'empowered employees'. Ritz-Carlton, a hotel company that has won the Baldridge Award (see Chapter 2) twice, is pro-active in empowering employees to deal effectively with customer problems. The results of this study suggest that such a strategy pays off in terms of improved customer satisfaction, customer perceived value, and ultimately their level of commitment.

## Customer costs

Table 4.11 presents the quadrant chart for the customer cost items. All five customer cost items were located in the 'focus here' section of the chart, which included the item with the largest gap of all 63 items, 'reasonable prices' (-0.99). This result suggests that if hotels want to increase meeting planner satisfaction and perceived value, they will need to keep their prices reasonable, even when the availability of meeting space is scarce. In order to do this, hotels need to maintain a fine balance between obtaining maximised profit for the hotel, and providing value to meeting

**Table 4.11 Quadrant chart of customer costs**
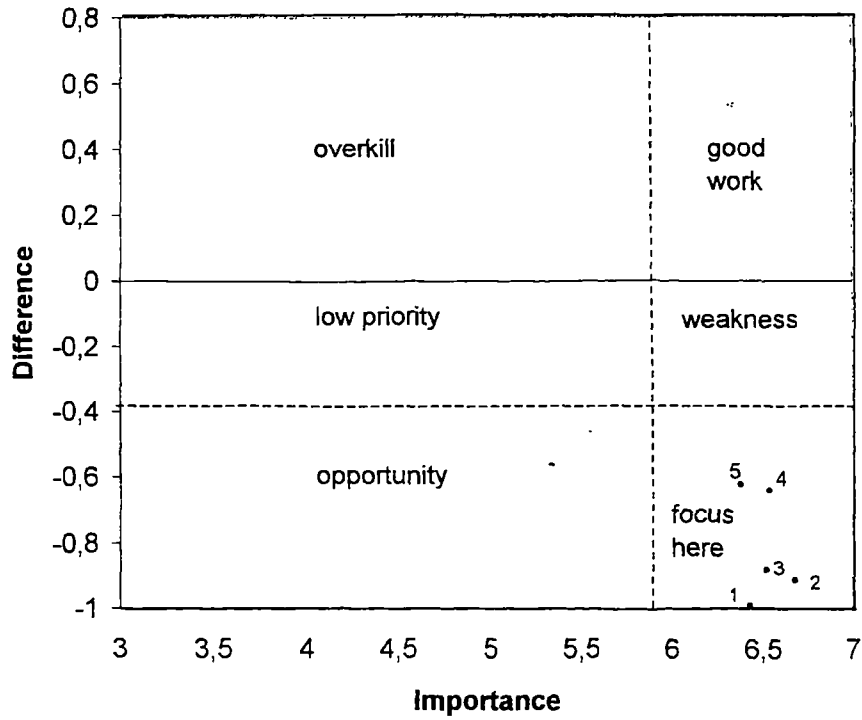


1. Reasonable prices    4. Fair contract terms
2. No hidden costs      5. Little risk
3. Hassle-free business

planners. Hotel markets tend to be cyclical and hotels need to be careful not to take advantage by overcharging and thereby alienating their meeting clients, so that when meeting space becomes more readily available, meeting planners will not switch to the competition.

'No hidden costs' (-0.91) was the item with the second largest gap of all 63 items. It was also the item that was second in overall importance to meeting planners (6.68 out of 7). These results suggest that hotel pricing needs to be transparent and stated clearly in all correspondence and contractual agreements.

'Hassle-free business' had the third largest gap of all 63 items (-0.88) and was twelfth in importance overall (6.52). This finding is related to the value that meeting planners find in the hotel providing one contact person (sometimes called the convention service manager) who co-ordinates communication with the various departments of the hotel. This result also supports the findings of a recent study sponsored by the Center for Hospitality Research at Cornell University that having a no-worry, hassle-free stay is a desired benefit mentioned most frequently by meeting and convention customers (Dube and Renaghan, 1999, p.94).

The above-mentioned customer cost items ('reasonable prices', 'no hidden costs' and 'hassle-free business') had the largest shortfalls of all 63 items. These results highlight the importance of customer costs to meeting planners even when they are booking meetings at upscale (4 and 5 star) hotels, and also confirm the importance of including an explicit consideration of direct and indirect customer costs as antecedents of customer satisfaction and perceived value (Spreng, Dixon and Olshavsky, 1993).

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The other two customer cost items, 'fair contract terms' and 'little risk', were also in the 'focus here' section of the quadrant chart and, although the gaps were still very large (-0.64 and –0.61 respectively), they were not as large as the three other customer cost items. These results support the findings of other studies that fairness (Bowen and Schoemaker, 1997, p.42) and low risk (Sweeney *et al*, 1999) are important antecedents of customer perceived value.

## In summary

The following is a summary of the main gap analysis results:

- The gap results indicate that hotels are performing relatively well in terms of the product they are offering to the meeting market. Hotel accessibility, cleanliness and meeting room furnishing were the only areas of product quality weakness.

- Unlike product quality, service quality is an area of great opportunity for hotels to improve their offering to the meeting market. In particular, the issue of operating departments fully meeting the agreements made by the sales department, and the related areas of accurately recording meeting requirements and employee attention to details emerged as significant areas of opportunity for improvement. In addition, accurate and understandable bills is also an area that requires attention. Although the post-event review ranked very low in importance to meeting planners, it also had a very large gap, indicating that it may possibly be an area of unrealised opportunity.

- The reliability of staff is a critical element in the building of strong relationships with customers and an area in great need of improvement.

- Extra benefits emerged as the area of least overall importance to meeting planners. The gap results suggest that hotels could consider reducing the resources that are allocated to gifts, hospitality events and the hotel being seen as a 'good citizen' in the community. Of particular interest is the low priority given to frequent stayer programmes by meeting planners. The only extra benefit that emerged as an area in which hotels could improve their offering to the meeting market was that of making space available to its regular meeting planners during busy periods.

- Problem resolution emerged as an area of great opportunity for hotels to improve their offering to the meeting market, with all four items falling in the 'focus here' section of the quadrant chart. The *attitude* of employees was not as critical a factor to meeting planners as their being empowered to solve problems quickly and well.

- Customer cost issues emerged as the area with the largest gaps, particularly in terms of reasonable prices, no hidden costs and hassle-free business. If hotels are interested in increasing the level of commitment of their regular meeting clients, the gap results suggest that they must maintain a fine balance between obtaining maximised profits when the availability of meeting space is scarce and providing value to their meeting clients.

## DRIVERS OF CUSTOMER COMMITMENT

Drivers of customer commitment is the name given to individual performance attributes whose ratings disproportionately affect customer commitment. Multiple regression analysis is an ideal multivariate tool with which to explore such a model of dependency (Vavra, 1997, p.386). Multiple regression is the appropriate method of analysis when the research problem involves a single metric dependent variable (in

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this case, 'customer commitment') presumed to be related to two or more metric

independent variables (for example, 'The hotel's setting is pleasant' or 'Employees are

courteous') (Hair *et al*, 1998, p.14). Alpert (1971) tested eight different methods of

determining attribute importance ranging from direct questioning (self-report) to

multiple regression analysis and found that regression analysis was the most effective

method for determining the importance of attributes.

One disadvantage, however, is that regression analysis does not lend itself well to

considerations of a large number of independent variables and their interactions

(Taylor, 1997, p.154). Therefore, in this study the top fifteen performance attributes

from the gap analysis (see Appendix D) were used as the independent variables and

regressed against 'customer commitment' as the dependent variable. The regression

output showed a significant model with an F-value of 5.42 and a p-value less than

.0001. Regression coefficients for each performance attribute describe the relative

importance of each in influencing overall commitment. There were eight attributes

whose t-score was statistically significant at the $p < 0.10$ level. In order, these

attributes are: pleasant setting (.0007), courteous employees (.0033), guestroom

furnishing (.0124), agreements met (.0131), professional appearance (.0683), clean

facilities (.0743), food quality (.0884), and consistent service (.0967).

Comparing the most important attributes that resulted from the gap analysis (self-

report importance ratings) with the most important attributes that resulted from the

regression analysis (drivers), we see that the results are not the same (see Table 4.13).

## Figure 4.3 Self-report and regression analysis 'importance' results

| Self-report 'importance' results | Regression analysis 'importance' results |
|---|---|
| 1. Staff reliability | 1. Pleasant setting |
| 2. No hidden costs | 2. Courteous employees |
| 3. **Agreements met** | 3. Guestroom furnishing |
| 4. Problems resolved well | 4. **Agreements met** |
| 5. On-time F&B functions | 5. Professional appearance |
| 6. Errors quickly rectified | 6. Clean facilities |
| 7. Attention to details | 7. Food quality |
| 8. Accurate recording | 8. Consistent service |

The only common result in the top eight attributes between the self-report importance ratings and the regression analysis is 'agreements met'. This finding confirms previous research findings that customers are not always able to state which attributes actually have the greatest impact on their level of satisfaction or commitment (for a discussion of previous research on this topic, see Mount, 1997a). This is not to imply, however, that customer ratings of the importance of various attributes to their level of commitment (self-report importance ratings) should be discounted. On the contrary, these perceptions are foremost in the minds of customers, and management therefore needs to consider them carefully. However, it should be kept in mind that self-report importance ratings are descriptive rather than statistical in nature, and therefore caution must be exercised in applying the results to the general population.

## Drivers and gaps

As discussed, although previous research suggests that regression analysis is a more reliable method than self-report for determining the most important factors influencing meeting planner commitment, regression analysis only tells us which factors are most important to customers, it does *not* tell us where hotels are falling short in their performance of these factors. It is the difference scores of the gap analysis that gives us this information. If, therefore, we compare the results of the regression analysis (the 'drivers' of customer commitment) with the difference results of the gap analysis (whether hotels are under-performing on these attributes), some interesting findings emerge (see Table 4.12).

For example, although 'pleasant setting' is the number one driver of customer commitment, the gap between hotel performance on this item and its importance to meeting planners is very small and positive (+0.08), indicating that hotels are performing well in this area. In addition, although the gaps for 'guestroom furnishing' (driver number three) and 'professional appearance' (driver number five) are negative, they are also very small (-0.02 and –0.06 respectively), indicating that hotels are also performing well in these areas. Therefore, in these three areas (pleasant setting, guestroom furnishing, and professional appearance), the results of this study indicate that hotels should continue their present strategy.

The gaps for 'courteous employees' (driver number two) and 'clean facilities' (driver number six) are relatively small (-0.32 and –0.23 respectively); however, they are larger than the gaps for 'pleasant setting', 'guestroom furnishing' and 'professional

## Table 4.12 Regression analysis 'importance' results with gaps

| Regression analysis 'importance' results | Gap | Description |
|---|---|---|
| 1. Pleasant setting | +0.08 | positive, very small |
| 2. Courteous employees | -0.32 | negative, small |
| 3. Guestroom furnishing | -0.02 | negative, very small |
| 4. **Agreements met** | -0.71 | negative, very large |
| 5. Professional appearance | -0.06 | negative, very small |
| 6. Clean facilities | -0.23 | negative, small |
| 7. Food quality | -0.50 | negative, large |
| 8. Consistent service | -0.53 | negative, large |

appearance', indicating that there is room for improvement in the areas of the courteousness of employees and the cleanliness of the facilities which should be addressed by hotels.

'Food quality' (driver number seven) and 'consistent service' (driver number eight) are less important drivers; however, the gap on these two items is large (-0.50 and -0.53 respectively). Therefore, if hotels were interested in increasing their level of customer commitment, they should be concerned about making improvements in the areas of food quality and consistent service.

However, as mentioned, the only item common to both the self-report and the regression analysis is 'agreements met' (driver number four) with a very large gap of – 0.71. Therefore, the most powerful conclusion drawn from comparing the difference results of the gap analysis with the results of the regression analysis (drivers of customer commitment), is that hotel improvement in fulfilling the agreements they make with meeting planners appears to be the area with the greatest potential for increasing meeting planner commitment to booking meetings at their hotel. However, it must also be recognised that the meeting of agreements could be perceived as one of the most subjective and ambiguous factors for hotels to control. It is entirely possible for meeting planners to find infinite ways of perceiving that an agreement has not been met, whereas hotel personnel think that it has and rationalise that the meeting planner is always changing his mind (unless, of course, the details have been accurately recorded in the written contractural agreement).

# STRUCTURAL EQUATION MODELING

Structural equation modeling examines a series of dependence relationships between constructs simultaneously and is particularly useful when a researcher wishes to develop a more systematic and holistic view of the problem (Hair, Anderson, Tatham and Black, 1998, p.578). Structural equation models are built in order to identify possible structural relationships between constructs (Vavra, 1997, p.354).

## Principal component analysis

In order to determine which of the 63 items (individual performance attributes, for example, 'The hotel's setting is pleasant') best represent each construct (e.g. Product

Quality) in the structural equation model, principal component analysis was employed (see, for example, Blackwell, 1998; Chandon, Wansink and Laurent, 2000; Messerli, 1993). Principal component analysis is appropriate when one has obtained measures on a number of observed variables (items) and wishes to develop a smaller number of unobserved variables (manifest variables or 'principal components') that will account for most of the variance in the observed variables (items) (Hatcher, 1994).

The following results on the principal component analysis were obtained:

- Three items (V16, V17, V18) loaded on the first principal component for the manifest variable 'product quality' (MPQ) with a loading of at least 0.66. These three items were 'The hotel's setting is pleasant' (V16), 'The hotel is visually appealing' (V17) and 'The hotel's facilities are unique' (V18).

- Four items (V42, V43, V44, V45) loaded on the first principal component for the manifest variable 'service quality' (MSQ) with a loading of at least 0.60. These four items were 'Bills are easy to understand' (V42), 'Bills are accurate' (V43), 'The hotel conducts an extensive post-event review session with meeting planners' (V44) and 'The hotel is a safe place' (V45).

- Three items (V46, V48, V49) loaded on the first principal component for the manifest variable 'relationship quality' (MRQ) with a loading of at least 0.77. These three items were 'The hotel is fair during negotiations' (V46), 'The relationship that meeting planners have with the staff at this hotel are based on trust' (V48) and 'Hotel staff have good working relationships with meeting planners' (V49).

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- Three items (V58, V59, V63) loaded on the first principal component for the manifest variable 'extra benefits' (MEB) with a loading of at least 0.69. These three items were 'During busy periods, the hotel does everything possible to make space available for the functions of its regular meeting planners' (V58), 'The hotel will provide upgrades for the VIP clients of its regular meeting planners' (V59) and 'The hotel is willing to customise its services in order to fulfill the requirements of its regular meeting planners' (V63).

- Two items (V70, V71) loaded on the first principal component for the manifest variable 'problem resolution' (MPR) with a loading of at least 0.84. These two items were 'When a hotel makes an error, they are quick to rectify it' (V70) and 'The hotel resolves problems well' (V71).

- Two items (V73, V74) loaded on the first principal component for the manifest variable 'customer costs' (MCC) with a loading of at least 0.82. These two items were 'Prices charged are reasonable' (V73) and 'There are no hidden costs' (V74).

The manifest variables denoted by MPQ, MSQ, MRQ, MEB, MPR, and MCC were obtained by summating the scales of the observed variables (items) from the individual principle components for each manifest variable. For example, the manifest variable that represents the construct 'product quality' (MPQ) was obtained by adding the responses to the items V16, V17, and V18. A complete list of the original indicators (items) for the manifest variables (constructs) can be found in Appendix F.

When only one indicator (item) for each variable (construct) is available (as is the case here for the constructs of 'customer satisfaction', 'customer perceived value' and

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'customer commitment'), identification problems create the necessity of making

certain assumptions about the values of these parameters. As described by Kenny

(1979), in such instances one can use information from the reliabilities to estimate the

effect of the construct and random error on the indicator.

## Reliability

Coefficient alpha reliabilities are reported in Table 4.13 along with the means and

standard deviations (based on a 7-point scale) for the variables. According to Hatcher

(1994), one may compute the coefficient alpha to estimate the reliabilities when one

has administered a multiple-item, summated rating scale to a group of subjects and

wants to determine the internal consistency reliability of the scale. The most

commonly accepted measure for assessing a scale's internal consistency is Cronbach's

coefficient alpha, which tells how well the items measure the same construct (Hinkin,

Tracey and Enz, 1997). Internal consistency is the extent to which the individual items

## Table 4.13 Means, standard deviations and coefficient alpha reliabilities

| Variables | Mean | Standard Deviation | Coefficient Alpha Reliabilities |
|---|---|---|---|
| Product Quality | 5.53 | 3.11 | 0.80 |
| Service Quality | 5.39 | 4.21 | 0.79 |
| Relationship Quality | 5.88 | 2.80 | 0.81 |
| Extra Benefits | 5.44 | 3.13 | 0.72 |
| Problem Resolution | 5.92 | 2.19 | 0.87 |
| Customer Costs | 2.41* | 2.46 | 0.79 |

*reverse coded

that constitute a test correlated with one another or with the test total. A large

coefficient (over .70) provides an indication of strong item homogeneity and suggests

that the sampling domain has adequately been captured (Hinkin *et al*, 1997).

Coefficient alpha reliability estimates (Cronbach, 1951) of the variables for this study

all exceed 0.72.


## Testing of the model

Figure 4.4 is the initial model. It represents the portion of the original theoretical

model (see Figure 1.6) that was tested using structural equation modeling. The model

is an adaptation of a model proposed by Patterson and Spreng (1997). The unique

features of this model are (1) the *explicit* consideration of the relationship of customer

costs to customer satisfaction and perceived value, (2) the inclusion of relationship

quality as a distinct construct from product and service quality, (3) the inclusion of the

construct of problem resolution, and (4) the structuring of the model in a generic and

all-encompassing way so that the relationship of the constructs in the model could be

tested across different types of service industries although the specific items would

need to be tailored.


The initial model is composed of two components, a 'structural' component and a

'measurement' component. The 'structural' component of the model represents the

dependence relationships linking the hypothesised model's nine constructs (Hair *et al*,

1998, p.583). The six independent constructs (exogenous variables) are product

quality, service quality, relationship quality, extra benefits, problem resolution and

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# Figure 4.4 Initial model
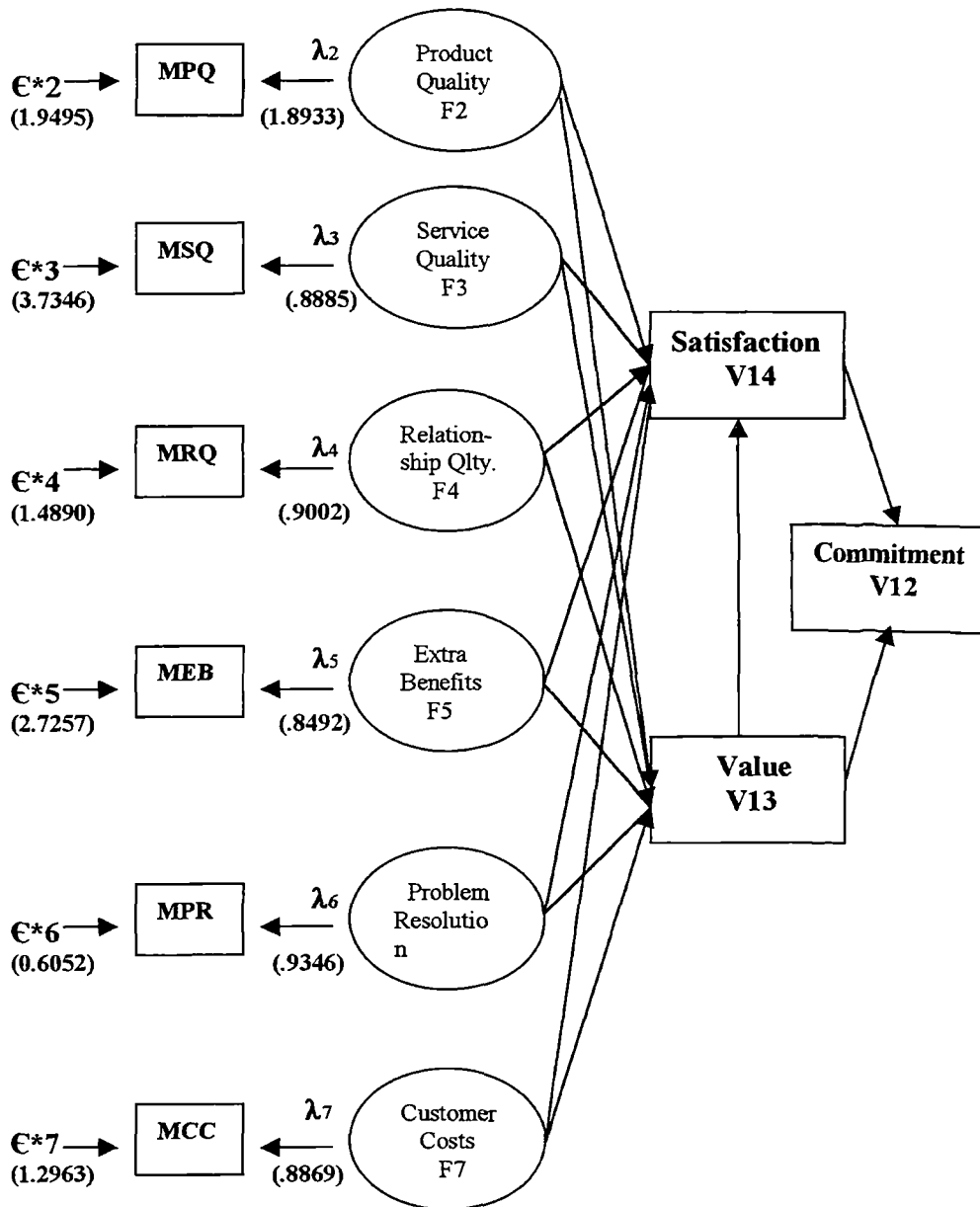


Correlations between the exogeneous variables have been omitted for clarity.

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customer cost. The three dependent constructs (endogenous variables) are customer satisfaction, customer perceived value and customer commitment. The 'measurement' component of the initial model specifies the reliability of each construct for estimating the proposed causal relationships (Hair *et al*, 1998, p.581). Within the measurement component, the influence of the constructs (latent variables, i.e. Product Quality) on the indicators (manifest variables, e.g. MPQ) is represented by λ's while the influence of random error is represented by Є's. The manifest variables (e.g. MPQ) are represented by squares.

A factor loading (λ) representing the influence of the constructs (i.e. Product Quality) on the indicators (i.e. MPQ) is indicated by the square root of the reliability, while the quantity 1 minus the reliability multiplied by the variance indicates the impact of random measurement error (Є). These parameters were estimated and set (fixed) at the appropriate values prior to the latent variable analysis and are noted with asterisks. The values at which they were set are in parentheses. This approach has been further described by James, Mulaik and Brett (1982) and Rogosa (1979), and applications have been given by Williams and Hazer (1986), Schmit and Allscheid (1995), and Heise and Smith-Lovin (1981).

The entire structural model was tested using SAS System's CALIS procedure using the maximum likelihood method. Several goodness-of-fit indices were used to assess the correspondence between the proposed model and the data (see Appendix F). Combined, these findings provide support for the final theoretical model (Figure 4.5) over the other theoretical models tested.

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# Figure 4.5 Final model



**€*2** → | **MPQ** | ← λ₂
(1.9495)       (1.8933)

Product Quality F2

β=0.3060
t=4.5652

**Satisfaction V14**

β=0.2328
t=2.9564

**€*4** → | **MRQ** | ← λ₄
(1.4890)       (.9002)

Relation-ship Qlty. F4

β=0.3060
t=5.1573

β=0.1189
t=1.4938

**Commitment V12**

β=0.2949
t=3.1017

**€*6** → | **MPR** | ← λ₆
(0.6052)       (.9346)

Problem Resolution F6

β=0.6150
t=10.0356

β=0.2074
t=2.6208

β=0.2958
t=3.2168

**Value V13**

β= - 0.4498
t= - 5.7371

**€*7** → | **MCC** | ← λ₇
(1.2963)       (.8869)

Customer Costs F7
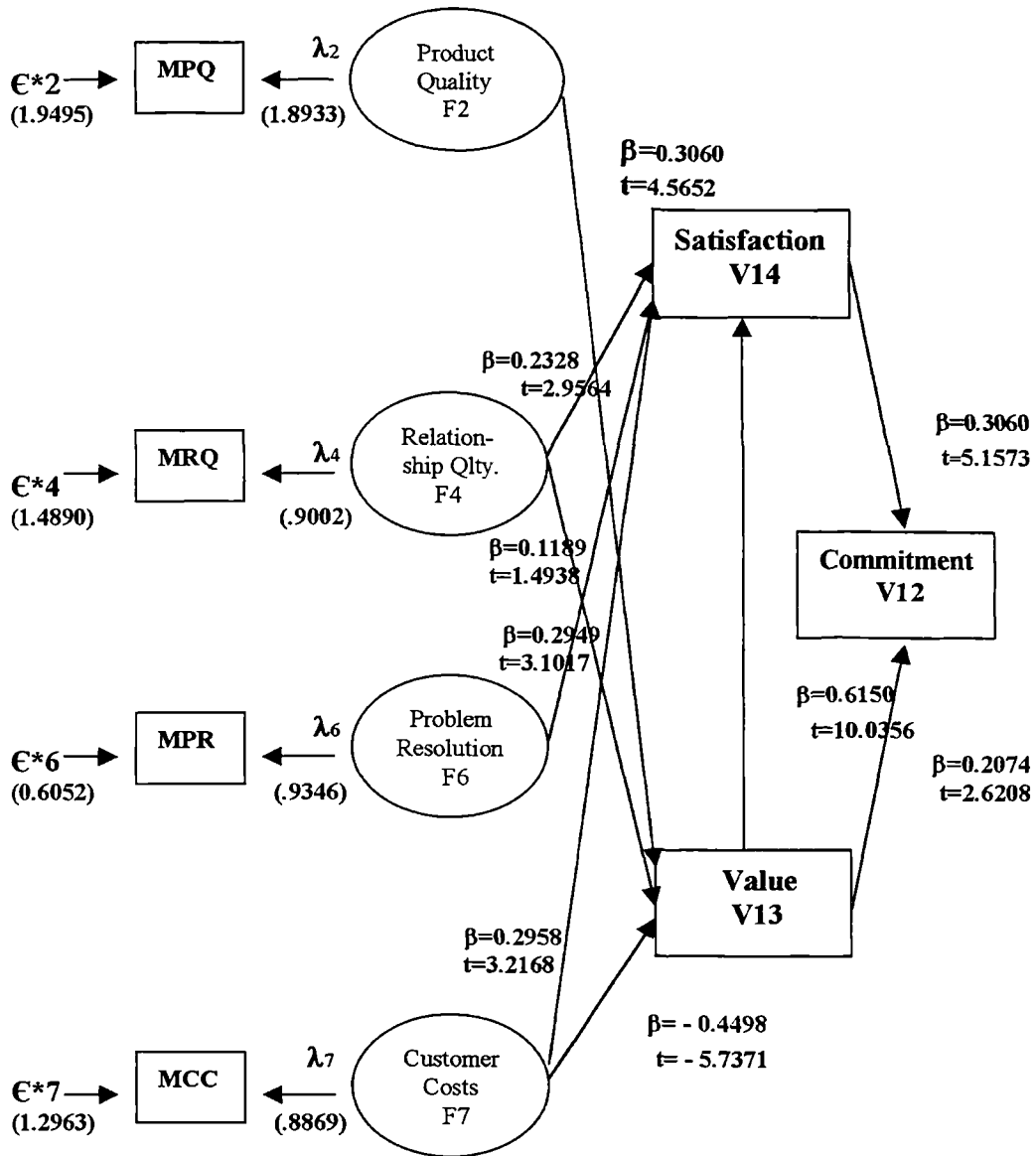
Correlations between the exogeneous variables have been omitted for clarity.

The $R^2$ values for the latent endogenous variables show the following:

- Customer Satisfaction (V14) and Perceived Value (V13) accounted for 32.647% of the variance in Customer Commitment (V12),

- Product Quality (F2), Relationship Quality (F4) and Customer Costs (F7) accounted for 45.07% of the variance in Perceived Value (V13), and

- Relationship Quality (F4), Problem Resolution (F6), Customer Costs (F7) and Perceived Value (V13) accounted for 59.94% of the variance in Customer Satisfaction (V14).

A copy of the complete structural equation modeling output can be found in Appendix F.


## Hypothesis testing

This section will address whether the empirical results of the structural equation modeling support the hypothesised relations proposed in Chapter Two. Each hypothesis or set of hypotheses will be discussed in turn. The implications of the structural equation modeling findings will be discussed in conjunction with the results of the other methodologies in Chapter 5.


### Hypotheses 1, 2a, 2b and 2c: satisfaction, value and commitment

H1:     Customer satisfaction has a significant positive impact on customer commitment.

H2a:    Customer perceived value has a significant positive impact on customer commitment.

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H2b:    Customer perceived value has a significant positive impact on customer

satisfaction.

H2c:    Customer perceived value has a significant positive indirect impact on

customer commitment via customer satisfaction.

Both customer satisfaction and customer perceived value were found to have a

significant positive impact on commitment as predicted (H1: $\beta$ = 0.31, t = 5.16; H2a: $\beta$

= 0.21, t = 2.62), with satisfaction exerting a stronger direct influence on commitment

($\beta$ = 0.31) than the direct influence of perceived value on commitment ($\beta$ = 0.21). The

path from value to satisfaction (H2b: $\beta$ = 0.62, t = 10.04) was the strongest path in the

model and was considerably stronger than the next strongest path which was the one

from satisfaction to commitment (H1: $\beta$ = 0.31, t = 5.16). Thus, the results of this

study indicate that customer satisfaction is the strongest, but not the only, significant

antecedent of customer commitment.


In order to determine whether satisfaction completely mediates the effect that

perceived value has on commitment, it is necessary to show that (1) value has a

significant relationship with commitment, and that (2) this effect is not significant

when perceived value is linked to commitment through satisfaction (see James and

Brett, 1984). The results indicate that perceived value does indeed have a significant

relationship with commitment (r = .49, p-value<.0001); therefore, the model was

estimated that freed the path between satisfaction and perceived value, resulting in a

significant decrease in chi square (108.45, df = 2). In addition, the t-value for the path

coefficient was significant (t = 2.62). The results of these mediation tests therefore

indicate that the effect of perceived value on commitment is not completely mediated

by satisfaction. However, customer perceived value was found to have a significant

positive indirect impact on customer commitment via customer satisfaction as hypothesised (H2c).

## Hypotheses 3a and 3b: product quality, satisfaction and value

H3a: Perceived product quality has a significant positive impact on customer satisfaction.

H3b: Perceived product quality has a significant positive impact on customer perceived value.

The path from product quality to customer satisfaction was not significant. However, the path from product quality to perceived value was significant (H3b: $\beta = 0.23$, $t = 2.96$) as hypothesised.

## Hypotheses 4a and 4b: service quality, satisfaction and value

H4a: Perceived service quality has a significant positive impact on customer satisfaction.

H4b: Perceived service quality has a significant positive impact on customer perceived value.

In accordance with recent research (Oh, 1999; Patterson and Spreng, 1997), a positive relationship was expected between service quality and both satisfaction and value. However, neither of these paths was found to be significant.

## Hypotheses 5a and 5b: relationship quality, satisfaction and value

H5a: Perceived relationship quality has a significant positive impact on customer satisfaction.

H5b:   Perceived relationship quality has a significant positive impact on customer

perceived value.

The hypothesised paths from relationship quality to customer satisfaction (H5a: $\beta$ =

0.23, t = 2.96), and relationship quality to perceived value (H3b: $\beta$ = 0.12, t = 1.49)

were both found to be significant. However, the path from relationship quality to

satisfaction was found to be stronger than the path from relationship quality to value,

with the path from relationship quality to value being the weakest significant path in

the model.


## Hypotheses 6a and 6b: extra benefits, satisfaction and value

H6a:   Extra benefits have a significant positive impact on customer satisfaction.

H6b:   Extra benefits have a significant positive impact on customer perceived value.

The hypothesised paths from extra benefits to customer satisfaction, and extra benefits

to perceived value were not supported by the data.


## Hypotheses 7a and 7b: problem resolution, satisfaction and value

H7a:   Effective problem resolution has a significant positive impact on customer

satisfaction.

H7b:   Effective problem resolution has a significant positive impact on customer

perceived value.

The path from effective problem resolution to customer satisfaction was significant, as

hypothesised (H7a: $\beta$ = 0.29, t = 3.10). However, the path from effective problem

resolution to perceived value was not significant.

## Hypotheses 8a and 8b: customer costs, satisfaction and value

H8a: Perceived customer costs have a significant negative impact on customer satisfaction.

H8b: Perceived customer costs have a significant negative impact on customer perceived value.

The path from customer costs to perceived value was negative as hypothsised (H8b: $\beta$ = -0.45, t = -5.74) and, after the path from value to satisfaction, was the strongest path in the model. However, the path from customer costs to customer satisfaction was positive (H8a: $\beta$ = 0.30, t = 3.22), rather than negative as hypothesised. It is interesting to note that the negative impact of costs on perceived value was considerably stronger than the positive impact of costs on customer satisfaction.

## IN-DEPTH INTERVIEWS

In order to complement the quantitative research findings and to gain greater in-depth understanding of meeting planner requirements, their perceptions of hotel performance and the resulting attitudes and behaviours, a series of eight in-depth semi-structured interviews were undertaken during the period from January, 1998 through February, 2000. Four of the interviews were held with meeting planners from the UK and four from the USA. All of the interviews were conducted by the researcher himself and all but one (which was conducted in person) were conducted by phone. The researcher used a prepared outline as a guide (see Appendix G). However, meeting planners were encouraged to expand on the topics presented. The interviews lasted from 45 minutes to 1 hour and 15 minutes.

All of the meeting planners were senior level executives of leading international companies and trade associations. They had from six to twenty-eight years of experience as meeting planners. Three of the planners were male and five were female. All of the meeting planners except two spent the majority of their time (80-100%) planning meetings. (However, the revenue from the meetings planned even by the two who did not spend the majority of their time planning meetings was in excess of $2 million per year). The number of meetings planned per year per meeting planner ranged from 12 to more than 350. All of the meeting planners organised meetings and seminars, with half of them also organising either conventions, or exhibitions and trade shows.

## Meeting venues

All of the planners used hotels for the meetings they booked. In addition, three out of four of the UK planners booked meetings in-house, and three out of four of the American planners booked meetings at universities. Two of the meeting planners also used convention centers and one used public facilities. None of the meeting planners used cruise ships. A wide range of hotel locations were used (city centre, resort, airport and suburban) with all but one meeting planner using city centre hotels. Both chain and non-chain hotels were used. When a chain hotel was chosen, some of the reasons were because of its reputation ("known for high standards of service and product quality"), the recourse to a national sales manager in the case of problems, and the ability to build on an existing relationship with a chain.

In choosing a new hotel venue, word of mouth was by far the most important source of information, with six out of eight of the meeting planners rating it as a very important source. Convention and Visitor Bureaus were identified as important sources of information, especially for out-of-town events and incentives. They were also called "an indispensable partner in the planning of large meetings and conventions" by one meeting planner. The use of the web by meeting planners is mixed, but appears to be growing in importance, especially as a source of reference for property information. None of the meeting planners said that special promotions were an important source of information in choosing a new hotel venue.

## Meeting planner satisfaction and commitment

When asked about their level of satisfaction with the hotel where they had booked the most meetings during the past twelve months, all but two of the meeting planners said that their level of satisfaction was very high. However, even at the hotel where they had booked the most meetings during the past twelve months, one meeting planner from the UK felt that the facility required refurbishment and that the level of service could be more consistent.

When asked what the word 'commitment' meant to them, four of the meeting planners specifically mentioned aspects connected to their relationship with the hotel ("close", "excellent", "long-term", "trusting"). Three meeting planners mentioned high service standards and two mentioned the quality of the facilities. One meeting planner said that 'commitment' means that the hotel is the first choice when booking meetings in the area. Another planner said that 'commitment' means to actively seek to place a

meeting at a venue of choice, to use a hotel as a benchmark for other venues, and to feel confident in recommending the hotel to colleagues.

Only one meeting planner (the one who was not very satisfied) was not committed to booking meetings at the hotel where they had booked the most meetings during the past 12 months. The reasons given for this meeting planner's lack of commitment were the complacency and lack of commitment among some members of the hotel's staff, and problems with miscommunication. All of the other meeting planners said they were committed to booking meetings at the hotel where they had booked the most meetings during the past 12 months. Issues relating to service (responsive, efficient, professional, high standards, consistent, proactive) were mentioned by each of the other seven planners, with special mention being made of efficient check-in, food being served on time, and a high ratio of staff to customers. One planner said, for example, "They understand professional meeting planner needs. We speak the same language. I don't have to ask - they know." The quality/excellence of the facilities (particularly the conference space, the mix of break-out rooms, and the upkeep of the facilities) was mentioned by four of the meeting planners. Relationship issues were mentioned by three of the meeting planners (long term, partnership). One meeting planner said, "We're not just a number". Another planner mentioned that an important aspect of their commitment was that they had dealt with the same Sales Manager at the hotel for many years, while another planner mentioned the fact that the General Manager got involved. Interestingly, only one meeting planner connected satisfaction with commitment ("Events are handled to my satisfaction"), and only one connected value with commitment ("We're willing to pay more, but we want value for our

money"). In addition, only one planner connected costs with commitment ("The hotel has flexible pricing and is willing to offer deals during the low season").

When asked to think about a 4 or 5 star hotel where they had booked meetings in the past but where they don't book meetings any longer, a key issue mentioned by several planners was that the hotel had not lived up to the agreements it had made ("Agreements made by the sales staff were not met by the hotel", "The hotel made promises they didn't live up to", "Agreements made were broken", "We did not receive what was promised"). In addition, two planners mentioned that extra charges had been added to the bill after the signing of the contract. Overall low service standards were also mentioned by four planners, with special mention being made of complacency, bad attitude, inconsistency and unreliability. A lack of professionalism and a lack of understanding of meeting planner needs were also mentioned frequently. Only two planners mentioned product quality items (lack of quality space, run down facilities) as reasons for no longer booking meetings at a hotel. Low food quality was mentioned by two planners.

## Key hotel evaluation factors

When asked about the key factors in their overall evaluation of a 4 or 5 star hotel as a meeting venue, six meeting planners cited the quality of the meeting and guest rooms. In addition, four planners specifically mentioned the existence of one staff person at the hotel who was responsible for handling the coordination of the meeting (convention service manager). The overall level of service quality was also mentioned by four planners. Flexibility on the part of the hotel was mentioned twice.

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## Areas of difficulty

When asked if there were areas where they often encounter difficulties in the planning

or staging of meetings at 4 or 5 star hotels, the issues mentioned most frequently were

related to (1) meeting rooms ('quality of space and design', 'inadequate lighting',

'lack of sufficient breakout and informal meeting space', 'larger, more flexible space

required'), (2) staffing ('sales staff has insufficient knowledge about meeting rooms',

'nine times out of ten, the person who made the booking and meeting arrangements is

not the same person who handles the actual meeting', 'high turnover', 'response time

is too long', 'indifferent', 'unprofessional' ), (3) billing ('difficult to decipher',

'incorrect posting of invoices'), and (4) lack of flexibility in pricing.


## The product

In terms of the product that 4 to 5 star hotels provide to the meeting market, the

overall view of meeting planners is that hotels do not offer sufficient efficiency and

flexibility in the design and layout of their meeting facilities. Particularly mentioned

was the fact that meeting and breakout rooms are often not located on the same floor

or near to each other. The meeting planners that were interviewed placed a high value

on hotels with facilities that are purpose built (customer designed) for the meeting

market with up-to-date technological equipment (mentioned by four planners),

informal spaces in which meeting participants can relax (mentioned by three

planners), a well-equipped business centre (mentioned by two planners) and daylight

in meeting rooms (mentioned by two planners). The standard of guestrooms was also a

concern (mentioned by three planners). One planner said, for example, "Guest rooms

don't need to provide over-the-top amenities, but they should be spacious and comfortable." Another planner valued guestrooms that are conducive to doing business, with two telephone lines, a computer jack and a large desk with a second telephone and good lighting.

## The service

Three of the meeting planners specifically mentioned the value of the hotel providing an experienced conference service manager (conference coordinator), with one planner stating that, "The convention service manager makes or breaks the conference". The majority of the remainder of the responses were staff-related (responsive, flexible, qualified, professional, knowledgeable, low turnover, positive attitude, efficient). In addition, the provision of a dedicated conference service desk, a well-service coffee break area, and an airport shuttle service were mentioned.

## Relationships

The aspect of their working relationship with a hotel that was valued the most by meeting planners seemed to be a stable, trusting relationship between the planner and the top management of the hotel (specifically mentioned were the Convention Service Manager, the General Manager and the Sales Manager). One meeting planner said, "My commitment is to the people at the hotel, not the facility itself". Good internal hotel communication and the provision of one contact person for all meeting arrangements (Convention Service Manager) were also mentioned as an issue of high importance by many of the planners. In addition, honesty regarding what can and cannot be done by the hotel, the fulfillment of agreements made, and a sense of teamwork between the hotel and the planner were mentioned as important factors.

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## Extra benefits

The majority of meeting planners do not feel that extra benefits are particularly valuable to them. In fact, one planner felt that extra benefits are an indirect form of bribery, and another stated that s/he has an ethical problem with extra benefits and 'goodies' for meeting planners. Some planners also mentioned that they prefer 'straight negotiations' and 'fair pricing' to extra benefits. However, three of the meeting planners mentioned that VIP upgrades are a valued extra benefit, and one planner mentioned that a 50% discount for the meeting planner and staff who are working the event is valued. The response to frequent stayer programmes was mixed, with two planners saying they appreciate these programmes and one saying that they didn't.

## Problem resolution

The aspects of problem resolution that were most important to meeting planners were that staff have a positive ('can-do') attitude as well as the authority to deal with problems on the spot. In addition, a sense of teamwork or partnership with the hotel was mentioned by several planners ("Not 'you' have a problem or 'I' have a problem, but 'we' have a problem").

## Customer costs

The cost item mentioned most often as important to the meeting planners interviewed was the provision of a package rate (specifically mentioned by four of the planners). In addition, the planners valued billing and pricing structures that were reasonable,

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transparent, easy to understand and negotiable. Several different price-related issues were mentioned. For example, one planner mentioned that, "Many hotels price themselves out of the market with their room rates". Another felt that hotels should reduce their room and F&B rates for larger functions. One planner did not like the automatic service charge that is added to F&B functions which is sometimes as high as 20%. Another planner insists on a satisfaction guarantee with a penalty clause if 20% or more of the conference attendees are not satisfied with the hotel's products or services.

The indirect cost that was mentioned most often was hassle and inefficiency on the part of the hotel, particularly in not having good records of meeting requirements. Several of the planners mentioned that when they are booking meetings at a hotel they use regularly, they feel the hotel should have a customer database with a record of their standard needs ("like a tailor who has taken your measurements"). One planner said that they now send a Meeting Profile Checklist ahead of time to the hotel they use regularly, listing detailed requirements for upcoming events. Planners mentioned that a valued benefit of working regularly with one hotel is that "they know what I want" which makes it easier for the planner to do business and reduces hassle.

## Areas most needing improvement

When asked in which areas hotels could make the greatest improvement in their offerings to the meeting market, the most often mentioned area was related to the product (overall quality, design and layout, and up-keep). The other area mentioned

most frequently was related to staffing issues (training, empowerment, and turnover). In addition, two planners mentioned improvements in technology.

## Emerging trends

Far and away the most often mentioned emerging trend was that of technology, with seven out of eight of the meeting planners mentioning this issue. In addition to technology, two planners mentioned healthier and lighter food, two mentioned more efficiently and professionally run meetings, and two mentioned purpose-built meeting facilities.

## In summary

The findings that emerged from the in-depth interviews seem to support the validity of employing qualitative research methods to supplement data obtained from quantitative research methodologies. Results obtained from the in-depth interviews confirmed and high-lighted findings from the quantitative portions of the present study in the following areas:

- The in-depth interviews confirmed the importance of a hotel fulfilling the agreements that it makes with the meeting planner. This issue was also frequently mentioned as a key factor in the decision *not* to book meetings at a hotel in the future.

- The importance of billing and pricing structures that are reasonable, transparent, easy to understand and negotiable was confirmed during the in-depth interviews.

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- The importance of the Convention Service Manager (CSM) was high-lighted in the in-depth interviews. Typical was the response of one meeting planner that 'The CSM makes or breaks the conference'.

- The meeting planners interviewed in the qualitative section of this study echoed the opinion voiced in the quantitative section that, on the whole, extra benefits do not provide any significant additional post-consumption value or satisfaction, and may even be construed as a form of bribery.

- The importance of empowering employees to solve problems and rectify errors was confirmed as an area of importance to meeting planners.

- The meeting planners interviewed confirmed the value of hassle-free business.

However, important additional information was gained through the interviews that did not emerge from the quantitative methodologies:

- One important additional factor that emerged from the in-depth interviews which was not evident in the gap analysis was the provision of meeting facilities that function well in terms of hotel design geared specifically to the meeting market (i.e. the configuration of the meeting rooms, the fact that they are located in close proximity to each other, and the existence of spaces where meeting participants can gather informally).

- Although the results of the gap analysis indicated that the provision of state-of-the-art technical equipment was a low priority, it was an area that was frequently mentioned during the in-depth interviews as one that is becoming increasingly important. This discrepancy might be explained by the fact that the planners who participated in the in-depth interviews were cutting edge leaders in the meeting

industry, representing major international companies and associations. The meetings that they run may therefore be more demanding and require a higher degree of technological interface and sophistication than the average meeting.

- As a result of the in-depth interviews, it became evident that, although turnover of line staff (such as cooks, waiters or maids) was generally not a concern to meeting planners, the turnover of key top level positions (such as the General Manager, Sales Manager and Convention Service Manager) was a matter of great concern. High turnover in these positions was felt to be strongly related to a hotel's inability to keep its agreements, whereas the building of strong, long-term partnering relationships with these key personnel was felt to be a positive factor in the development of meeting planner commitment to a hotel.

- Although the results of the structural equation modeling indicated that service quality was not significantly related to customer satisfaction or perceived value, the results of the in-depth interviews indicated that the overall level of service quality (and, in particular, food quality and consistency of service) was a key hotel evaluation factor. This finding from the in-depth interviews lends support to the belief that, in attempting to capture the domain of relationship quality in this thesis, a conceptual overlap may have occurred and that further research is necessary to more accurately specify the domains of service and relationship quality.

These findings confirm the value of using different forms of analysis when investigating complex research topics. In the final chapter, the findings from the various research methodologies is consolidated and analysed, and implications for management are presented along with recommendations for future research.

# CHAPTER 5: CONCLUSIONS

In this final chapter, the significant findings of the various research strategies are synthesised and the major conclusions are presented. First, an overview of the research objectives is given. Following is a discussion of the results with managerial implications. Then the contributions of the study are outlined and, finally, the limitations of the study and implications for future research are presented.

# OVERVIEW

During the 1990's, as evidence began to emerge that even satisfied customers defect (Jones and Sasser, 1995) and as the benefit of customer loyalty (commitment) to a company began to be increasingly recognised as a powerful defensive weapon providing a formidable protective barrier against the advances of the competition (Reichheld, 1996a), the focus in marketing research began to shift from satisfaction to loyalty. Furthermore, as the actual benefit to a company of investments in quality began to come under question, the focus in marketing research also began to shift from quality to value (quality at what price) (Woodruff, 1997).

Most previous studies have concentrated on either customer satisfaction or perceived value as antecedents of customer loyalty (commitment). However, little research has been conducted that considers the impact of satisfaction and value simultaneously on the development of customer commitment (loyalty/repurchase intentions). In addition, most studies have focussed on only a few antecedents of value and satisfaction. The present study, however, is integrative in nature and is one of the first that attempts to capture a more comprehensive view of commitment, satisfaction and perceived value,

including the relevant factors impacting these constructs. Because it was desired that the results of the study be both theoretically and operationally relevant, the factors that significantly impact customer commitment were examined at both the individual attribute and the aggregate construct level.

The present study extends previous research by proposing and testing a conceptual model that integrates both customer satisfaction and perceived value as antecedents of customer commitment (loyalty) from the perspective of the customer, and thereby responds to the call in the literature to more fully specify the relationship between satisfaction, value and commitment (loyalty) (Nguyen and LeBlanc, 1998; Oh, 1999). The study also extends previous research by including the relative impact of individual performance attributes on customers' levels of satisfaction and perceptions of value (see Patterson and Spreng, 1997). The thesis attempts to answer the following questions: What are the factors that lead to customer commitment? Specifically, what is the role of customer satisfaction and perceived value in its development, and how are these constructs related? In the domain to which the model was applied (meeting planners who book meetings at 4 and 5 star hotels), which aspects of a hotel's offering are highly valued by meeting planners, lead to their satisfaction, and impact their level of commitment to booking meetings at a hotel? Are there significant areas in which hotels are falling short in their offering to the meeting market?

The study uses a multi-method research strategy in the belief that each of the various strategies employed provides insights from a different perspective, with synthesis occurring at the final stage of the analysis (Morgan, 1983, p.380 as cited in Gill and Johnson, 1991, p.147). It is believed that the use of more than one research method to

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examine a particular phenomenon improves understanding of that phenomenon with each technique revealing facets of the phenomenon that would not be yielded by the use of alternative methods (Clark, Riley, Wilkie and Wood, 1998, p.39).

Furthermore, in response to the call for a more multi-faceted conceptualisation of loyalty (Dick and Basu, 1994, p.111), this thesis has conceptualised loyalty as a three dimensional construct, consisting of a behavioural, an attitudinal and a temporal dimension. The behavioural and temporal dimensions were captured in the study by asking meeting planners to respond in terms of the hotel where they had booked the most meetings during the past twelve months. The attitudinal dimension (commitment) was captured as the ultimate dependent variable.

In addition, many recent marketing studies have investigated the repurchase intentions of customers (Anderson and Sullivan, 1993; Fornell, 1992; Liu, 1998; Oh, 1999; Oliver, 1980; Patterson and Spreng, 1997; Taylor and Baker, 1994). However, customers can intend to repurchase for reasons other than true loyalty, such as a lack of alternatives or high switching costs (Bendpudi and Berry, 1997; Bitner, 1990; Liljandeer and Strandvik, 1995). If true customer loyalty is not just repeat purchase over time (regardless of the reasons) but is also a function of a customer's enduring positive intention towards (commitment to) a firm, and if the goal is to investigate the drivers of true customer loyalty (rather than spurious loyalty or mere retention), then it is critical that the ultimate dependent variable of the study *not* be repurchase intentions. This is the first empirical research study that the researcher is aware of which investigates customer commitment simultaneously with both customer satisfaction and perceived value.

# DISCUSSION AND MANAGERIAL IMPLICATIONS

The results of the present study confirm previous research findings that committed customers (meeting planners) (1) are proactive in their purchase behaviour (this hotel is their first choice when booking meetings in the area), (2) are not actively pursuing alternatives (not looking to switch hotels), that (3) their behaviour is voluntary (they like to book meetings at this hotel), and that (4) they intend to continue doing business with the company. Furthermore, although usually only about 5% of customers who encounter problems will let a company know (Hart *et al*, 1990), the results of the present study indicate that committed meeting planners communicate with the hotel they are committed to when they encounter problems, thus providing the hotel with invaluable information. In addition, the present study confirms that nearly all committed meeting planners speak positively to others about the hotel to which they are committed, and that positive word-of-mouth and the reputation of a hotel are primary sources of information for meeting planners in choosing a new hotel venue.

The results of this study also indicate that customer satisfaction is the strongest, but not the only, driver of customer commitment. Customer perceived value was also found to have a significant positive influence on customer commitment. These results lend support to the theory that customer satisfaction is not the sole determinant of customer commitment (loyalty/repurchase intentions), and that focusing on satisfaction alone may result in overlooking other important drivers of customer commitment (loyalty) (Bloemer, de Ruyter and Peeters, 1998, p.283; Liu, 1998, p.124). This study also lends support to the theory that customer satisfaction is a

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necessary but insufficient condition in the development of customer commitment (loyalty) (Jones and Sasser, 1995; Liu, 1998; Oh, 1999; Reichheld, 1996b; Taher, Leigh and French, 1996, p.217).

The current study also demonstrates that perceived value influences customer commitment not only directly but also indirectly via its powerful impact on customer satisfaction. In fact, the path from perceived value to satisfaction was the strongest path in the model, being considerably stronger than any other path. Current theory and the results of recent research have been mixed in terms of the relationship between customer satisfaction, perceived value and commitment (loyalty/repurchase intentions)(see, for example, Fornell *et al*, 1996; Heskett *et al*, 1997; Kaplan and Norton, 1996a; Oh, 1999; Patterson and Spreng, 1997; Reichheld, 1996b). However, the results of this research lend support to the theory that customer perceived value is foundational in the formation of customer satisfaction and commitment, with satisfaction playing a powerful, but intermediary, role. The present research therefore indicates that customer perceived value enhances customer commitment both in tandem with, as well as independently of, satisfaction and supports the theory that customer perceived value is the driving force of customer satisfaction (Gale, 1994; Liu, 1998; Reichheld, 1996a).

The findings of this study thus help to clarify the structural relationship between the constructs of customer satisfaction, perceived value and commitment (the attitudinal dimension of loyalty); specifically, that the preferential judgement of the benefits and costs of a consumption experience by the customer (perceived value) gives rise to a pleasurable feeling of fulfillment (satisfaction) and an enduring favourable intention

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(commitment) to continue purchasing from a company in the future. The important

task of understanding customer value perceptions and of developing and implementing

strategies to address this critical component is therefore encompassed within the

managerial goal of developing customer satisfaction and commitment.

Furthermore, in terms of the development of customer commitment, the results of the

present study also indicate that when both customer satisfaction and perceived value

are included in a model, there are no significant direct paths between any of the

performance dimensions (product quality, service quality, relationship quality, extra

benefits, customer costs and problem resolution) and customer commitment (see

Patterson and Spreng, 1997). The implication of this finding is that, in the design or

alteration of a service offering, managers should *not* consider the performance

dimensions in isolation, but rather only as they impact customer value perceptions and

satisfaction, which will ultimately impact customers' levels of commitment. The

results of this study therefore suggest that this 'inside-out' perspective (what satisfies

the customer and what does s/he value) is a critical element in the development of

customer commitment.

## Antecedents of satisfaction and value

The results of the structural equation modeling indicate that the antecedents of

customer satisfaction are not identical to the antecedents of customer perceived value:

- Product quality was significantly related to perceived value, but not to customer

    satisfaction;

- Relationship quality was significantly related to both customer satisfaction and perceived value, but the path to satisfaction was considerably stronger than the path to value;

- Problem resolution was significantly related to satisfaction, but not to value; and

- Customer costs were significantly related to both satisfaction and value, but the path to value was negative whereas the path to satisfaction was positive (the negative path from costs to value was considerably stronger than the positive path from costs to satisfaction).

Therefore, in the following sections, the significant results from the various research methodologies for each antecedent will be addressed in turn. The managerial implications of the research findings that relate to each antecedent will also be discussed.

## Product quality

The finding that product quality is significantly related to customer perceived value lends support to the results of recent studies that the physical aspects of a hotel play a prominent role in determining customers' value perceptions (Dube *et al*, 1999, p.344; Mattila, 1999, p.46). However, product quality was not found to have a significant direct relationship with satisfaction. An explanation for this finding is that the quality of the 'product' has already been pre-judged by planners at the decision-making stage when they are choosing between alternative offerings, and that product quality therefore functions primarily as the 'ante into the game' rather than as a significant driver of customer satisfaction.

In addition, three of the eight drivers of customer commitment at the attribute level were product items: pleasant setting (#1), guestroom furnishing (#3), and clean facilities (#6). Hotels were found to be performing very well in terms of pleasant setting and guestroom furnishing. In terms of the cleanliness of the facility, both the driver and the gap results support the findings of many other studies that the cleanliness of a hotel is of top importance to its clients (Knutson, 1988; McCleary, Choi and Weaver, 1998, p.33; Oberoi and Hales, 1990, p.708; Riley and Perogiannis, 1990; Taninecz, 1990). However, the findings of this study indicate that, even in 4 and 5 star hotels and despite the fact that cleanliness was the number one performance item, in the eyes of meeting planners, hotels could be kept even more clean.

According to the gap results, hotels appear to be performing well overall in the product they are offering to the meeting market. However, there are a few product quality areas other than cleanliness that are of concern to meeting planners. Hotel accessibility had the largest gap of all the product quality items. Hotel properties that are easily accessible have a competitive advantage that should be exploited in their promotional strategy to the meeting market. Properties that are not easily accessible could (1) devise alternative strategies to counteract this shortfall (perhaps by highlighting other benefits such as a unique setting, the quality of the service, new experiences or exciting activities) and/or (2) target segments of the meeting market that might value such benefits. This finding seems to suggest that travel costs and time involved in reaching a property are important considerations to meeting planners and an area in which hotels are falling short. This result also supports previous research

findings that a convenient location is a dominant source of value to meeting planners (Dube *et al*, 1999, p.345).

Meeting room furnishing displayed a small gap in the eyes of meeting planners. This finding was expanded and clarified in the in-depth interviews which also highlighted the importance of the layout and design of hotel meeting facilities, especially the value of meeting and breakout rooms being located close together. If the meeting market is a segment that a hotel is interested in, the results of this study seem to indicate that the needs of the meeting market should be reflected in the design, layout and furnishing (including technology) of the facilities that the hotel provides to this market. Some hotels are currently addressing this weakness by offering upgraded meeting room furnishings to their meeting clients through such programmes as Hilton's Meeting 2000 which provides dedicated meeting rooms with up-to-date technical equipment and specially designed chairs, and through the development of purpose-built conference resorts (Cabanas, 1992).

## Service quality

One of the most surprising findings of the study was that, according to the results of the structural equation modeling, service quality was not significantly related to either customer satisfaction or perceived value. However, in the gap analysis and the in-depth interviews, the importance of service quality to meeting planners was evident. One possible explanation is that, like high standards of product quality, high standards of service quality are now also being seen as the 'ante into the game' in the meeting market of upscale hotels, and that strong working relationships and effective, pro-

active problem resolution strategies are becoming the significant factors in the ability

of an upscale hotel to differentiate itself from the competition and to develop higher

levels of post-consumption satisfaction, perceived value and customer commitment.

Ritz-Carlton, two-time winner of the Baldridge Award (see Chapter 2), is an example

of a hotel company that has experienced great success in part through the

implementation of effective, pro-active problem resolution strategies and a highly

personalised service strategy.

The results of this study indicate that the area of greatest opportunity for hotels to

improve their offering to the meeting market and thereby increase customer

commitment to booking meetings at their hotel was 'agreements met', which was the

number four driver of customer commitment and also displayed a very large negative

gap. This finding was strongly echoed in the in-depth interviews. Several other factors

emerged (such as the accurate recording of meeting requirements, employee attention

to details, and high turnover in top level management) that are related to the ability of

hotels to keep the agreements they make with their meeting clients.

Three further drivers of customer commitment at the attribute level were service

items: professional appearance (#5), food quality (#7), and consistent service (# 8).

According to the results of this study, 4 and 5 star hotels are performing well in the

professional appearance of their staff. However, both food quality and consistent

service displayed very large negative gaps, indicating that there is room for

improvement in these areas. Both of these results were reiterated in the in-depth

interviews. In addition, accurate and understandable bills emerged as an area requiring

attention.

Finally, although post-event review emerged as a low priority, it is an area that demonstrated one of the largest gaps. It is therefore possible that the post-event review represents an unrealised opportunity for hotels to ensure that unresolved problems encountered during the meeting, as well as other meeting planner concerns such as inaccurate or unclear bills, could be addressed prior to the meeting planner's departure from the hotel. In addition to being an opportunity for the hotel to deal with unresolved meeting planner problems and concerns, the post-event review could also represent an opportunity for the hotel to further build its relationship with the meeting planner, uncover leads for future business and obtain valuable feedback about the hotel's own strengths and weaknesses as well as those of the competition.

## Relationship quality

The finding that relationship quality is significantly related to both customer satisfaction and perceived value lends support to the results of recent studies which indicate that, in certain settings, the interpersonal elements of a company's offering can provide benefits apart from product or service benefits that are valued by the customer (Dube *et al*, 1999, p.344; Gwinner *et al*, 1998; Mittal and Lassar, 1996). Furthermore, in service industries where product and service offerings may be virtually identical (as is often the case in the upscale hotel market), relationship quality can provide a significant means for gaining competitive advantage (Gwinner *et al*, 1998). The finding that the path from relationship quality to satisfaction was considerably stronger than the path to value suggests that relational benefits are more closely associated with the construct of satisfaction which is more affectively oriented

('a pleasurable *feeling* of fulfillment'), than with the construct of value which is more cognitively oriented ('a preferential *judgement* of the benefits and costs'). The implication of this finding is that, in the development of longer-term relationships with customers, it is therefore important for management and staff to be trained and competent in knowing how to deal with customers' feelings.

The provision of one contact person to coordinate all the meeting arrangements with the various departments of the hotel and to act as a point of contact with the hotel emerged as a benefit that is highly valued by meeting planners and one that has a powerful influence on their level of commitment. This finding was evident not only in the results from the questionnaire, but also in the in-depth interviews in which one meeting planner said, for example, that the CSM 'makes or breaks the conference'. It is not surprising that the overwhelming majority (96%) of hotels that meeting planners are committed to provide such a benefit to the meeting market.

One of the eight drivers of customer commitment was a relationship quality item, courteous employees, which was driver number two. There was a small negative gap on this item, indicating that there is room for improvement in this area.

Staff reliability was the number one item in importance to meeting planners according to the self-report importance ratings. This finding indicates that the reliability of staff is foremost in the minds of the planners and confirms the findings of previous research regarding the importance to customers of being able to rely on staff (Parasuraman, Zeithaml and Berry, 1988). Staff reliability is critical to the building of strong

relationships and is also connected with the ability of a hotel to keep the agreements that it makes with meeting planners.

The results of the in-depth interviews indicated that staff turnover was not a priority to meeting planners in terms of line staff positions (such as waiters, maids, or cooks). However, according to the results of the in-depth interviews, turnover of upper level staff, such as the general manager, sales director or convention service was manager, was an important consideration to meeting planners. Although this distinction was not evident in the gap results, it became evident in the in-depth interviews.

## Extra benefits

The results of this study indicate that extra benefits do not deliver any significant additional post-consumption value or satisfaction to meeting planners. In fact, meeting planners were quite forceful in voicing their view that the giving of gifts is frowned on and can be perceived as a form of bribery. The response to hotel frequent stayer programmes was also less than enthusiastic. Despite the considerable investment of hotel resources and the interest from both academic literature and the popular press in frequent stayer programmes, it was the third least important item to meeting planners of all 63 items. However, as more and more businesses become involved in providing extra benefits to their customers, this finding presents a dilemma to management. Some ways of dealing with this dilemma are to keep extra benefits programmes as simple as possible so that they are not time consuming (both from the perspective of the hotel as well as from the customers' perspective), and to focus on benefits that are not as costly for the hotel to offer, such as VIP upgrades and complimentary rooms

according to availability. It seems that the unfortunate state of affairs may be that, if

other hotels are offering frequent stayer programmes to meeting planners, then your

hotel needs to offer such a programme as well, even though it could result in resources

being allocated to a benefit which, according to the results of this and other studies, is

not highly valued by meeting planners and does not contribute in any significant way

to their commitment to booking meetings at your hotel in the future.

The most valued extra benefit was space availability. In order to address this issue,

hotels could make space available to their regular meeting planners on a first right of

refusal basis and thus demonstrate their own commitment to their regular meeting

clients. In order to do this, a good guest history tracking system would need to be in

place.

## Problem resolution

Conflicting views have been evident in the literature regarding the impact of effective

problem resolution strategies on a customer's future intentions with a company. The

results of some studies have indicated that the customer-company bond is weakened

even when problems are effectively resolved (Bolton and Drew, 1992; McDougall and

Levesque, 1998; Zeithaml, Berry and Parasuraman, 1996), while the results of other

studies have indicated that a company's effective problem resolution efforts can

strengthen that bond (Abrams and Pease, 1993; Hocutt, Chakraborty and Mowen,

1997; Johnston, 1995, p.222; Johnston and Fern, 1999, p.81; McCollough and

Bharadwaj, 1992; Webster and Sundaram, 1998, p.158).

The findings of the present research indicate that a company's effective recovery efforts have a significant positive impact on customer satisfaction and, ultimately, their commitment. These findings suggest that effective problem resolution is a critical component that should be included in future models of customer satisfaction and commitment (loyalty). The managerial implication is that, in the development of customer satisfaction and commitment, it is advantageous for companies to be pro-active in the implementation of effective problem resolution strategies. In addition, the results of this study indicate that empowering employees to solve problems and rectify errors is more important to customers (meeting planners) than whether employees have a positive attitude about solving problems. This study thus contributes to our understanding of the role of effective problem resolution strategies in the development of customer satisfaction and commitment.

Furthermore, previous research has demonstrated that the majority of customers do not communicate with a service provider when they encounter problems (Harari, 1992; Singh and Wilkes, 1996; Spreng, Harrell and Mackoy, 1995; Tax and Brown, 1998b), thereby leaving the provider 'in the dark'. However, the results of this study indicate that committed meeting planners will let a hotel know when they experience a problem, thus giving the hotel an opportunity not only to resolve the problem but also to address the underlying factors that caused the problem in the first place and thus respond proactively in order to prevent it from occurring in the future.

## Customer costs

The results of this study indicate that it is important to include an explicit consideration of customer costs in future models of satisfaction, value and

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commitment (loyalty). Costs were significantly related to both satisfaction and value, although the relationship to value was negative and the relation to satisfaction was positive. These findings may be explained by the dual role of price as both an attraction (a higher price signaling higher quality) and a repellant (as the sacrifice component of value) (Zeithaml and Bitner, 2000, p.435). These findings also support the results of other studies that customer costs can have both a negative and a positive effect simultaneously (Dodds *et al*, 1991; Sweeney *et al*, 1999). The finding that the negative impact of customer costs on perceptions of value is much stronger than the positive impact of customer costs on satisfaction suggests that the significant antecedents of customer satisfaction (in this case, relationship quality and problem resolution) must be strong enough to counteract the powerful negative influence that costs have on customer perceptions of value. These two dimensions (relationship quality and problem resolution) are more intangible than the dimensions of product quality or even service quality and are therefore more difficult to manage. The results of this study suggest that as high product and service standards come to be increasingly taken for granted, the ability to compete on relationship quality and effective problem resolution strategies emerges as critical to the development of customer commitment. The results of this study therefore seem to suggest that if customers are enjoying strong working relationships with a company and know that their problems are going to be effectively taken care of, they will not be open to switching to another service provider even if a better offer comes along.

Approximately half of the committed meeting planners said they were willing to pay a price premium for the benefits received at the hotel to which they were committed and, even when booking at 4 and 5 star hotels, a small percentage are significantly

constrained by cost considerations, stating that the primary reason they are committed

to booking meetings at the hotel where they have booked the most meetings during the

past 12 months was because of its prices.

The largest gaps of all the 63 performance attributes were two customer costs items,

reasonable prices and no hidden costs. This finding was confirmed in the in-depth

interviews, during which one planner said, for example, "Some hotels price

themselves right out of the market with their room rates and other charges." Several

planners mentioned that they like all-inclusive package rates and transparency in

billing. It's natural that businesses try to maximise their total revenue potential by

charging what the market can bear. However, it is critical for businesses to understand

that, in order to obtain committed customers, the price/value relationship must be

maintained, even during potential sell-out periods. The other important managerial

implication is that customer costs for items such as service charges, minimum

guarantees, commissions, room prices, and food and beverage rate structures must be

fully transparent.

## CONTRIBUTIONS OF THE STUDY

The objectives of this study were to (1) investigate the outcomes of customer

commitment, (2) determine areas of opportunity to increase the level of customer

commitment, (3) investigate the attribute level drivers of customer commitment, and

(4) develop and test an integrated post-consumption model of customer loyalty (the

relationship between customer commitment, customer satisfaction, and perceived

value) as applied to the meeting market of upscale hotels. Each of these objectives has

been successfully met. The empirical results of the study have supported the majority

of the hypotheses, thus providing a greater understanding and clarification of the

relationship between customer commitment, satisfaction and perceived value

(including their antecedents) than existed prior to the research. In addition, the study

has provided descriptive results that are operationally relevant to the meeting market

of upscale hotels. This study has therefore made several important contributions both

to the theoretical field of the development of customer commitment (the attitudinal

dimension of loyalty), as well as to the applied field of the meeting market of upscale

hotels. The following sections summarise the major contributions of the study.


## Outcomes of commitment

The results of the present study confirm that committed customers (1) are proactive in

their purchase behaviour, (2) are not actively pursuing alternatives, (3) engage in

voluntary behaviour, (4) intend to continue doing business with the company, (5)

spread positive word-of-mouth, and (6) communicate with the company when they

encounter problems. This powerful impact of committed customers is a confirmation

of the importance for a business to know which strategies are the most effective to

pursue in order to increase the level of commitment of their customers. This research

has helped provide such knowledge.


## Areas of opportunity

Using gap analysis, five major areas of potential opportunity for hotels to enhance

their offering to the meeting market and thereby increase the level of customer

commitment have been identified: (1) customer costs (reasonable prices, no hidden

costs, and hassle-free business); (2) post-event review; (3) billing (accurate and understandable bills); (4) effective problem resolution (empowering employees, rectifying errors, and resolving problems well); and (5) being able to depend on the hotel (agreements met, accurate recording of meeting information, and staff reliability). Specific managerial strategies have been proposed to address these shortfalls. In addition, the findings of the gap analysis indicated that many of the extra benefits provided by hotels do not lead to any significant increase in customer satisfaction or perceptions of value. In particular, this study found that the giving of gifts (which was the least important of all 63 items with the largest positive gap) may be construed by meeting planners as a form of bribery.

## Attribute drivers of commitment

Using regression analysis, the study has identified eight significant drivers of customer commitment at the performance attribute level: (1) pleasant setting, (2) courteous employees, (3) guestroom furnishing, (4) agreements met, (5) professional appearance, (6) clean facilities, (7) food quality, and (8) consistent service. Combining the results of the gap analysis with the results of the regression analysis and the in-depth interviews, the present study indicates that hotels to which meeting planners are committed should continue their present strategy in the areas of pleasant setting, guestroom furnishings and the professional appearance of staff. Improvements should be sought in the areas of courteousness of employees, cleanliness of the facilities, food quality, and consistency of service. However, the greatest area of opportunity for hotels to increase the level of meeting planner commitment to booking meetings at their hotel is in fully meeting the agreements that it makes with the meeting planner,

with particular care being given to the related issues of staff reliability, low turnover of top executives, and the accurate recording of meeting requirements. The results of this study also indicate that the provision of one contact person (e.g., Convention Service Manager) by the hotel to the meeting planner is a critical factor in the development of meeting planner commitment, and that failing to provide such a position could result in the hotel being at a distinct competitive disadvantage.

## Theoretical development

Finally, a post-consumption theoretical model of customer loyalty has been proposed and tested using structural equation modeling. The results help clarify the relationship between customer perceived value, customer satisfaction and customer commitment (the attitudinal dimension of loyalty), and thus build on and extend previous work in the field of services marketing. The study found that both customer satisfaction and perceived value influence customer commitment directly. In addition, perceived value was found to influence commitment indirectly through satisfaction. The results of this research therefore lend support to the theory that customer perceived value is foundational in the formation of customer satisfaction and commitment, with customer satisfaction playing a powerful but intermediary role.

The unique features of the model are (1) the inclusion of relationship quality as a distinct construct from product and service quality, (2) the inclusion of the construct of effective problem resolution, and (3) the explicit consideration of the relationship of customer costs to customer satisfaction and perceived value. The results of testing the model in the meeting market of upscale hotels indicate that (1) relationship quality and

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problem resolution are significant antecedents of customer satisfaction, (2) product quality and relationship quality are significant antecedents of perceived value, and (3) customer costs have a negative impact on perceived value but a positive impact on customer satisfaction. Taken together, these findings suggest that the positive impact that relationship quality and problem resolution have on customer satisfaction must be strong enough in the minds of customers to offset the powerful negative impact that customer costs have on value. In summary, at the construct level (as applied to the meeting industry), the results of this study indicate that, in order to enhance customer (meeting planner) value perceptions and satisfaction and thereby increase the level of customer commitment, hotels need to provide an excellent product at a reasonable price and establish strong working relationships with effective problem resolution strategies. In addition, the model is generic in nature and can therefore be tested across different service industries.

## In closing

It must be kept in mind that the results of this research are based on data that relates to hotels to which meeting planners are committed, which are therefore hotels that can be considered as having achieved the highest level of meeting planner acceptance in terms of their offering to the meeting market. The performance of hotels to which meeting planners are *not* committed is most likely significantly lower. However, the relevance of these findings is not limited to hotels to which meeting planners are committed, but could also be useful for other hotels as a benchmark in evaluating their offering to the meeting market and in initiating improvement strategies in the above mentioned areas. Furthermore, these findings could be of value to developers, hotel

companies, and tourism authorities in their development of managerial and operational strategies for future hotels and conference venues that desire to have a loyal base of committed meeting customers.

## LIMITATIONS AND IMPLICATIONS FOR FUTURE RESEARCH

Since the domain of the study was restricted to meeting planners who book meetings at 4 and 5 star hotels, the generalisability of the findings is limited. It is anticipated that in other service industries the significant antecedents of perceived value and satisfaction could be different than for the meeting market. Therefore, it is recommended that the model be tested in other service industries. In addition, as customer perceived value and satisfaction captured only 33% of the variance in customer commitment, it appears that there are other significant antecedents of commitment that were not captured in this model. Future research could investigate what these factors may be.

The scale for measuring customer commitment presented here, although more comprehensive than commitment scales used in previous studies, could also benefit from further development. For example, in order to strengthen the reliability of the scale, it is recommended that future studies develop multiple-item indicators for the constructs of satisfaction, value and commitment. In addition, the questionnaire was highly data intensive and, although the response rate was good for studies of this kind, a more compact questionnaire might yield a higher response rate.

The findings of this study support the inclusion of an *explicit* consideration of

customer costs in future models of customer commitment (loyalty). In agreement with

previous research, the findings of the present study indicate that costs can have both a

negative and a positive effect simultaneously, operating as both an attraction (a higher

price signaling higher quality) and a repellant (as the sacrifice component of value)

(Dodds *et al*, 1991; Sweeney *et al*, 1999; Zeithaml and Bitner, 2000, p.435).

Additional research would be helpful in specifying more exactly the relationship of

customer costs with customer satisfaction, perceived value and quality.


In addition, it appears that further research may be needed in order to more accurately

specify the domains of product quality, service quality and relationship quality.

Previous research has provided evidence that relationship issues are important sources

of customer satisfaction and perceived value *apart from* the satisfaction and value

customers receive from the product or service (Mittal and Lassar, 1997; Rosen and

Surprenant, 1998, p.111). In the SERVQUAL scale (see Chapter 2), 'product quality'

is included within the construct of 'service quality' as 'tangibles.' Future research

would be helpful in determining more exactly which aspects of a service provider's

offering represent the 'tangible' elements (product quality), which aspects represent

the 'process' elements (service quality), and which represent the 'interpersonal'

elements (relationship quality). Just as service marketing (service quality) needed to

break free from product marketing (product quality) (Shostack, 1977), perhaps

relationship marketing (relationship quality) needs to break free from service

marketing (service quality).

# APPENDIX A

Cover letter and questionnaire

UNIVERSITY OF
STRATHCLYDE

Dear Conference Organiser,

## PERCEIVED VALUE & THE MEETING PLANNER
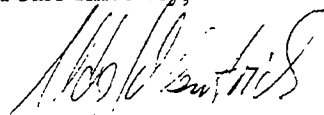
I am writing to request your assistance in an international research project that is being conducted by Strathclyde University, Glasgow, Scotland and the University of New Hampshire, USA. The objective of this project is to investigate the perceived value of products and services provided by international four and five star hotels to meeting planners and its effect on their level of loyalty.

Your contribution is vitally important as it will help the hospitality industry to better understand and serve the needs of the growing and significant meeting market segment.

Both personal and company data will remain anonymous and will be treated with the strictest confidence. The data collected will be analysed and the consolidated findings presented to industry and academia. We would greatly appreciate if you would return the completed questionnaire in the enclosed self-addressed envelope within ten days. The questionnaire takes approximately **15 minutes** to complete. Should you be interested in receiving a summary of the findings, please include your business card with the questionnaire.

Thank you very much for your participation. We greatly value your input.

Yours sincerely,

Prof. Udo Schlentrich

UNIVERSITY OF
STRATHCLYDE

**Confidential Survey**

# PERCEIVED VALUE & THE MEETING PLANNER:

## Investigating the Drivers of Meeting Planner Loyalty

Professor Udo Schlentrich

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# PERCEIVED VALUE AND THE MEETING PLANNER

1. Which name best describes your position?
   - ☐ Corporate travel manager
   - ☐ In-house corporate meeting planner
   - ☐ Association meeting planner
   - ☐ Travel agent
   - ☐ Freelance meeting planner
   - ☐ Other _____

2. Which word(s) best describe your role as a meeting planner?

   - ☐ Influencer          ☐ Buyer
   - ☐ Decision maker      ☐ Other _____

3. How long have you been planning meetings?

   - ☐ Less than 2 years   ☐ 6 – 10 years
   - ☐ 2 – 5 years         ☐ More than 10 years

4. What percentage of your time do you spend planning meetings?

   - ☐ Less than 25 %      ☐ 50 - 75 %
   - ☐ 25 - 49 %           ☐ More than 75 %

5. How many off-site meetings do you plan per year?

   - ☐ Less than 10        ☐ 26 - 50
   - ☐ 10 – 25             ☐ More than 50

6. What is your gender?

   - ☐ Male                ☐ Female

7. When choosing a new hotel venue, how important are the following sources of information to you?
   (Please circle appropriate number)

| | Not Very Important | | | | Extremely Important | | |
|---|---|---|---|---|---|---|---|
| Word of mouth | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Advertising | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Guide books | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Travel agencies | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| World Wide Web | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Trade shows | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Hotel sales reps | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Reservation systems | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Special promotions | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Awards / Star ratings | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Prior use of brand | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Reputation of hotel | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Hotel nat'l sales offices | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| CD-ROM presentations | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Hotel videos | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Convention & Visitors Bureaux | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| FAM trips | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

8. For each of the items listed in the centre column below, please think about the 4 or 5 star hotel where you have booked the most meetings during the past 12 months and indicate the extent to which you agree or disagree with each statement as it relates to this hotel: (Please circle appropriate number)

9. For each of the items listed in the centre column below, please indicate how important each item. if provided by any 4 or 5 star hotel. would be to your level of commitment to booking meetings at that hotel: (Please circle appropriate number)

| Strongly Disagree | | | | | | Strongly Agree | PRODUCT QUALITY | Not Very Important | | | | | | Extremely Important |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | - The hotel is easily accessible. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | - The hotel's setting is pleasant. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | - The hotel is visually appealing. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | - The hotel's facilities are unique. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | - The hotel's facilities are clean. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | - The hotel has ample car parking. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | - The hotel has state-of-the-art technical equipment. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | - Meeting rooms are well-furnished. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | - Guest rooms are well-furnished. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | - Guest rooms are spacious. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | - The hotel has good facilities for group leisure activities. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

## SERVICE QUALITY

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 2 3 4 5 6 7 | - The sales staff are knowledgeable about meeting planner requirements. | 1 2 3 4 5 6 7 |
| 1 2 3 4 5 6 7 | - The hot.l has an efficient reservation system. | 1 2 3 4 5 6 7 |
| 1 2 3 4 5 6 7 | - Meeting space inquiries are answered promptly. | 1 2 3 4 5 6 7 |
| 1 2 3 4 5 6 7 | - The hotel uses prior meeting information to help meeting planners organise their next function. | 1 2 3 4 5 6 7 |
| 1 2 3 4 5 6 7 | - Meeting requirements are accurately recorded. | 1 2 3 4 5 6 7 |
| 1 2 3 4 5 6 7 | - Group check-in and check-out is efficient. | 1 2 3 4 5 6 7 |
| 1 2 3 4 5 6 7 | - Employees have a professional appearance. | 1 2 3 4 5 6 7 |
| 1 2 3 4 5 6 7 | - The hotel is continually improving its offerings. | 1 2 3 4 5 6 7 |
| 1 2 3 4 5 6 7 | - Hotel staff have a high level of expertise in handling meetings. | 1 2 3 4 5 6 7 |
| 1 2 3 4 5 6 7 | - Employees pay attention to details. | 1 2 3 4 5 6 7 |
| 1 2 3 4 5 6 7 | - There is an excellent variety of food offerings. | 1 2 3 4 5 6 7 |
| 1 2 3 4 5 6 7 | - The hotel is creative in its food and beverage offerings. | 1 2 3 4 5 6 7 |
| 1 2 3 4 5 6 7 | - The food quality is of a high standard. | 1 2 3 4 5 6 7 |
| 1 2 3 4 5 6 7 | - Food and beverage functions are served on time. | 1 2 3 4 5 6 7 |
| 1 2 3 4 5 6 7 | - The hotel is consistent in the delivery of its services. | 1 2 3 4 5 6 7 |
| 1 2 3 4 5 6 7 | - The agreements made with the sales department are fully met by the hotel's operating departments. | 1 2 3 4 5 6 7 |
| 1 2 3 4 5 6 7 | - Bills are easy to understand. | 1 2 3 4 5 6 7 |
| 1 2 3 4 5 6 7 | - Bills are accurate. | 1 2 3 4 5 6 7 |
| 1 2 3 4 5 6 7 | - The hotel conducts a comprehensive post-event review session with meeting planners. | 1 2 3 4 5 6 7 |
| 1 2 3 4 5 6 7 | - The hotel is a safe place. | 1 2 3 4 5 6 7 |

## RELATIONSHIP QUALITY

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 2 3 4 5 6 7 | - The hotel is fair during negotiations. | 1 2 3 4 5 6 7 |
| 1 2 3 4 5 6 7 | - If hotel staff say they will do something, they do it. | 1 2 3 4 5 6 7 |
| 1 2 3 4 5 6 7 | - The relationships that meeting planners have with the staff at this hotel are based on trust. | 1 2 3 4 5 6 7 |
| 1 2 3 4 5 6 7 | - Hotel staff have good working relationships with meeting planners | 1 2 3 4 5 6 7 |
| 1 2 3 4 5 6 7 | - Employees greet regular meeting planners by name. | 1 2 3 4 5 6 7 |
| 1 2 3 4 5 6 7 | - Management is easily accessible. | 1 2 3 4 5 6 7 |
| 1 2 3 4 5 6 7 | - The various departments of the hotel work well together. | 1 2 3 4 5 6 7 |
| 1 2 3 4 5 6 7 | - Employees are courteous. | 1 2 3 4 5 6 7 |
| 1 2 3 4 5 6 7 | - Employees seem to enjoy working at this hotel. | 1 2 3 4 5 6 7 |
| 1 2 3 4 5 6 7 | - The hotel has low staff turnover. | 1 2 3 4 5 6 7 |
| 1 2 3 4 5 6 7 | - The business that meeting planners bring to this hotel is appreciated. | 1 2 3 4 5 6 7 |
| 1 2 3 4 5 6 7 | - The hotel seeks meeting planners' advice in order to improve their service and product offerings. | 1 2 3 4 5 6 7 |

## EXTRA BENEFITS

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 2 3 4 5 6 7 | - During busy periods, the hotel does everything possible to make space available for the functions of its regular meeting planners. | 1 2 3 4 5 6 7 |
| 1 2 3 4 5 6 7 | - The hotel will provide upgrades for the VIP clients of its regular meeting planners. | 1 2 3 4 5 6 7 |
| 1 2 3 4 5 6 7 | - The hotel has an attractive frequent stayer programme. | 1 2 3 4 5 6 7 |
| 1 2 3 4 5 6 7 | - To show appreciation for meeting planners' business, the hotel occasionally gives them gifts. | 1 2 3 4 5 6 7 |
| 1 2 3 4 5 6 7 | - The hotel invites its regular meeting planners to hospitality events. | 1 2 3 4 5 6 7 |
| 1 2 3 4 5 6 7 | - The hotel is willing to customise its services in order to fulfill the requirements of its regular meeting planners. | 1 2 3 4 5 6 7 |
| 1 2 3 4 5 6 7 | - The hotel has a good reputation with meeting planners. | 1 2 3 4 5 6 7 |
| 1 2 3 4 5 6 7 | - Meeting planners take pride in booking meetings at this hotel. | 1 2 3 4 5 6 7 |

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| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | - The hotel has the reputation as a 'good citizen' in the local community. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | - The hotel is concerned about the environment. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | - The hotel's name/brand stands for quality. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

## DIRECT AND INDIRECT COSTS

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | - Prices charged are reasonable. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | - There are no hidden costs. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | - The terms of the contract are fair. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | - Meeting planners incur little risk booking meetings at this hotel. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | - Doing business with this hotel is hassle-free. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

## PROBLEM RESOLUTION

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | - Hotel employees communicate the attitude that meeting planner problems are important to them. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | - When the hotel makes an error, they are quick to rectify it. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | - The hotel resolves problems well. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | - Employees have the authority to deal with problems. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

## CONFERENCE SERVICE MANAGER

| | | | | | |
|---|---|---|---|---|---|
| NO | YES | - The hotel has a staff member who is responsible for communicating meeting requirements to the various hotel departments. | 1 2 3 4 5 6 7 |

---

**PART THREE: MEETING PLANNERS' RELATIONSHIP WITH HOTEL**

10. Please circle the number that best expresses your agreement or disagreement with the following statements as they apply to your relationship with this hotel. If a statement does not apply, please tick "Doesn't Apply".

| | Strongly Disagree | | | | | Strongly Agree | | Doesn't Apply |
|---|---|---|---|---|---|---|---|---|
| I like to book meetings at this hotel. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ___ |
| I have to book meetings at this hotel. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ___ |
| I am looking to switch hotels. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ___ |
| I speak positively to others about this hotel. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ___ |
| I have an excellent working relationship with the staff at this hotel. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ___ |
| I use this hotel for occasions other than meetings. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ___ |
| I intend to continue booking meetings at this hotel. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ___ |
| I am willing to pay a higher price than competitors charge for the benefits I receive at this hotel. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ___ |
| The primary reason I book meetings at this hotel is because it offers the lowest prices. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ___ |
| If I encounter a problem at this hotel, I let someone at the hotel know about it. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ___ |
| When booking meetings in the area, this hotel is my first choice. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ___ |

11. What do you consider to be your level of satisfaction with this hotel? *(Please circle)*

| Dissatisfied | | | | Satisfied |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |

12. What do you consider to be the level of value you receive at this hotel? *(Please circle)*

| Poor | | | | Excellent |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |

13. What do you consider to be your level of commitment to booking meetings at this hotel? *(Please circle)*

| Uncommitted | | | | Committed |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |

**Thank you for making your valuable time and expertise available!**

# APPENDIX B

Interview guidelines and meeting planner interview sheet

# PERCEIVED VALUE & THE MEETING PLANNER:
## The Value Propositions of Hotel Companies

## MEETING PLANNER FIELD INTERVIEWS

### Objective
Interview a total of 6-8 meeting planners:
1. Corporate
2. Association
3. Independent meeting planners, travel agents, corporate travel managers, etc.

### Methodology
1. Qualitative in-depth interviews
2. Semi-structured
3. Laddering method

### Arranging Interviews
1. Introductory call to be made by Convention & Visitor Bureau contact or Prof. Schlentrich who will explain purpose of study (see Cover Letter, "Perceived Value & The Meeting Planner")
2. Interviewer to follow up with call to make specific appointment
3. Approximate length of interview - 45 minutes
4. Make note of arrangements made (name of person, position, company, date, time, place of interview)

### Interviewer Training
1. Literature review
   Emory, William C. and Cooper, Donald R. (1991) Business Research Methods, 4th Ed., Irwin, p. 318 - 330
   Kinnear, Thomas C. and Taylor, James R. (1991) Marketing Research, 4th Ed. McGraw-Hill , p. 481-493
2. Conduct trial interview

### Interview
1. Arrive 5 minutes early
2. Introduce self, from SU
3. Thank for time and input
4. Restate purpose of interview/research (see Introductory Letter)
5. Identities will be kept confidential
6. Study is non-commercial - of academic and industry interest
7. Will be asking open-ended and semi-structured questions
8. Begin questioning ( see attached)
9. At end of interview, give interviewee a copy of the quantitative questionnaire and ask them to return it by mail when completed
10. Thank interviewee for valuable time and assistance

# PERCEIVED VALUE & THE MEETING PLANNER:
## The Value Propositions of Hotel Companies

# MEETING PLANNER FIELD INTERVIEWS

# PERCEIVED VALUE & THE MEETING PLANNER:
## FIEI D INTERVIEWS
## (Meeting Planners, Corporate Travel Managers, Travel Agents, etc.)

Name _____Position_____

Company _____

Date _____ Place_____

Time started _____ Time finished _____

1. For **how many years** have you been planning meetings? _____ years

2. What **% of your time** do you spend planning meetings? _____ %

3. Approximately **how many** meetings did you book during the past year? ____

4. Could you please tell me about the **kind of meetings** you book? [*tick*]

   ____ Conventions                 ____ Incentives

   ____ Exhibitions/Trade shows     ____ Shareholder meetings

   ____ Meetings/Seminars           ____ Board meetings

   ____ Other _____

5. What are the main **types of venues** that you use for the meetings you book? [*tick*]

   ____ In-house                    ____ Convention & Exhibition Centres

   ____ Hotels                      ____ Universities

   ____ Cruise ships                ____ Public facilities, municipal halls, etc.

   ____ Other _____

6. When you book meetings at hotels, what is the **type of hotel** you primarily use? [*tick*]

   ____ City centre      ____ Resort      ____ Airport

   ____ Suburban         ____ Other _____

6. Do you prefer to book meetings at: [*tick*]

\_\_\_\_\_ Chain hotels    \_\_\_\_\_ Non-chain hotels    \_\_\_\_\_ No preference

7. If you **do** have a preference, would you explain your reasons: _____

_____

8. Do you feel the following methods are "not important ", "important ", or "very important" in the communication of a hotel's value proposition [*offering*] to the meeting market? [*circle*]

|  | Not Important | Important | Very Important |
|---|---|---|---|
| Word of mouth | 1 | 2 | 3 |
| **Advertising** | 1 | 2 | 3 |
| Guide books | 1 | 2 | 3 |
| **Travel agencies** | 1 | 2 | 3 |
| World Wide Web | 1 | 2 | 3 |
| **Trade shows** | 1 | 2 | 3 |
| Hotel sales reps | 1 | 2 | 3 |
| **Reservation systems** | 1 | 2 | 3 |
| Special promotions | 1 | 2 | 3 |
| **Awards/Star ratings** | 1 | 2 | 3 |
| Brand/Image | 1 | 2 | 3 |
| **Hotel nat'l sales office** | 1 | 2 | 3 |
| CD-ROM presentations | 1 | 2 | 3 |
| **Hotel videos** | 1 | 2 | 3 |
| C & V Bureaux | 1 | 2 | 3 |

9. Would you please think about the 4 or 5 star hotel where you have booked the **most** meetings during the past 12 months:

a. What is your overall **level of satisfaction** with this hotel? _____

_____

_____

_____

b. If someone asked you if you were "committed" to booking meetings at this hotel, what would the word **"committed" mean to you?**

_____

_____

_____

_____

c. Would you say that **you are committed** to booking meetings at this hotel? [*circle*]

YES / NO

- [ If "*YES*" ] What are the **main reasons** you are committed to booking meetings at this hotel?

_____

_____

_____

- [ If "*NO*" ] What are the **main reasons** you are NOT committed to booking meetings at this hotel?

_____

_____

_____

10. Now would you please think about a 4 or 5 star hotel where you have booked meetings in the past, but where you **don't book meetings any longer**.

a. What are the **main reasons** that you don't book meetings there any longer?

_____

_____

_____

_____

_____

11. In order of importance, what are the **key factors** for you in your overall evaluation of a 4 or 5 star hotel as a meeting venue?

_____

_____

_____

_____

_____

_____

12. Are there any areas where you often **encounter difficulties** in the planning or staging of meetings at 4 or 5 star hotels?

_____

_____

_____

_____

13. Now I'd like to ask you some questions about **specific areas** relating to the products and services that 4 and 5 star hotels offer to the meeting market that are most important to you:

a. What are the **product attributes** (for example, the hotel's setting, facilities, design features) that are most important to you in booking meetings at a 4 or 5 star hotel?

_____

_____

_____

_____

_____

b. Which aspects of **service** do you value the most at a 4 or 5 star hotel where you would book meetings?

_____

_____

_____

_____

_____

c. Which aspects of your **working relationships** with the hotel's staff and management are most important to you?

_____

_____

_____

_____

d. Are there any **extra benefits** that 4 and 5 star hotels provide to the meeting market that are particularly valuable to you?

_____

_____

_____

_____

e. Which aspects of a hotel's **pricing structure** for meetings are important to you?

_____

_____

_____

f. Are there any **indirect costs** (like time, effort, convenience) that are particularly important to you?

_____

_____

_____

g. Which aspects of **problem resolution** are most important to you?

_____

_____

_____

14. Thinking in general about 4 and 5 star hotels, where do you think hotels could make the **greatest improvement** in their offerings to the meeting market?

_____

_____

_____

15. Are there any emerging **trends** that you are aware of in the meeting market?

_____

_____

_____

_____

**Thank you for your valuable time and assistance!**

# APPENDIX C


Outcomes of customer commitment

# Outcomes of Customer Commitment
($n = 60$)

**Item 1: "I like to book meetings at this hotel"**

| Rating | Frequency | Top Box | Top 2 Box |
|--------|-----------|---------|-----------|
| DA | 2 | | |
| 1 | 0 | | |
| 2 | 0 | | |
| 3 | 1 | | |
| 4 | 0 | | |
| 5 | 0 | | |
| 6 | 11 | | |
| 7 | 46 | 77% | 95% |

**Item 2: "I have to book meetings at this hotel"**

| Rating | Frequency | Top Box | Top 2 Box |
|--------|-----------|---------|-----------|
| DA | 18 | | |
| 1 | 17 | | |
| 2 | 6 | | |
| 3 | 4 | | |
| 4 | 7 | | |
| 5 | 5 | | |
| 6 | 2 | | |
| 7 | 1 | 2% | 5% |

**Item 3: "I am looking to switch hotels"**

| Rating | Frequency | Top Box | Top 2 Box |
|--------|-----------|---------|-----------|
| DA | 16 | | |
| 1 | 26 | | |
| 2 | 9 | | |
| 3 | 4 | | |
| 4 | 4 | | |
| 5 | 1 | | |
| 6 | 0 | | |
| 7 | 0 | 0% | 0% |

**Item 4: "I speak positively to others about this hotel"**

| Rating | Frequency | Top Box | Top 2 Boxes |
|---|---|---|---|
| 'Doesn't Apply' | 1 | | |
| 1 | 0 | | |
| 2 | 0 | | |
| 3 | 1 | | |
| 4 | 2 | | |
| 5 | 1 | | |
| 6 | 14 | | |
| 7 | 41 | 68% | 92% |


**Item 5: I have an excellent working relationship with the staff at this hotel"**

| Rating | Frequency | Top Box | Top 2 Boxes |
|---|---|---|---|
| 'Doesn't Apply' | 1 | | |
| 1 | 0 | | |
| 2 | 1 | | |
| 3 | 1 | | |
| 4 | 1 | | |
| 5 | 3 | | |
| 6 | 13 | | |
| 7 | 40 | 67% | 88% |


**Item 6: "I use this hotel for occasions other than meetings"**

| Rating | Frequency | Top Box | Top 2 Boxes |
|---|---|---|---|
| 'Doesn't Apply' | 19 | | |
| 1 | 6 | | |
| 2 | 3 | | |
| 3 | 1 | | |
| 4 | 2 | | |
| 5 | 2 | | |
| 6 | 10 | | |
| 7 | 17 | 28% | 45% |

**Item 7: "I intend to continue booking meetings at this hotel"**

| Rating | Frequency | Top Box | Top 2 Boxes |
|--------|-----------|---------|-------------|
| 'Doesn't Apply' | 6 | | |
| 1 | 0 | | |
| 2 | 0 | | |
| 3 | 1 | | |
| 4 | 1 | | |
| 5 | 1 | | |
| 6 | 9 | | |
| 7 | 42 | 70% | 80% |

**Item 8: "I am willing to pay a higher price than competitors charge for the benefits I receive at this hotel"**

| Rating | Frequency | Top Box | Top 2 Boxes |
|--------|-----------|---------|-------------|
| 'Doesn't Apply' | 2 | | |
| 1 | 5 | | |
| 2 | 6 | | |
| 3 | 5 | | |
| 4 | 9 | | |
| 5 | 8 | | |
| 6 | 12 | | |
| 7 | 13 | 22% | 42% |

**\*Item 9: "The primary reason I book meetings at this hotel is because it offers the lowest prices"**

| Rating | Frequency | Top Box | Top 2 Boxes |
|--------|-----------|---------|-------------|
| 'Doesn't Apply' | 4 | | |
| 1 | 23 | | |
| 2 | 11 | | |
| 3 | 5 | | |
| 4 | 4 | | |
| 5 | 9 | | |
| 6 | 3 | | |
| 7 | 1 | 2% | 7% |

**Item 10: "If I encounter a problem at this hotel, I let someone at the hotel know about it"**

| Rating | Frequency | Top Box | Top 2 Boxes |
|--------|-----------|---------|-------------|
| 'Doesn't Apply' | 0 | | |
| 1 | 0 | | |
| 2 | 0 | | |
| 3 | 1 | | |
| 4 | 0 | | |
| 5 | 1 | | |
| 6 | 17 | | |
| 7 | 41 | 68% | 97% |

**Item 11: "When booking meetings in the area, this hotel is my first choice"**

| Rating | Frequency | Top Box | Top 2 Boxes |
|--------|-----------|---------|-------------|
| 'Doesn't Apply' | 0 | | |
| 1 | 0 | | |
| 2 | 0 | | |
| 3 | 0 | | |
| 4 | 1 | | |
| 5 | 2 | | |
| 6 | 9 | | |
| 7 | 48 | 80% | 95% |

# APPENDIX D

Gap analysis results

1. All items
2. Items by category

# 1. All items

# Overall Ranking of Item Means by Performance

| Item | Performance | Importance | Difference |
|---|---|---|---|
| Clean Facilities | 6.36 | 6.59 | -0.23 |
| On-time F&B Functions | 6.17 | 6.61 | -0.44 |
| Courteous Employees | 6.15 | 6.47 | -0.32 |
| Professional Appearance | 6.05 | 6.11 | -0.06 |
| Staff Reliability | 6.04 | 6.72 | -0.68 |
| Knowledgeable Sales Staff | 6.01 | 6.40 | -0.39 |
| Staff Expertise | 6.01 | 6.48 | -0.47 |
| Guest Room Furnishing | 6.00 | 6.02 | -0.02 |
| Pleasant Setting | 5.98 | 5.90 | 0.08 |
| Good Working Relationships | 5.98 | 6.35 | -0.37 |
| Problems Resolved Well | 5.96 | 6.64 | -0.68 |
| Food Quality | 5.94 | 6.44 | -0.50 |
| Consistent Service Delivery | 5.94 | 6.47 | -0.53 |
| Hotel Safety | 5.93 | 6.42 | -0.49 |
| Agreements Met | 5.93 | 6.64 | -0.71 |
| Visually Appealing | 5.92 | 5.66 | 0.26 |
| Attention to Details | 5.92 | 6.57 | -0.65 |
| Fair Contract Terms | 5.90 | 6.54 | -0.64 |
| Accurate Recording | 5.89 | 6.57 | -0.68 |
| Problem Solving Attitude | 5.87 | 6.38 | -0.51 |
| Errors Quickly Rectified | 5.87 | 6.58 | -0.71 |
| Meeting Room Furnishing | 5.86 | 6.09 | -0.23 |
| Relationships of Trust | 5.84 | 6.10 | -0.26 |
| Fair Negotiations | 5.84 | 6.43 | -0.59 |
| Business Appreciated | 5.81 | 6.06 | -0.25 |
| Quality Name/Brand | 5.80 | 6.07 | -0.27 |
| Employees Enjoy Work | 5.77 | 5.91 | -0.14 |
| No Hidden Costs | 5.77 | 6.68 | -0.91 |
| Prompt Answers | 5.76 | 6.38 | -0.62 |
| Little Risk | 5.76 | 6.38 | -0.62 |
| Departmental Teamwork | 5.75 | 6.35 | -0.60 |
| Empowered Employees | 5.74 | 6.50 | -0.76 |
| Accurate Bills | 5.73 | 6.53 | -0.80 |
| Efficient Check-in/out | 5.69 | 6.28 | -0.59 |
| Accessible Management | 5.69 | 6.18 | -0.49 |
| Hotel Accessibility | 5.68 | 6.05 | -0.37 |
| Efficient Reservation System | 5.68 | 6.08 | -0.40 |
| Hassle-Free Business | 5.64 | 6.52 | -0.88 |
| Hotel Reputation | 5.62 | 6.03 | -0.41 |
| VIP Upgrades | 5.61 | 5.79 | -0.18 |
| Variety of Food | 5.59 | 6.00 | -0.41 |
| Continuous Improvement | 5.58 | 5.89 | -0.31 |

| Item | Performance | Importance | Difference |
|---|---|---|---|
| Spacious Guest Rooms | 5.54 | 5.52 | 0.02 |
| Understandable Bills | 5.54 | 6.25 | -0.71 |
| Space Availability | 5.49 | 6.08 | -0.59 |
| F & B Creativity | 5.47 | 5.94 | -0.47 |
| Reasonable Prices | 5.44 | 6.43 | -0.99 |
| Meeting Planners Take Pride | 5.43 | 5.74 | -0.31 |
| Personalized Greeting | 5.42 | 5.31 | 0.11 |
| | 5.27 | 5.88 | |
| Service Customisation | 5.27 | 5.88 | -0.61 |
| Ample Parking | 5.26 | 5.12 | 0.14 |
| Low Staff Turnover | 5.19 | 5.48 | -0.29 |
| Prior Information Used | 5.17 | 5.50 | -0.33 |
| Leisure Facilities | 5.16 | 5.08 | 0.08 |
| Technical Equipment | 5.14 | 5.26 | -0.12 |
| MP Advice Sought | 5.04 | 5.69 | -0.65 |
| Good Citizen | 4.98 | 4.91 | 0.07 |
| Environmental Concern | 4.88 | 4.94 | -0.06 |
| Unique Facilities | 4.74 | 4.73 | 0.01 |
| Post-event Review | 4.33 | 5.16 | -0.83 |
| Frequent Stayer Programme | 4.29 | 4.39 | -0.10 |
| Hospitality Events | 4.23 | 3.97 | 0.26 |
| Gifts Given | 3.83 | 3.47 | 0.36 |

## Overall Ranking of Item Means by Importance

| Item | Performance | Importance | Difference |
|---|---|---|---|
| Staff Reliability | 6.04 | 6.72 | -0.68 |
| No Hidden Costs | 5.77 | 6.68 | -0.91 |
| Problems Resolved Well | 5.96 | 6.64 | -0.68 |
| Agreements Met | 5.93 | 6.64 | -0.71 |
| On-time F & B Functions | 6.17 | 6.61 | -0.44 |
| Clean Facilities | 6.36 | 6.59 | -0.23 |
| Errors Quickly Rectified | 5.87 | 6.58 | -0.71 |
| Attention to Details | 5.92 | 6.57 | -0.65 |
| Accurate Recording | 5.89 | 6.57 | -0.68 |
| Fair Contract Terms | 5.90 | 6.54 | -0.64 |
| Accurate Bills | 5.73 | 6.53 | -0.80 |
| Hassle-Free Business | 5.64 | 6.52 | -0.88 |
| Empowered Employees | 5.74 | 6.50 | -0.76 |
| Staff Expertise | 6.01 | 6.48 | -0.47 |
| Courteous Employees | 6.15 | 6.47 | -0.32 |
| Consistent Service Delivery | 5.94 | 6.47 | -0.53 |
| Food Quality | 5.94 | 6.44 | -0.50 |

| | | | |
|---|---|---|---|
| Fair Negotiations | 5.84 | 6.43 | -0.59 |
| Reasonable Prices | 5.44 | 6.43 | -0.99 |
| Hotel Safety | 5.93 | 6.42 | -0.49 |
| Knowledgeable Sales Staff | 6.01 | 6.40 | -0.39 |
| Problem Solving Attitude | 5.87 | 6.38 | -0.51 |
| Prompt Answers | 5.76 | 6.38 | -0.62 |
| Little Risk | 5.76 | 6.38 | -0.62 |
| Good Working Relationships | 5.98 | 6.35 | -0.37 |
| Departmental Teamwork | 5.75 | 6.35 | -0.60 |
| Efficient Check-in/out | 5.69 | 6.28 | -0.59 |
| Understandable Bills | 5.54 | 6.25 | -0.71 |
| Accessible Management | 5.69 | 6.18 | -0.49 |
| Professional Appearance | 6.05 | 6.11 | -0.06 |
| Relationships of Trust | 5.84 | 6.10 | -0.26 |
| Meeting Room Furnishing | 5.86 | 6.09 | -0.23 |
| Efficient Reservation System | 5.68 | 6.08 | -0.40 |
| Space Availability | 5.49 | 6.08 | -0.59 |
| Quality Name/Brand | 5.80 | 6.07 | -0.27 |
| Business Appreciated | 5.81 | 6.06 | -0.25 |
| Hotel Accessibility | 5.68 | 6.05 | -0.37 |
| Hotel Reputation | 5.62 | 6.03 | -0.41 |
| Guest Room Furnishing | 6.00 | 6.02 | -0.02 |
| Variety of Food | 5.59 | 6.00 | -0.41 |
| F & B Creativity | 5.47 | 5.94 | -0.47 |
| Employees Enjoy Work | 5.77 | 5.91 | -0.14 |
| Pleasant Setting | 5.98 | 5.90 | 0.08 |
| Continuous Improvement | 5.58 | 5.89 | -0.31 |
| Service Customisation | 5.27 | 5.88 | -0.61 |
| VIP Upgrades | 5.61 | 5.79 | -0.18 |
| MPs Take Pride | 5.43 | 5.74 | -0.31 |
| MP Advice Sought | 5.04 | 5.69 | -0.65 |
| Visually Appealing | 5.92 | 5.66 | 0.26 |
| Spacious Guest Rooms | 5.54 | 5.52 | 0.02 |
| Prior Information Used | 5.17 | 5.50 | -0.33 |
| Low Staff Turnover | 5.19 | 5.48 | -0.29 |
| Personalised Greeting | 5.42 | 5.31 | 0.11 |
| Technical Equipment | 5.14 | 5.26 | -0.12 |
| Post-event Review | 4.33 | 5.16 | -0.83 |
| Ample Parking | 5.26 | 5.12 | 0.14 |
| Leisure Facilities | 5.16 | 5.08 | 0.08 |
| Environmental Concern | 4.88 | 4.94 | -0.06 |
| Good Citizen | 4.98 | 4.91 | 0.07 |
| Unique Facilities | 4.74 | 4.73 | 0.01 |
| Frequent Stayer Programme | 4.29 | 4.39 | -0.10 |
| Hospitality Events | 4.23 | 3.97 | 0.26 |
| Gifts Given | 3.83 | 3.47 | 0.36 |

## Overall Ranking of Item Means by Difference

| Item | Performance | Importance | Difference |
|---|---|---|---|
| Reasonable Prices | 5.44 | 6.43 | -0.99 |
| No Hidden Costs | 5.77 | 6.68 | -0.91 |
| Hassle-Free Business | 5.64 | 6.52 | -0.88 |
| Post-event Review | 4.33 | 5.16 | -0.83 |
| Accurate Bills | 5.73 | 6.53 | -0.80 |
| Empowered Employees | 5.74 | 6.50 | -0.76 |
| Agreements Met | 5.93 | 6.64 | -0.71 |
| Errors Quickly Rectified | 5.87 | 6.58 | -0.71 |
| Understandable Bills | 5.54 | 6.25 | -0.71 |
| Staff Reliability | 6.04 | 6.72 | -0.68 |
| Accurate Recording | 5.89 | 6.57 | -0.68 |
| Problems Resolved Well | 5.96 | 6.64 | -0.68 |
| Attention to Details | 5.92 | 6.57 | -0.65 |
| MP Advice Sought | 5.04 | 5.69 | -0.65 |
| Fair Contract Terms | 5.90 | 6.54 | -0.64 |
| Prompt Answers | 5.76 | 6.38 | -0.62 |
| Little Risk | 5.76 | 6.38 | -0.62 |
| Service Customisation | 5.27 | 5.88 | -0.61 |
| Departmental Teamwork | 5.75 | 6.35 | -0.60 |
| Fair Negotiations | 5.84 | 6.43 | -0.59 |
| Efficient Check-in/out | 5.69 | 6.28 | -0.59 |
| Space Availability | 5.49 | 6.08 | -0.59 |
| Consistent Service Delivery | 5.94 | 6.47 | -0.53 |
| Problem Solving Attitude | 5.87 | 6.38 | -0.51 |
| Food Quality | 5.94 | 6.44 | -0.50 |
| Hotel Safety | 5.93 | 6.42 | -0.49 |
| Accessible Management | 5.69 | 6.18 | -0.49 |
| Staff Expertise | 6.01 | 6.48 | -0.47 |
| F & B Creativity | 5.47 | 5.94 | -0.47 |
| On-time F & B Functions | 6.17 | 6.61 | -0.44 |
| Hotel Reputation | 5.62 | 6.03 | -0.41 |
| Variety of Food | 5.59 | 6.00 | -0.41 |
| Efficient Reservation System | 5.68 | 6.08 | -0.40 |
| Knowledgeable Sales Staff | 6.01 | 6.40 | -0.39 |
| Good Working Relationships | 5.98 | 6.35 | -0.37 |
| Hotel Accessibility | 5.68 | 6.05 | -0.37 |
| Prior Information Used | 5.17 | 5.50 | -0.33 |
| Courteous Employees | 6.15 | 6.47 | -0.32 |
| Continuous Improvement | 5.58 | 5.89 | -0.31 |
| MPs Take Pride | 5.43 | 5.74 | -0.31 |
| Low Staff Turnover | 5.19 | 5.48 | -0.29 |

| | | | | |
|---|---|---|---|---|
| Quality Name/Brand | 5.80 | 6.07 | -0.27 | |
| Relationships of Trust | 5.84 | 6.10 | -0.26 | |
| Business Appreciated | 5.81 | 6.06 | -0.25 | |
| Clean Facilities | 6.36 | 6.59 | -0.23 | |
| Meeting Room Furnishing | 5.86 | 6.09 | -0.23 | |
| VIP Upgrades | 5.61 | 5.79 | -0.18 | |
| Employees Enjoy Work | 5.77 | 5.91 | -0.14 | |
| Technical Equipment | 5.14 | 5.26 | -0.12 | |
| Frequent Stayer Programme | 4.29 | 4.39 | -0.10 | |
| Professional Appearance | 6.05 | 6.11 | -0.06 | |
| Environmental Concern | 4.88 | 4.94 | -0.06 | |
| Guest Room Furnishing | 6.00 | 6.02 | -0.02 | |
| Unique Facilities | 4.74 | 4.73 | 0.01 | |
| Spacious Guest Rooms | 5.54 | 5.52 | 0.02 | |
| Good Citizen | 4.98 | 4.91 | 0.07 | |
| Pleasant Setting | 5.98 | 5.90 | 0.08 | |
| Leisure Facilities | 5.16 | 5.08 | 0.08 | |
| Personalised Greeting | 5.42 | 5.31 | 0.11 | |
| Ample Parking | 5.26 | 5.12 | 0.14 | |
| Visually Appealing | 5.92 | 5.66 | 0.26 | |
| Hospitality Events | 4.23 | 3.97 | 0.26 | |
| Gifts Given | 3.83 | 3.47 | 0.36 | |

2. Items by category

# Ranking of Item Means for Product Quality

## By Performance

| Item | Performance | Importance | Difference |
|---|---|---|---|
| Clean Facilities | 6.36 | 6.59 | -0.23 |
| Guest Room Furnishing | 6.00 | 6.02 | -0.02 |
| Pleasant Setting | 5.98 | 5.90 | 0.08 |
| Visually Appealing | 5.92 | 5.66 | 0.26 |
| Meeting Room Furnishing | 5.86 | 6.09 | -0.23 |
| Hotel Accessibility | 5.68 | 6.05 | -0.37 |
| Spacious Guest Rooms | 5.54 | 5.52 | 0.02 |
| Ample Parking | 5.26 | 5.12 | 0.14 |
| Leisure Facilities | 5.16 | 5.08 | 0.08 |
| Technical Equipment | 5.14 | 5.26 | -0.12 |
| Unique Facilities | 4.74 | 4.73 | 0.01 |

## By Importance

| Item | Performance | Importance | Difference |
|---|---|---|---|
| Clean Facilities | 6.36 | 6.59 | -0.23 |
| Meeting Room Furnishing | 5.86 | 6.09 | -0.23 |
| Hotel Accessibility | 5.68 | 6.05 | -0.37 |
| Guest Room Furnishing | 6.00 | 6.02 | -0.02 |
| Pleasant Setting | 5.98 | 5.90 | 0.08 |
| Visually Appealing | 5.92 | 5.66 | 0.26 |
| Spacious Guest Rooms | 5.54 | 5.52 | 0.02 |
| Technical Equipment | 5.14 | 5.26 | 0.14 |
| Ample Parking | 5.26 | 5.12 | 0.14 |
| Leisure Facilities | 5.16 | 5.08 | 0.08 |
| Unique Facilities | 4.74 | 4.73 | 0.01 |

## By Difference

| Item | Performance | Importance | Difference |
|---|---|---|---|
| Hotel Accessibility | 5.68 | 6.05 | -0.37 |
| Meeting Room Furnishing | 5.86 | 6.09 | -0.23 |
| Clean Facilities | 6.36 | 6.59 | -0.23 |
| Technical Equipment | 5.14 | 5.26 | -0.12 |
| Guest Room Furnishing | 6.00 | 6.02 | -0.02 |
| Unique Facilities | 4.74 | 4.73 | 0.01 |
| Spacious Guest Rooms | 5.54 | 5.52 | 0.02 |
| Leisure Facilities | 5.16 | 5.08 | 0.08 |
| Pleasant Setting | 5.98 | 5.90 | 0.08 |
| Ample Parking | 5.26 | 5.12 | 0.14 |
| Visually Appealing | 5.92 | 5.66 | 0.26 |

# Ranking of Item Means for Service Quality

## By Performance

| Item | Performance | Importance | Difference |
|---|---|---|---|
| On-time F & B Service | 6.17 | 6.61 | -0.44 |
| Professional Appearance | 6.05 | 6.11 | -0.06 |
| Knowledgeable Sales Staff | 6.01 | 6.40 | -0.39 |
| Staff Expertise | 6.01 | 6.48 | -0.47 |
| Food Quality | 5.94 | 6.44 | -0.50 |
| Consistent Service Delivery | 5.94 | 6.47 | -0.53 |
| Agreements Met | 5.93 | 6.64 | -0.71 |
| Hotel Safety | 5.93 | 6.42 | -0.49 |
| Attention to Details | 5.92 | 6.57 | -0.65 |
| Accurate Recording | 5.89 | 6.57 | -0.68 |
| Prompt Answers | 5.76 | 6.38 | -0.62 |
| Accurate Bills | 5.73 | 6.53 | -0.80 |
| Efficient Check-in/out | 5.69 | 6.28 | -0.59 |
| Efficient Reservation System | 5.68 | 6.08 | -0.40 |
| Variety of Food | 5.59 | 6.00 | -0.41 |
| Continuous Improvement | 5.58 | 5.89 | -0.31 |
| Understandable Bills | 5.54 | 6.25 | -0.71 |
| F & B Creativity | 5.47 | 5.94 | -0.47 |
| Prior Information Used | 5.17 | 5.50 | -0.33 |
| Post-event Review | 4.33 | 5.16 | -0.83 |

## By Importance

| Item | Performance | Importance | Difference |
|---|---|---|---|
| Agreements Met | 5.93 | 6.64 | -0.71 |
| On-time F & B Service | 6.17 | 6.61 | -0.44 |
| Attention to Details | 5.92 | 6.57 | -0.65 |
| Accurate Recording | 5.89 | 6.57 | -0.68 |
| Accurate Bills | 5.73 | 6.53 | -0.80 |
| Staff Expertise | 6.01 | 6.48 | -0.47 |
| Consistent Service Delivery | 5.94 | 6.47 | -0.53 |
| Food Quality | 5.94 | 6.44 | -0.50 |
| Hotel Safety | 5.93 | 6.42 | -0.49 |
| Knowledgeable Sales Staff | 6.01 | 6.40 | -0.39 |
| Prompt Answers | 5.76 | 6.38 | -0.62 |
| Efficient Check-in/out | 5.69 | 6.28 | -0.59 |
| Understandable Bills | 5.54 | 6.25 | -0.71 |
| Professional appearance | 6.05 | 6.11 | -0.06 |
| Efficient Reservation System | 5.68 | 6.08 | -0.40 |
| Variety of Food | 5.59 | 6.00 | -0.41 |
| F & B Creativity | 5.47 | 5.94 | -0.47 |
| Continuous Improvement | 5.58 | 5.89 | -0.31 |
| Prior Information Used | 5.17 | 5.50 | -0.33 |
| Post-event Review | 4.33 | 5.16 | -0.83 |

# Ranking of Item Means for Service Quality (cont.)

## By Difference

| Item | Performance | Importance | Difference |
|---|---|---|---|
| Post-event Review | 4.33 | 5.16 | -0.83 |
| Accurate Bills | 5.73 | 6.53 | -0.80 |
| Understandable Bills | 5.54 | 6.25 | -0.71 |
| Agreements Met | 5.93 | 6.64 | -0.71 |
| Accurate Recording | 5.89 | 6.57 | -0.68 |
| Attention to Details | 5.92 | 6.57 | -0.65 |
| Prompt Answers | 5.76 | 6.38 | -0.62 |
| Efficient Check-in/out | 5.69 | 6.28 | -0.59 |
| Consistent Service Delivery | 5.94 | 6.47 | -0.53 |
| Food Quality | 5.94 | 6.44 | -0.50 |
| Hotel Safety | 5.93 | 6.42 | -0.49 |
| F & B Creativity | 5.47 | 5.94 | -0.47 |
| Staff Expertise | 6.01 | 6.48 | -0.47 |
| On-time F & B Functions | 6.17 | 6.61 | -0.44 |
| Variety of Food | 5.59 | 6.00 | -0.41 |
| Efficient Reservation System | 5.68 | 6.08 | -0.40 |
| Knowledgeable Sales Staff | 6.01 | 6.40 | -0.39 |
| Prior Meeting Information | 5.17 | 5.50 | -0.33 |
| Continuous Improvement | 5.58 | 5.89 | -0.31 |
| Professional Appearance | 6.05 | 6.11 | -0.06 |

# Ranking of Item Means for Relationship Quality

## By Performance

| Item | Performance | Importance | Difference |
|---|---|---|---|
| Courteous Employees | 6.15 | 6.47 | -0.32 |
| Staff Reliability | 6.04 | 6.72 | -0.68 |
| Good Working Relationships | 5.98 | 6.35 | -0.37 |
| Fair Negotiations | 5.84 | 6.43 | -0.59 |
| Relationships of Trust | 5.84 | 6.10 | -0.26 |
| Business Appreciated | 5.81 | 6.06 | -0.25 |
| Employees Enjoy Work | 5.77 | 5.91 | -0.14 |
| Departmental Teamwork | 5.75 | 6.35 | -0.60 |
| Accessible Management | 5.69 | 6.18 | -0.49 |
| Personalised Greeting | 5.42 | 5.31 | 0.11 |
| Low Staff Turnover | 5.19 | 5.48 | -0.29 |
| MP Advice Sought | 5.04 | 5.69 | -0.65 |

## By Importance

| Item | Performance | Importance | Difference |
|---|---|---|---|
| Staff Reliability | 6.04 | 6.72 | -0.68 |
| Courteous Employees | 6.15 | 6.47 | -0.32 |
| Fair Negotiations | 5.84 | 6.43 | -0.59 |
| Good Working Relationships | 5.98 | 6.35 | -0.37 |
| Departmental Teamwork | 5.75 | 6.35 | -0.60 |
| Management Accessibility | 5.69 | 6.18 | -0.49 |
| Relationships of Trust | 5.84 | 6.10 | -0.26 |
| Business Appreciated | 5.81 | 6.06 | -0.25 |
| Employees Enjoy Work | 5.77 | 5.91 | -0.14 |
| MP Advice Sought | 5.04 | 5.69 | -0.65 |
| Low Staff Turnover | 5.19 | 5.48 | -0.29 |
| Personalised Greeting | 5.42 | 5.31 | 0.11 |

## By Difference

| Item | Performance | Importance | Difference |
|---|---|---|---|
| Staff Reliability | 6.04 | 6.72 | -0.68 |
| MP Advice Sought | 5.04 | 5.69 | -0.65 |
| Departmental Teamwork | 5.75 | 6.35 | -0.60 |
| Fair Negotiations | 5.84 | 6.43 | -0.59 |
| Management Accessibility | 5.69 | 6.18 | -0.49 |
| Good Working Relationships | 5.98 | 6.35 | -0.37 |
| Courteous Employees | 6.15 | 6.47 | -0.32 |
| Low Staff Turnover | 5.19 | 5.48 | -0.29 |
| Relationships of Trust | 5.84 | 6.10 | -0.26 |
| Business Appreciated | 5.81 | 6.06 | -0.25 |
| Employees Enjoy Work | 5.77 | 5.91 | -0.14 |
| Personalised Greeting | 5.42 | 5.31 | 0.11 |

# Rankings of Item Means for Extra Benefits

## By Performance

| Item | Performance | Importance | Difference |
|------|-------------|------------|------------|
| Quality Name/Brand | 5.80 | 6.07 | -0.27 |
| Hotel Reputation | 5.62 | 6.03 | -0.41 |
| VIP Upgrades | 5.61 | 5.79 | -0.18 |
| Space Availability | 5.49 | 6.08 | -0.59 |
| MPs Take Pride | 5.43 | 5.74 | -0.31 |
| Service Customisation | 5.27 | 5.88 | -0.61 |
| Good Citizen | 4.98 | 4.91 | 0.07 |
| Environmental Concern | 4.88 | 4.94 | -0.06 |
| Frequent Stayer Programme | 4.29 | 4.39 | -0.10 |
| Hospitality Events | 4.23 | 3.97 | 0.26 |
| Gifts Given | 3.83 | 3.47 | 0.36 |

## By Importance

| Item | Performance | Importance | Difference |
|------|-------------|------------|------------|
| Space Availability | 5.49 | 6.08 | -0.59 |
| Quality Name/Brand | 5.80 | 6.07 | -0.27 |
| Hotel Reputation | 5.62 | 6.03 | -0.41 |
| Service Customisation | 5.27 | 5.88 | -0.61 |
| VIP Upgrades | 5.61 | 5.79 | -0.18 |
| MPs Take Pride | 5.43 | 5.74 | -0.31 |
| Environmental Concern | 4.88 | 4.94 | -0.06 |
| Good Citizen | 4.98 | 4.91 | 0.07 |
| Frequent Stayer Programme | 4.29 | 4.39 | -0.10 |
| Hospitality Events | 4.23 | 3.97 | 0.26 |
| Gifts Given | 3.83 | 3.47 | 0.36 |

## By Difference

| Item | Performance | Importance | Difference |
|------|-------------|------------|------------|
| Service Customisation | 5.27 | 5.88 | -0.61 |
| Space Availability | 5.49 | 6.08 | -0.59 |
| Hotel Reputation | 5.62 | 6.03 | -0.41 |
| MPs Take Pride | 5.43 | 5.74 | -0.31 |
| Quality Name/Brand | 5.80 | 6.07 | -0.27 |
| VIP Upgrades | 5.61 | 5.79 | -0.18 |
| Frequent Stayer Programme | 4.29 | 4.39 | -0.10 |
| Environmental Concern | 4.88 | 4.94 | -0.06 |
| Good Citizen | 4.98 | 4.91 | 0.07 |
| Hospitality Events | 4.23 | 3.97 | 0.26 |
| Gifts Given | 3.83 | 3.47 | 0.36 |

# Rankings of Item Means for Problem Resolution

## By Performance

| Item | Performance | Importance | Difference |
|------|-------------|------------|------------|
| Problem Solving Attitude | 5.87 | 6.38 | -0.51 |
| Errors Quickly Rectified | 5.87 | 6.58 | -0.71 |
| Problems Resolved Well | 5.96 | 6.64 | -0.68 |
| Empowered Employees | 5.74 | 6.50 | -0.76 |

## By Importance

| Item | Performance | Importance | Difference |
|------|-------------|------------|------------|
| Problems Resolved Well | 5.96 | 6.64 | -0.68 |
| Errors Quickly Rectified | 5.87 | 6.58 | -0.71 |
| Empowered Employees | 5.74 | 6.50 | -0.76 |
| Problem Solving Attitude | 5.87 | 6.38 | -0.51 |

## By Difference

| Item | Performance | Importance | Difference |
|------|-------------|------------|------------|
| Empowered Employees | 5.74 | 6.50 | -0.76 |
| Errors Quickly Rectified | 5.87 | 6.58 | -0.71 |
| Problems Resolved Well | 5.96 | 6.64 | -0.68 |
| Problem Solving Attitude | 5.87 | 6.38 | -0.51 |

# Rankings of Item Means for Customer Costs

## By Performance

| Item | Performance | Importance | Difference |
|------|-------------|------------|------------|
| Fair Contract Terms | 5.90 | 6.54 | -0.64 |
| No Hidden Costs | 5.77 | 6.68 | -0.91 |
| Little Risk | 5.76 | 6.38 | -0.62 |
| Hassle-Free Business | 5.64 | 6.52 | -0.88 |
| Reasonable Prices | 5.44 | 6.43 | -0.99 |

## By Importance

| Item | Performance | Importance | Difference |
|------|-------------|------------|------------|
| No Hidden Costs | 5.77 | 6.68 | -0.91 |
| Fair Contract Terms | 5.90 | 6.54 | -0.64 |
| Hassle-Free Business | 5.64 | 6.52 | -0.88 |
| Reasonable Prices | 5.44 | 6.43 | -0.99 |
| Little Risk | 5.76 | 6.38 | -0.62 |

## By Difference

| Item | Performance | Importance | Difference |
|------|-------------|------------|------------|
| Reasonable Prices | 5.44 | 6.43 | -0.99 |
| No Hidden Costs | 5.77 | 6.68 | -0.91 |
| Hassle-Free Business | 5.64 | 6.52 | -0.88 |
| Fair Contract Terms | 5.90 | 6.54 | -0.64 |
| Little Risk | 5.76 | 6.38 | -0.62 |

# APPENDIX E

Drivers of customer commitment
(regression analysis)

.

The REG Procedure
Model: MODEL1
Dependent Variable: V12

Analysis of Variance

| Source | DF | Sum of Squares | Mean Square | F Value | Pr > F |
|---|---|---|---|---|---|
| Model | 15 | 101.62251 | 6.77483 | 5.42 | <.0001 |
| Error | 163 | 203.67760 | 1.24956 | | |
| Corrected Total | 178 | 305.30011 | | | |

| | | | |
|---|---|---|---|
| Root MSE | 1.11784 | R-Square | 0.3329 |
| Dependent Mean | 5.44358 | Adj R-Sq | 0.2715 |
| Coeff Var | 20.53495 | | |

Parameter Estimates

| Variable | DF | Parameter Estimate | Standard Error | t Value | Pr > \|t\| | Type I SS | Type II SS | Tolerance | Variance Inflation |
|---|---|---|---|---|---|---|---|---|---|
| Intercept | 1 | 0.17208 | 0.90812 | 0.19 | 0.8499 | 5304.21989 | 0.04487 | . | 0 |
| V19 | 1 | -0.29444 | 0.16390 | -1.80 | 0.0743 | 14.33059 | 4.03296 | 0.51457 | 1.94337 |
| V39 | 1 | -0.17330 | 0.16658 | -1.04 | 0.2997 | 14.77779 | 1.35235 | 0.31795 | 3.14516 |
| V53 | 1 | 0.44228 | 0.14839 | 2.98 | 0.0033 | 28.13809 | 11.10058 | 0.42469 | 2.35467 |
| V32 | 1 | -0.24535 | 0.13367 | -1.84 | 0.0683 | 0.61604 | 4.20969 | 0.54876 | 1.82230 |
| V47 | 1 | -0.04191 | 0.15080 | -0.28 | 0.7814 | 0.77674 | 0.09649 | 0.33729 | 2.96481 |
| V26 | 1 | 0.07895 | 0.11530 | 0.68 | 0.4945 | 4.79993 | 0.58580 | 0.64059 | 1.56106 |
| V34 | 1 | -0.06537 | 0.15033 | -0.43 | 0.6642 | 1.08960 | 0.23631 | 0.39722 | 2.51752 |
| V23 | 1 | 0.30630 | 0.12114 | 2.53 | 0.0124 | 5.56519 | 7.98789 | 0.56771 | 1.76147 |
| V16 | 1 | 0.40289 | 0.11660 | 3.46 | 0.0007 | 9.95034 | 14.91775 | 0.55851 | 1.79048 |
| V49 | 1 | 0.17542 | 0.12579 | 1.39 | 0.1651 | 6.33272 | 2.43008 | 0.48177 | 2.07570 |
| V71 | 1 | 0.11241 | 0.12284 | 0.92 | 0.3615 | 0.48205 | 1.04640 | 0.47687 | 2.09701 |
| V38 | 1 | -0.25899 | 0.15107 | -1.71 | 0.0884 | 2.11706 | 3.67267 | 0.38030 | 2.62951 |
| V40 | 1 | 0.26545 | 0.15890 | 1.67 | 0.0967 | 6.40243 | 3.48715 | 0.34772 | 2.87589 |

The REG Procedure
Model: MODEL1
Dependent Variable: V12

Parameter Estimates

| Variable | DF | Parameter Estimate | Standard Error | t Value | Pr > \|t\| | Type I SS | Type II SS | Tolerance | Variance Inflation |
|----------|----|--------------------|----------------|---------|-----------|-----------|------------|-----------|--------------------|
| V45 | 1 | -0.08839 | 0.11321 | -0.78 | 0.4360 | 0.34873 | 0.76184 | 0.54194 | 1.84521 |
| V41 | 1 | 0.27744 | 0.12773 | 2.17 | 0.0313 | 5.89520 | 5.89520 | 0.42346 | 2.36152 |

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The UNIVARIATE Procedure
Variable: ry (Residual)

Moments

| N | 179 | Sum Weights | 179 |
|---|---|---|---|
| Mean | 0 | Sum Observations | 0 |
| Std Deviation | 1.06969911 | Variance | 1.14425618 |
| Skewness | -0.3946322 | Kurtosis | -0.1595205 |
| Uncorrected SS | 203.6776 | Corrected SS | 203.6776 |
| Coeff Variation | . | Std Error Mean | 0.07995307 |

Basic Statistical Measures

| Location | | Variability | |
|---|---|---|---|
| Mean | 0.000000 | Std Deviation | 1.06970 |
| Median | 0.119551 | Variance | 1.14426 |
| Mode | 0.574107 | Range | 5.14044 |
| | | Interquartile Range | 1.36138 |

Tests for Location: Mu0=0

| Test | -Statistic- | | -----p Value------ | |
|---|---|---|---|---|
| Student's t | t | 0 | Pr > |t| | 1.0000 |
| Sign | M | 4.5 | Pr >= |M| | 0.5500 |
| Signed Rank | S | 430 | Pr >= |S| | 0.5372 |

Tests for Normality

| Test | --Statistic--- | | -----p Value----- | |
|---|---|---|---|---|
| Shapiro-Wilk | W | 0.982276 | Pr < W | 0.0225 |
| Kolmogorov-Smirnov | D | 0.055026 | Pr > D | >0.1500 |

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The UNIVARIATE Procedure
Variable: ry (Residual)

Tests for Normality

| Test | --Statistic--- | -----p Value------ |
|------|----------------|---------------------|
| Cramer-von Mises | W-Sq 0.112091 | Pr > W-Sq 0.0809 |
| Anderson-Darling | A-Sq 0.81404 | Pr > A-Sq 0.0365 |

Quantiles (Definition 5)

| Quantile | Estimate |
|----------|----------|
| 100% Max | 2.430250 |
| 99% | 2.262353 |
| 95% | 1.649501 |
| 90% | 1.386938 |
| 75% Q3 | 0.776889 |
| 50% Median | 0.119551 |
| 25% Q1 | -0.584493 |
| 10% | -1.601015 |
| 5% | -1.962714 |
| 1% | -2.547873 |
| 0% Min | -2.710191 |

Extreme Observations

| ------Lowest----- | | -----Highest------ | |
|---------|-----|---------|-----|
| Value | Obs | Value | Obs |
| -2.71019 | 147 | 1.85083 | 108 |
| -2.54787 | 156 | 1.87040 | 63 |
| -2.52507 | 62 | 1.87556 | 84 |
| -2.52419 | 89 | 2.26235 | 71 |

The UNIVARIATE Procedure
Variable:  ry  (Residual)

Extreme Observations

| -----Lowest----- | | -----Highest----- | |
|---|---|---|---|
| Value | Obs | Value | Obs |
| -2.45742 | 38 | 2.43025 | 105 |

Missing Values

| | | -----Percent Of----- | |
|---|---|---|---|
| Missing | | | Missing |
| Value | Count | All Obs | Obs |
| . | 18 | 9.14 | 100.00 |

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The UNIVARIATE Procedure
Variable:  ry (Residual)
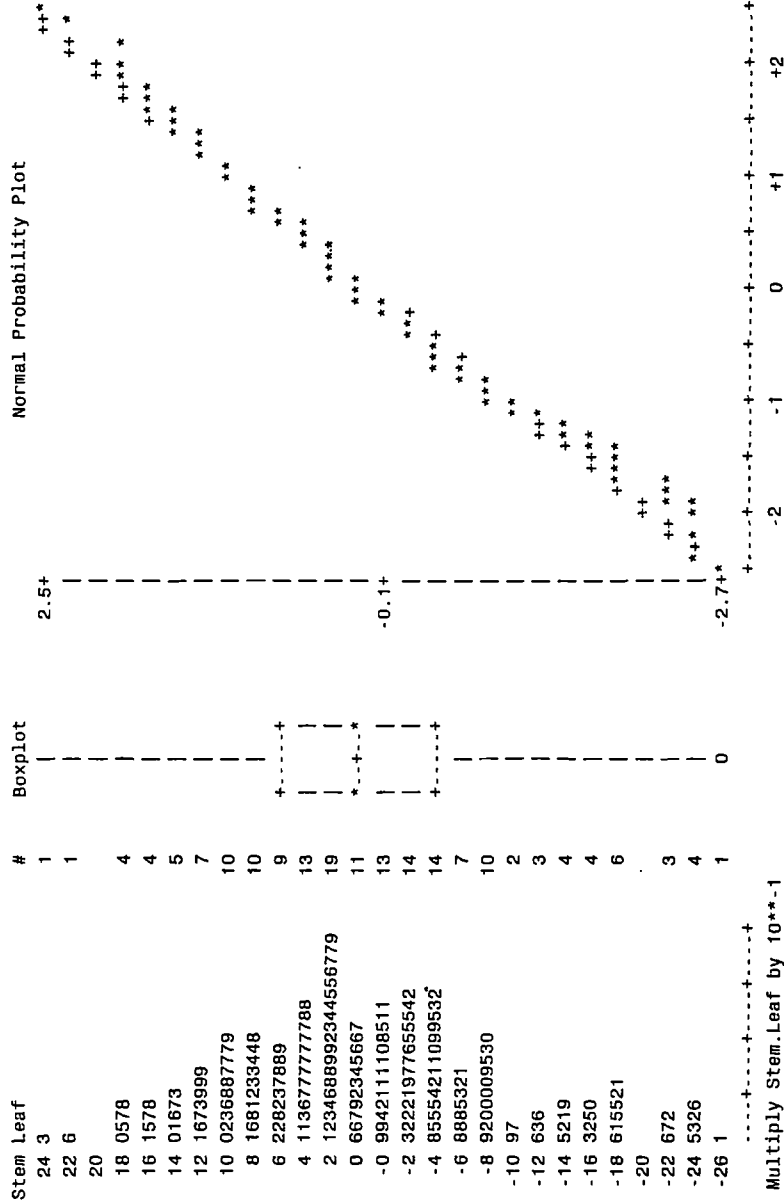
```
Stem Leaf                                      #   Boxplot
  24 3                                          1   |
  22 6                                          1   |
  20                                                |
  18 0578                                        4   |
  16 1578                                        4   |
  14 01673                                       5   |
  12 1673999                                     7   |
  10 0236887779                                 10   |
   8 1681233448                                 10   |
   6 228237889                                   9   +-----+
   4 11367777777788                             13   |     |
   2 12346889923445566779                       19   *--+--*
   0 66792345667                                11   |  +  |
  -0 994211108511                               13   |  +  |
  -2 32221977655542                             14   *--+--*
  -4 855542110995322                            14   +-----+
  -6 8885321                                     7   |
  -8 9200009530                                 10   |
 -10 97                                          2   |
 -12 636                                         3   |
 -14 5219                                        4   |
 -16 3250                                        4   |
 -18 615521                                      6   |
 -20                                                 |
 -22 672                                         3   |
 -24 5326                                        4   |
 -26 1                                           1   0
     ----+----+----+----+
Multiply Stem.Leaf by 10**-1
```

Normal Probability Plot

```
2.5+                                         ++*
    |                                     ++ *
    |                                  ++
    |                               +++* *
    |                            +***
    |                           ***
    |                        ***
    |                       **
    |                     ***
    |                    **
-0.1+                   ***
    |                  ****
    |                 ***
    |               **
    |              ***+
    |             ***+
    |            ***
    |           **
    |          ***
    |         ++*
    |        ***
    |       ++***
    |      ++***
    |     +++++
    |    ++
    |   ++ ***
-2.7+*  *+* **
    +----+----+----+----+----+----+----+----+----+----+
        -2        -1         0        +1        +2
```

Plot of nscores*ry.  Legend: A = 1 obs, B = 2 obs, etc.

```
   3 +
 R   |
 a   |
 n 2 +
 k   |                                                            A
     |                                                          A
 f 1 +                                                     A
 o   |                                                     B
 r   |                                                 C A
 V 0 +                                            CB A
 a   |                                        BBD
 r   |                                     ADCC
 i   |                                  AEBE
 a   |                               BJBB
 b-1 +                           BFHAA
 l   |                        BBDGB
 e   |                      FEEB
     |                    BFCBC
 r-2 +                 BEBAC
 y   |               AAA AAEA
     |             AABC A
     |           ACAA
     |             A
     |        AAA
     |        AA
     |      AA
     |       A
  -3 +
     ---+---------+---------+---------+---------+---------+---------+---
       -3        -2        -1         0         1         2         3

                                  Residual
```
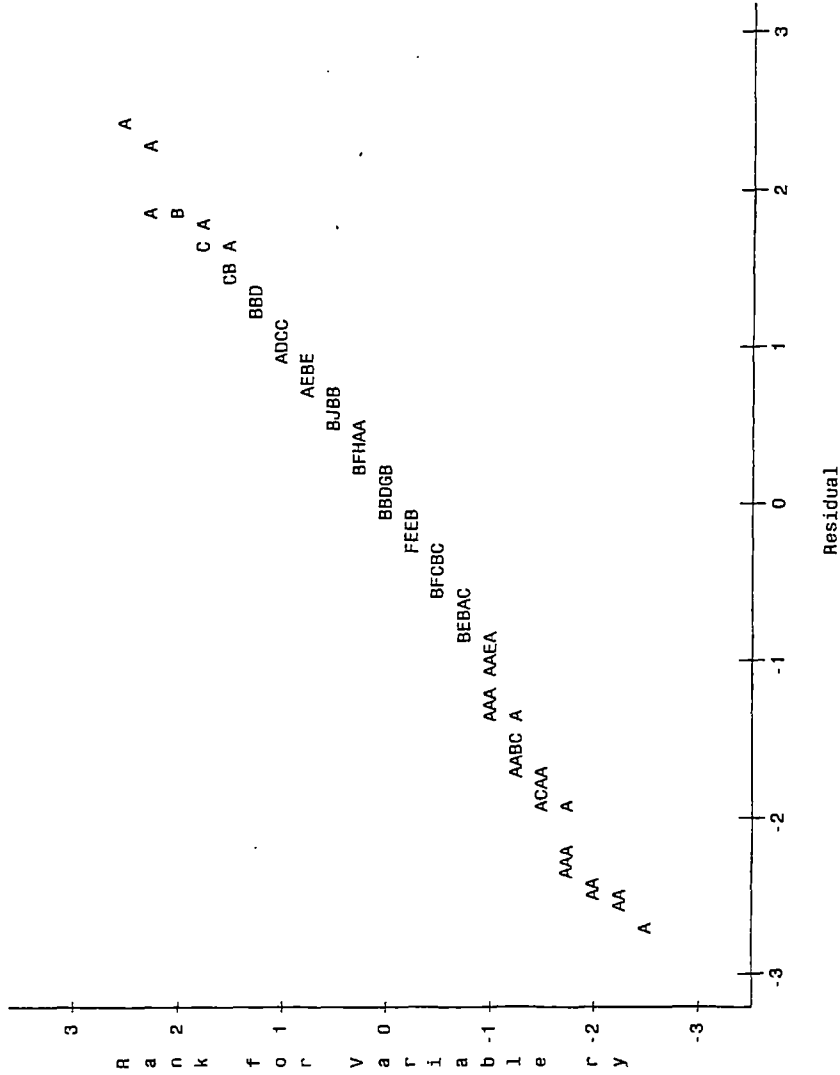
NOTE: 18 obs had missing values.

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| Obs | id | q1 | q2 | q2p1 | q2p2 | q2p3 | q2p4 | q3 | q3a | q4 | q4a | q5 | q5a | q6 | q7p1 | q7p2 | q7p3 | q7p4 | q7p5 | q7p6 | q7p7 | q7p8 | q7p9 | q7p10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 32 | 5 | . | 1 | 1 | 0 | 0 | 3 | . | . | 4 | . | 1 | 2 | 6 | 3 | 5 | 1 | 1 | 3 | 5 | 1 | 2 | 6 |
| 2 | 45 | 7 | . | 1 | 0 | 0 | 0 | 4 | . | . | 4 | . | 2 | 2 | 6 | 5 | 5 | 1 | 6 | 5 | 6 | 6 | 4 | 4 |
| 3 | 60 | 8 | . | 1 | 0 | 0 | 0 | 2 | . | . | 2 | . | 1 | 2 | 4 | 1 | 3 | 4 | 4 | 5 | 5 | 1 | 7 | 7 |
| 4 | 74 | 5 | . | 0 | 1 | 0 | 0 | 3 | . | . | 1 | . | 1 | 2 | 4 | 3 | 4 | 1 | 4 | 1 | 4 | 4 | 2 | 4 |
| 5 | 83 | 8 | . | 1 | 0 | 1 | 0 | 1 | . | . | 1 | . | 1 | 1 | 7 | 4 | 1 | 1 | 1 | 5 | 3 | 1 | 5 | 1 |
| 6 | 88 | 6 | . | 0 | 1 | 0 | 0 | 2 | . | . | 2 | . | 3 | 2 | 6 | 4 | 3 | 4 | 4 | 3 | 6 | 3 | 3 | 6 |
| 7 | 92 | 5 | . | 0 | 1 | 0 | 0 | 3 | . | . | 1 | . | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 5 | 5 | 4 | 2 | 7 |
| 8 | 94 | 8 | . | 1 | 1 | 1 | 1 | 4 | . | . | 4 | . | 2 | 2 | 3 | 5 | 1 | 2 | 4 | 7 | 4 | 7 | 4 | 4 |
| 9 | 104 | 5 | . | 0 | 0 | 0 | 0 | 4 | . | . | 1 | . | 2 | 1 | 7 | 5 | 5 | 2 | 2 | 3 | 5 | 2 | 2 | 4 |
| 10 | 110 | 8 | . | 1 | 1 | 0 | 0 | 2 | . | . | 2 | . | 1 | 1 | 5 | 3 | 3 | 3 | 4 | 5 | 6 | 4 | 3 | 4 |
| 11 | 113 | 8 | . | 1 | 0 | 0 | 0 | 2 | . | . | 3 | . | 1 | 2 | 5 | 5 | 2 | 2 | 5 | 1 | 7 | 3 | 2 | 7 |
| 12 | 121 | 5 | . | 0 | 0 | 0 | 0 | 3 | . | . | 1 | . | 1 | 1 | 5 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 4 | 5 |
| 13 | 131 | 8 | . | 0 | 0 | 0 | 0 | 4 | . | . | 2 | . | 2 | 2 | 7 | 3 | 3 | 2 | 5 | 3 | 3 | 4 | 5 | 2 |
| 14 | 138 | 8 | . | . | 1 | 0 | 0 | 3 | . | . | 1 | . | 1 | 1 | 5 | 3 | 5 | 6 | 3 | 4 | 3 | 5 | 3 | 6 |
| 15 | 141 | 10 | . | 0 | 1 | 0 | 0 | 4 | . | . | 3 | . | 2 | 2 | 5 | 4 | 3 | 2 | 1 | 5 | 4 | 2 | 4 | 5 |
| 16 | 145 | 8 | . | 1 | 1 | 1 | 0 | 2 | . | . | 4 | . | 4 | 1 | 6 | 3 | 3 | 1 | 3 | 4 | 5 | 5 | 5 | 4 |
| 17 | 155 | 8 | . | 0 | 1 | 0 | 0 | 3 | . | . | 1 | . | 1 | 2 | 5 | 5 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 |
| 18 | 207 | 7 | . | 1 | 0 | 1 | 0 | 4 | . | . | 1 | . | 1 | 1 | 5 | 3 | 3 | 1 | 2 | 4 | 3 | 5 | 7 | 7 |
| 19 | 217 | 5 | . | 1 | . | 1 | 0 | 3 | . | . | 1 | . | 1 | 2 | 3 | 3 | 4 | 3 | 3 | 5 | 5 | 5 | 3 | 5 |
| 20 | 219 | 5 | . | 0 | 0 | 0 | 0 | 4 | . | . | 2 | . | 2 | 1 | 5 | 3 | 1 | 3 | 3 | 3 | 3 | 4 | 5 | 7 |
| 21 | 226 | 5 | . | 0 | 1 | 1 | 0 | 2 | . | . | 1 | . | 1 | 1 | 4 | 4 | 1 | 1 | 1 | 2 | 5 | 4 | 1 | 4 |
| 22 | 237 | 6 | . | 0 | 1 | 1 | 0 | 4 | . | . | 4 | . | 4 | 2 | 1 | 1 | 7 | 1 | 1 | 2 | 6 | 4 | 3 | 4 |
| 23 | 242 | 7 | . | 1 | 1 | 1 | 0 | 1 | . | . | 2 | . | 4 | 2 | 2 | 6 | 2 | 2 | 1 | 3 | 5 | 5 | 7 | 7 |
| 24 | 249 | 7 | . | 1 | 1 | 1 | 0 | 4 | . | . | 2 | . | 2 | 2 | 3 | 3 | 6 | 1 | 1 | 3 | 6 | 3 | 2 | 5 |
| 25 | 256 | 7 | . | 0 | 1 | 0 | 0 | 4 | . | . | 1 | . | 1 | 2 | 7 | 6 | 4 | 4 | 1 | 1 | 5 | 6 | 3 | 6 |
| 26 | 257 | 7 | . | 1 | 0 | 0 | 0 | 4 | . | . | 1 | . | 1 | 2 | 6 | 4 | 4 | 4 | 3 | 1 | 1 | 1 | 3 | 3 |
| 27 | 262 | 8 | . | 0 | 1 | 0 | 0 | 2 | . | . | 4 | . | 3 | 2 | 5 | 3 | 2 | 2 | 2 | 4 | 2 | 3 | 4 | 4 |

| Obs | q7p11 | q7p12 | q7p13 | q7p14 | q7p15 | q7p16 | q7p17 | q8p1 | q8p2 | q8p3 | q8p4 | q8p5 | q8p6 | q8p7 | q8p8 | q8p9 | q8p10 | q8p11 | q9p1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 7 | 6 | 2 | 6 | 6 | 1 | 4 | 7 | 7 | 6 | 6 | 4 | 4 | 5 | 7 | 7 | 7 | 6 |
| 2 | 6 | 7 | 7 | 6 | 6 | 5 | 4 | 6 | 7 | 7 | 6 | 6 | 3 | 4 | 6 | 6 | 5 | 4 | 7 |
| 3 | 6 | 7 | 3 | 1 | 4 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 6 | 6 | 7 | 7 | 5 | 7 |
| 4 | 4 | 7 | 2 | 3 | 4 | 5 | 4 | 7 | 5 | 5 | 4 | 7 | 6 | 6 | 6 | 5 | 4 | 3 | 7 |
| 5 | 5 | 5 | 1 | 1 | 3 | 5 | 5 | 7 | 6 | 6 | 3 | 7 | 5 | 2 | 4 | 6 | 5 | 6 | 6 |
| 6 | 7 | 7 | 3 | 3 | 3 | 5 | 3 | 6 | 6 | 6 | 5 | 6 | 2 | 6 | 6 | 6 | 6 | 6 | 5 |
| 7 | 7 | 7 | 5 | 4 | 4 | 6 | 5 | 4 | 4 | 4 | 4 | 5 | 6 | 4 | 6 | 6 | 4 | 6 | 4 |
| 8 | 6 | 6 | 5 | 1 | 1 | 4 | 3 | 4 | 5 | 7 | 3 | 7 | 4 | 6 | 6 | 7 | 3 | 2 | 3 |
| 9 | 7 | 7 | 5 | 2 | 3 | 6 | 5 | 5 | 4 | 4 | 2 | 6 | 5 | 5 | 6 | 4 | 7 | 6 | 6 |
| 10 | 3 | 4 | 6 | 2 | 2 | 2 | 4 | 5 | 7 | 7 | 6 | 7 | 3 | 4 | 5 | 7 | 5 | 4 | 7 |
| 11 | 7 | 7 | 2 | 1 | 1 | 2 | 5 | 7 | 4 | 5 | 4 | 6 | 4 | 3 | 6 | 6 | 4 | 7 | 7 |
| 12 | 5 | 6 | 4 | 3 | 3 | 3 | 3 | 6 | 7 | 5 | 3 | 7 | 7 | 5 | 6 | 4 | 6 | 6 | 6 |
| 13 | 7 | 7 | 3 | 2 | 2 | 2 | 2 | 7 | 7 | 7 | 6 | 7 | 5 | 4 | 4 | 6 | 3 | 4 | 5 |
| 14 | 6 | 6 | 4 | 3 | 3 | 4 | 7 | 5 | 6 | 7 | 5 | 5 | 6 | 4 | 5 | 7 | 6 | 7 | 6 |
| 15 | 5 | 6 | 5 | 3 | 4 | 4 | 5 | 6 | 3 | 3 | 3 | 6 | 7 | 5 | 7 | 4 | 4 | 6 | . |
| 16 | 5 | 6 | 6 | 3 | 3 | 4 | 6 | 6 | 6 | 6 | 4 | 5 | 6 | 3 | 4 | 6 | 5 | 1 | 5 |
| 17 | 6 | 6 | 1 | 1 | 1 | 1 | 1 | 6 | 5 | 5 | 3 | 7 | 6 | 4 | 6 | 5 | 6 | 5 | 5 |
| 18 | 7 | 7 | 3 | 3 | 4 | 4 | 6 | 5 | 4 | 5 | 5 | 6 | 6 | 7 | 6 | 6 | 4 | 5 | 5 |
| 19 | 4 | 5 | 3 | 3 | 3 | 5 | 4 | 5 | 4 | 5 | 4 | 4 | 5 | 3 | 5 | 4 | 5 | 4 | 5 |
| 20 | 4 | 7 | 4 | 3 | 3 | 3 | 1 | 4 | 7 | 5 | 3 | 7 | 5 | 3 | 6 | 5 | 5 | 5 | 7 |
| 21 | 5 | 5 | 2 | 1 | 1 | 1 | 4 | 5 | 6 | 7 | 6 | 6 | 6 | 6 | 5 | 7 | 6 | 7 | 6 |
| 22 | 4 | 4 | 1 | 1 | 1 | 2 | 1 | 4 | 6 | 6 | 4 | 7 | 6 | 4 | 7 | 7 | 6 | 7 | 7 |
| 23 | 7 | 7 | 6 | 1 | 1 | 2 | 4 | 4 | 7 | 6 | 3 | 7 | 6 | 6 | 6 | 6 | 6 | 2 | 6 |
| 24 | 6 | 6 | 2 | 1 | 1 | 1 | 7 | 6 | 2 | 7 | 2 | 6 | 3 | 4 | 6 | 6 | 4 | 7 | 6 |
| 25 | 6 | 7 | 3 | 1 | 1 | 1 | 4 | 7 | 4 | 2 | 2 | 7 | 4 | 5 | 6 | 5 | 7 | 3 | 7 |
| 26 | 6 | 4 | 1 | 1 | 1 | 1 | 4 | 6 | 7 | 5 | 2 | 6 | 3 | 5 | 6 | 7 | 7 | 4 | 6 |
| 27 | 6 | 6 | 3 | 2 | 2 | 2 | 4 | 6 | 4 | 5 | 2 | 7 | 3 | 5 | 7 | 7 | 7 | 4 | 6 |

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| Obs | q9p2 | q9p3 | q9p4 | q9p5 | q9p6 | q9p7 | q9p8 | q9p9 | q9p10 | q9p11 | q8s1 | q8s2 | q8s3 | q8s4 | q8s5 | q8s6 | q8s7 | q8s8 | q8s9 | q8s10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 7 | 7 | 7 | 7 | 3 | 6 | 6 | 7 | 7 | 7 | 6 | 4 | 5 | 5 | 4 | 6 | 7 | 4 | 5 | 4 |
| 2 | 7 | 7 | 6 | 7 | 5 | 5 | 6 | 6 | 6 | 4 | 7 | 6 | 6 | 4 | 5 | 6 | 7 | 6 | 7 | 7 |
| 3 | 7 | 7 | 6 | 6 | 4 | 3 | 4 | 7 | 6 | 6 | 4 | 4 | 4 | 3 | 3 | 5 | 4 | 5 | 5 | 4 |
| 4 | 6 | 6 | 5 | 7 | 7 | 6 | 7 | 6 | 6 | 5 | 7 | 6 | 7 | 6 | 7 | 7 | 6 | 6 | 7 | 7 |
| 5 | 5 | 5 | 3 | 7 | 7 | 3 | 5 | 4 | 3 | 3 | 5 | 5 | 4 | 3 | 7 | 7 | 4 | 5 | 5 | 4 |
| 6 | 6 | 5 | 7 | 7 | 6 | 6 | 7 | 7 | 6 | 5 | 5 | 4 | 3 | 6 | 6 | 6 | 7 | 6 | 5 | 6 |
| 7 | 6 | 6 | 4 | 6 | 2 | 4 | 6 | 6 | 6 | 4 | 7 | 5 | 4 | 7 | 5 | 5 | 6 | 7 | 7 | 7 |
| 8 | 4 | 4 | 3 | 6 | 6 | 6 | 6 | 6 | 4 | 6 | 5 | 5 | 6 | 6 | 7 | 4 | 5 | 5 | 5 | 6 |
| 9 | 4 | 7 | 4 | 8 | 4 | 4 | 6 | 7 | 4 | 6 | 6 | 3 | 6 | 6 | 7 | 7 | 7 | 7 | 6 | 6 |
| 10 | 5 | 5 | 4 | 7 | 4 | 3 | 5 | 4 | 7 | 4 | 7 | 7 | 7 | 2 | 7 | 6 | 5 | 2 | 7 | 5 |
| 11 | 7 | 7 | 5 | 6 | 3 | 3 | 6 | 7 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 7 | 6 | 5 | 6 |
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| 15 | 5 | . | 4 | 6 | 5 | 7 | 7 | 6 | 6 | 6 | 5 | 6 | 4 | 4 | 4 | 1 | 5 | 6 | 6 | 3 |
| 16 | 4 | 4 | 4 | 7 | 4 | 6 | 6 | 6 | 6 | 2 | 4 | 4 | 3 | 4 | 3 | 7 | 7 | 3 | 4 | 6 |
| 17 | 6 | 4 | 6 | . | 5 | 6 | 7 | 6 | 7 | 6 | 6 | 6 | 6 | 5 | 6 | 7 | 7 | 4 | 4 | 6 |
| 18 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |
| 19 | 6 | 5 | 6 | 7 | 5 | 3 | 6 | 7 | 6 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 6 | 6 | 6 |
| 20 | 5 | 5 | 5 | 6 | 6 | 5 | 6 | 6 | 5 | 5 | 4 | 6 | 3 | 3 | 5 | 4 | 6 | 5 | 6 | 6 |
| 21 | 4 | 5 | 4 | 7 | 5 | 4 | 6 | 4 | 5 | 4 | 6 | 6 | 6 | 6 | 6 | 7 | 6 | 4 | 6 | 6 |
| 22 | 5 | 4 | 4 | 6 | 6 | 6 | 6 | 7 | 6 | 5 | 6 | 6 | 6 | 7 | 6 | 4 | 5 | 6 | 6 | 6 |
| 23 | 7 | 6 | 5 | 6 | 6 | 5 | 6 | 5 | 7 | 6 | 7 | 6 | 5 | 2 | 6 | 7 | 7 | 6 | 6 | 6 |
| 24 | 4 | 5 | 2 | 7 | 3 | 3 | 7 | 4 | 4 | 1 | 6 | 5 | 5 | 1 | 5 | 4 | 5 | 5 | 5 | 5 |
| 25 | 7 | 7 | 7 | 6 | 4 | 7 | 5 | 7 | 7 | 7 | 6 | 6 | 6 | 3 | 6 | 1 | 6 | 6 | 5 | 6 |
| 26 | 1 | 1 | 1 | 7 | 1 | 4 | 7 | 5 | 4 | 2 | 6 | 6 | 6 | 5 | 6 | 5 | . | 4 | 5 | 3 |
| 27 | 3 | 4 | 2 | . | . | 6 | 7 | 7 | 7 | 1 | 6 | 5 | 6 | 7 | 6 | 4 | . | 7 | 7 | 7 |

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| Obs | q8s11 | q8s12 | q8s13 | q8s14 | q8s15 | q8s16 | q8s17 | q8s18 | q8s19 | q8s20 | q9s1 | q9s2 | q9s3 | q9s4 | q9s5 | q9s6 | q9s7 | q9s8 | q9s9 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 6 | 6 | 6 | 7 | 4 | 5 | 3 | 4 | 1 | 6 | 7 | 6 | 7 | 5 | 7 | 7 | 7 | 5 | 7 |
| 2 | 6 | 5 | 6 | 5 | 4 | 4 | 5 | 6 | 4 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 7 |
| 3 | 4 | 5 | 5 | 5 | 5 | 3 | 5 | 4 | 2 | 6 | 7 | 6 | 7 | 6 | 7 | 7 | 6 | 7 | 6 |
| 4 | 6 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 6 | 7 | 7 | 7 | 5 | 6 | 7 | 7 | 6 | 6 | 7 |
| 5 | 6 | 6 | 5 | 4 | 4 | 5 | 4 | 6 | 3 | 4 | 7 | 6 | 6 | 5 | 6 | 6 | 7 | 6 | 7 |
| 6 | 7 | 7 | 7 | 5 | 8 | 6 | 5 | 6 | 4 | 5 | 7 | 4 | 6 | 7 | 7 | 5 | 6 | 6 | 7 |
| 7 | 5 | 4 | 5 | 6 | 5 | 7 | 6 | 7 | 5 | 5 | 6 | 6 | 7 | 5 | 7 | 7 | 5 | 6 | 6 |
| 8 | 5 | 5 | 6 | 5 | 6 | 3 | 3 | 4 | 1 | 4 | 5 | 5 | 6 | 5 | 7 | 5 | 7 | 7 | 7 |
| 9 | 6 | 5 | 6 | 7 | 6 | 7 | 7 | 7 | 4 | 7 | 7 | 4 | 7 | 6 | 7 | 7 | 6 | 7 | 6 |
| 10 | 3 | 6 | 4 | 7 | 6 | 7 | 7 | 4 | 5 | 6 | 7 | 6 | 6 | 7 | 7 | 5 | 5 | 4 | 6 |
| 11 | 2 | 3 | 5 | 7 | 6 | 4 | 4 | 6 | 5 | 7 | 7 | 4 | 7 | 3 | 5 | 7 | 6 | 6 | 7 |
| 12 | 6 | 2 | 6 | 6 | 6 | 6 | 6 | 6 | 4 | 5 | 8 | 6 | 6 | 5 | 6 | 6 | 5 | 6 | 6 |
| 13 | 5 | 6 | 5 | 6 | 6 | 6 | 6 | 6 | 5 | 7 | 5 | 3 | 6 | 5 | 6 | 5 | 7 | 5 | 7 |
| 14 | 7 | 5 | 6 | 7 | 7 | 5 | 5 | 6 | 1 | 3 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 |
| 15 | 6 | 7 | 4 | 4 | 4 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 6 | 6 |
| 16 | 3 | 3 | 6 | 3 | 5 | 5 | 6 | 4 | 2 | 3 | 5 | 5 | 6 | 5 | 7 | 7 | 7 | 7 | 6 |
| 17 | 6 | 6 | 7 | 6 | 7 | 7 | 6 | 6 | 2 | 6 | 5 | 4 | 6 | 5 | 7 | 7 | 5 | 7 | 7 |
| 18 | 4 | 5 | 6 | 6 | 5 | 7 | 4 | 7 | 5 | 5 | 7 | 6 | 7 | 6 | 7 | 7 | 7 | 4 | 6 |
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| 20 | 3 | 3 | 5 | 7 | 7 | 5 | 6 | 5 | 4 | 5 | 5 | 5 | 6 | 6 | 7 | 7 | 7 | 5 | 7 |
| 21 | 4 | 4 | 7 | 7 | 5 | 4 | 6 | 5 | 4 | 6 | 6 | 4 | 7 | 7 | 7 | 7 | 7 | 4 | 7 |
| 22 | 7 | 7 | 5 | 5 | 5 | 6 | 6 | 6 | 5 | 4 | 7 | 6 | 7 | 5 | 7 | 6 | 5 | 6 | 7 |
| 23 | 6 | 6 | 7 | 6 | 6 | 6 | 6 | 6 | 4 | 5 | 6 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 7 |
| 24 | 4 | 5 | 4 | 5 | 6 | 5 | 6 | 7 | 4 | 6 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 5 | 7 |
| 25 | 4 | 4 | 5 | 6 | 5 | 5 | 7 | 6 | 2 | 4 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 6 | 7 |
| 26 | 5 | 4 | 5 | 6 | 6 | 6 | 6 | 6 | 2 | 4 | 6 | 6 | 6 | 6 | 7 | 7 | 6 | 5 | 5 |
| 27 | 4 | 2 | 5 | 4 | 6 | 6 | 5 | 4 | 3 | 7 | 6 | 7 | 6 | 7 | 7 | 4 | 6 | 6 | 6 |

| Obs | q9s10 | q9s11 | q9s12 | q9s13 | q9s14 | q9s15 | q9s16 | q9s17 | q9s18 | q9s19 | q9s20 | q8r1 | q8r2 | q8r3 | q8r4 | q8r5 | q8r6 | q8r7 | q8r8 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1  | 7 | 4 | 4 | 5 | 7 | 7 | 7 | 6 | 5 | 6 | 7 | 5 | 7 | 6 | 6 | 5 | 5 | 5 | 7 |
| 2  | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 6 | 6 | 7 | 6 | 7 |
| 3  | 7 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 5 | 3 | 4 | 4 | 5 | 6 | 5 | 6 |
| 4  | 7 | 6 | 7 | 7 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 6 | 6 | 5 | 5 | 5 | 7 | 7 | 6 |
| 5  | 6 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 5 | 3 | 7 | 6 | 5 | 7 | 7 | 3 | 3 | 5 | 6 |
| 6  | 7 | 4 | 5 | 5 | 6 | 7 | 7 | 5 | 7 | 4 | 4 | 6 | 7 | 7 | 7 | 6 | 6 | 4 | 7 |
| 7  | 7 | 3 | 3 | 7 | 6 | 7 | 7 | 7 | 4 | 4 | 7 | 5 | 5 | 7 | 7 | 5 | 7 | 4 | 5 |
| 8  | 7 | 7 | 6 | 5 | 7 | 7 | 4 | 7 | 7 | 4 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 |
| 9  | 6 | 6 | 5 | 6 | 7 | 6 | 7 | 6 | 6 | 2 | 5 | 7 | 5 | 4 | 7 | 5 | 5 | 6 | 6 |
| 10 | 6 | 4 | 4 | 4 | 7 | 6 | 7 | 7 | 6 | 4 | 7 | 6 | 7 | 6 | 6 | 6 | 4 | 3 | 6 |
| 11 | 7 | 6 | 6 | 7 | 6 | 7 | 7 | 6 | 7 | 5 | 7 | 6 | 7 | 7 | 6 | 5 | 5 | 6 | 6 |
| 12 | 6 | 6 | 6 | 5 | 6 | 6 | 6 | 6 | 7 | 5 | 7 | 7 | 6 | 7 | 6 | 6 | 6 | 6 | 6 |
| 13 | 6 | 5 | 5 | 6 | 7 | 7 | 6 | 6 | 7 | 6 | 7 | 5 | 7 | 7 | 6 | 6 | 5 | 5 | 6 |
| 14 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 6 | 6 | 7 | 7 | 7 |
| 15 | 7 | 6 | 5 | 6 | 6 | 6 | 7 | 6 | 6 | 6 | . | 7 | 6 | 6 | 6 | 3 | 4 | 4 | 4 |
| 16 | 7 | 5 | 5 | 6 | 7 | 7 | 7 | 7 | 4 | 4 | 7 | 6 | 6 | 6 | 4 | 3 | 4 | 6 | 7 |
| 17 | 7 | 5 | 5 | 6 | 7 | 7 | 7 | 6 | 4 | . | . | 6 | 6 | 7 | 5 | 3 | 4 | 7 | 7 |
| 18 | . | . | . | . | . | . | . | . | . | . | . | 4 | 6 | 6 | 6 | 6 | 6 | 4 | 7 |
| 19 | 7 | 6 | 6 | 6 | 6 | 7 | 7 | 6 | 7 | 5 | 5 | 6 | 6 | 4 | 5 | 6 | 6 | 6 | 5 |
| 20 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 4 | 7 | 6 | 6 | 4 | 5 | 6 | 5 | 7 | 6 |
| 21 | 5 | 5 | 5 | 6 | 7 | 7 | 6 | 5 | 7 | 6 | 6 | 4 | 5 | 5 | 5 | 6 | 6 | 5 | 6 |
| 22 | 7 | 6 | 6 | 5 | 7 | 6 | 6 | 4 | 7 | 4 | 7 | 6 | 5 | 3 | 4 | 5 | 7 | 3 | 5 |
| 23 | 7 | 6 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 1 | 6 | 6 | 6 | 7 | 7 | 7 | 4 | 4 | 4 |
| 24 | 7 | 5 | 4 | 6 | 7 | 6 | 7 | 6 | 7 | 4 | 6 | 4 | 3 | 4 | 4 | 3 | 7 | 2 | 7 |
| 25 | 6 | 7 | 6 | 6 | 7 | 6 | 7 | 5 | 6 | 5 | 6 | 5 | 5 | 6 | 7 | 7 | 5 | 5 | 6 |
| 26 | 7 | 6 | 6 | 6 | 6 | 6 | 7 | 6 | 6 | 4 | 6 | 7 | 7 | 6 | 6 | 6 | 5 | 6 | 6 |
| 27 | 7 | 5 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 4 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 5 | 6 |

| Obs | q8r9 | q8r10 | q8r11 | q8r12 | q9r1 | q9r2 | q9r3 | q9r4 | q9r5 | q9r6 | q9r7 | q9r8 | q9r9 | q9r10 | q9r11 | q9r12 | q8x1 | q8x2 | q8x3 | q8x4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 7 | 3 | 3 | 3 | 7 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 7 | 4 | 4 | 7 | 1 | 4 | 4 | 7 |
| 2 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 6 | 7 | 4 | 1 |
| 3 | 7 | 7 | 6 | 3 | 6 | 6 | 6 | 6 | 4 | 7 | 7 | 7 | 6 | 5 | 6 | 4 | 4 | 4 | 5 | 5 |
| 4 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 5 | 7 | 7 | 6 | 6 | 6 | 7 | 6 | 5 | 6 | 5 | 5 |
| 5 | 4 | 4 | 4 | 3 | 7 | 7 | 5 | 6 | 3 | 4 | 5 | 7 | 4 | 4 | 5 | 5 | 6 | 3 | 3 | 2 |
| 6 | 6 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 3 | 5 | 7 | 7 | 4 | 4 | 7 | 5 | 6 | 5 | 3 | 2 |
| 7 | 5 | 3 | 7 | 6 | 7 | 7 | 7 | 5 | 5 | 6 | 4 | 4 | 6 | 6 | 5 | 4 | 7 | 7 | 4 | 5 |
| 8 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 5 | 5 | 7 | 6 | 5 | 5 | 7 | 5 | 6 | 5 | 3 | 3 |
| 9 | 5 | 5 | 7 | 1 | 7 | 7 | 5 | 7 | 6 | 7 | 6 | 7 | 6 | 6 | 7 | 6 | 5 | 6 | 5 | 2 |
| 10 | 6 | 2 | 3 | 5 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 6 | 6 | 3 | 7 | 7 | 4 | 4 | 3 | 5 |
| 11 | 4 | 3 | 6 | 5 | 7 | 7 | 7 | 7 | 5 | 6 | 7 | 6 | 4 | 5 | 6 | 5 | 6 | 6 | 5 | 6 |
| 12 | 6 | 5 | 6 | 2 | 7 | 7 | 6 | 7 | 4 | 6 | 6 | 6 | 5 | 4 | 4 | 5 | 7 | 4 | 6 | 2 |
| 13 | 6 | 5 | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 6 | 7 | 7 | 6 | 5 | 6 | 4 | 1 |
| 14 | 6 | 4 | 7 | 6 | 6 | 7 | 6 | 6 | 5 | 7 | 7 | 7 | 7 | 4 | 6 | 4 | 6 | 6 | 4 | 2 |
| 15 | 6 | 3 | 4 | 6 | 6 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 6 | 6 | 7 | 7 | 7 | 4 | 5 | 3 |
| 16 | 3 | 3 | 6 | 6 | 6 | 7 | 6 | 6 | 4 | 7 | 7 | 7 | 6 | 4 | 6 | 6 | 5 | 4 | 4 | 1 |
| 17 | 7 | 4 | 6 | 5 | 6 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 4 | 7 | 1 |
| 18 | 5 | 7 | 6 | 4 | . | . | . | . | . | . | . | . | . | . | . | . | 3 | 4 | 3 | 2 |
| 19 | 4 | 4 | 4 | 4 | 6 | 7 | 4 | 6 | 6 | 7 | 6 | 6 | 4 | 6 | 6 | 4 | 6 | 6 | 4 | 1 |
| 20 | 5 | 5 | 5 | 6 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 2 | 5 | 4 | 1 |
| 21 | 5 | 4 | 6 | 2 | 6 | 7 | 7 | 6 | 5 | 6 | 6 | 6 | 6 | 4 | 5 | 5 | 4 | 4 | 4 | 2 |
| 22 | 5 | 7 | 4 | 2 | 7 | 7 | 5 | 7 | 5 | 5 | 7 | 7 | 7 | 6 | 6 | 7 | 6 | 6 | 5 | 5 |
| 23 | 5 | 2 | 3 | 1 | 7 | 7 | 7 | 7 | 3 | 7 | 5 | 7 | 7 | 5 | 4 | 5 | 2 | 5 | 3 | 3 |
| 24 | 2 | 3 | 4 | 3 | 7 | 7 | 4 | 5 | 7 | 7 | 5 | 6 | 5 | 4 | 3 | 6 | 6 | 3 | 2 | 1 |
| 25 | 7 | 6 | 4 | 3 | 6 | 7 | 7 | 7 | 4 | 7 | 5 | 6 | 4 | 5 | 5 | 1 | 4 | 5 | 1 | 4 |
| 26 | 6 | 5 | 5 | 5 | 6 | 6 | 7 | 5 | 7 | 5 | 5 | 6 | 6 | 3 | 6 | 5 | 6 | 3 | 4 | 1 |
| 27 | 5 | 4 | 5 | 3 | 8 | 7 | 7 | 7 | 7 | 7 | 5 | 6 | 4 | 2 | 6 | 5 | 6 | 6 | 2 | 3 |

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| Obs | q8x5 | q8x6 | q8x7 | q8x8 | q8x9 | q8x10 | q8x11 | q9x1 | q9x2 | q9x3 | q9x4 | q9x5 | q9x6 | q9x7 | q9x8 | q9x9 | q9x10 | q9x11 | q8d1 | q8d2 |
|-----|------|------|------|------|------|-------|-------|------|------|------|------|------|------|------|------|------|------|-------|-------|------|------|
| 1  | 7 | 4 | 6 | 7 | 6 | 5 | 7 | 1 | 6 | 7 | 7 | 7 | 4 | 6 | 7 | 7 | 4 | 7 | 3 | 6 |
| 2  | 4 | 6 | 6 | 7 | 7 | 6 | 7 | 7 | 6 | 4 | 1 | 3 | 7 | 7 | 7 | 7 | 8 | 7 | 7 | 6 |
| 3  | 2 | 2 | 4 | 6 | 4 | 4 | 5 | 5 | 7 | 5 | 5 | 5 | 7 | 7 | 6 | 4 | 5 | 6 | 5 | 6 |
| 4  | 7 | 7 | 7 | 6 | 6 | 6 | 7 | 7 | 6 | 5 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
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| 6  | 3 | 5 | 5 | 6 | 6 | 4 | 5 | 6 | 7 | 4 | 3 | 5 | 7 | 7 | 5 | 5 | 4 | 5 | 3 | 3 |
| 7  | 6 | 7 | 7 | 6 | 2 | 2 | 4 | 7 | 7 | 3 | 5 | 4 | 6 | 7 | 7 | 3 | 3 | 7 | 6 | 6 |
| 8  | 5 | 6 | 6 | 6 | 5 | 4 | 6 | 5 | 6 | 3 | 3 | 3 | 6 | 7 | 6 | 6 | 6 | 6 | 1 | 1 |
| 9  | 5 | 6 | 7 | 6 | 6 | 4 | 5 | 5 | 5 | 2 | 2 | 5 | 5 | 6 | 7 | 2 | 4 | 4 | 7 | 7 |
| 10 | 4 | 5 | 6 | 6 | 2 | 4 | 6 | 6 | 7 | 4 | 4 | 5 | 7 | 6 | 7 | 4 | 4 | 7 | 7 | 7 |
| 11 | 5 | 4 | 5 | 5 | 4 | 5 | 6 | 6 | 5 | 5 | 5 | 5 | 5 | 8 | 5 | 6 | 5 | 6 | 6 | 6 |
| 12 | 6 | 5 | 6 | 6 | 6 | 7 | 6 | 7 | 5 | 4 | 2 | 2 | 6 | 6 | 6 | 7 | 7 | 5 | 6 | 7 |
| 13 | 2 | 6 | 6 | 5 | 7 | 6 | 5 | 6 | 7 | 6 | 1 | 4 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 |
| 14 | 4 | 5 | 5 | 5 | 6 | 5 | 6 | 5 | 5 | 6 | 1 | 4 | 5 | 7 | 5 | 4 | 5 | 6 | 6 | 7 |
| 15 | 5 | 6 | 7 | 4 | 4 | 4 | 5 | 7 | 7 | 3 | 3 | 3 | 7 | 7 | 3 | 4 | 5 | 5 | 5 | 6 |
| 16 | 5 | 4 | 4 | 6 | 7 | 7 | 5 | 6 | 5 | 5 | 1 | 1 | 6 | 6 | 6 | 6 | 5 | 5 | 2 | 7 |
| 17 | 1 | 4 | 6 | 6 | 5 | 6 | 7 | . | 4 | . | . | . | . | . | . | . | . | . | 5 | 7 |
| 18 | 5 | 6 | 6 | 4 | 5 | 5 | 5 | 2 | 6 | 4 | 4 | 4 | 6 | 4 | 4 | 4 | 5 | 5 | 6 | 6 |
| 19 | 4 | 5 | 4 | 5 | 5 | 4 | 6 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 6 | 5 | 7 | 6 | 5 |
| 20 | 3 | 4 | 4 | 4 | 4 | 6 | 5 | 4 | 6 | 5 | 4 | 3 | 5 | 5 | 6 | 4 | 5 | 5 | 4 | 7 |
| 21 | 1 | 6 | 5 | 6 | 6 | 5 | 7 | 7 | 6 | 6 | 3 | 4 | 6 | 6 | 6 | 5 | 5 | 7 | 3 | 6 |
| 22 | 5 | 5 | 4 | 3 | 1 | 3 | 6 | 6 | 7 | 3 | 1 | 4 | 2 | 5 | 2 | 3 | 4 | 6 | 5 | 6 |
| 23 | 1 | 3 | 3 | 2 | 1 | 1 | 5 | 7 | 6 | 7 | 1 | 1 | 3 | 7 | 4 | 1 | 5 | 5 | 2 | 6 |
| 24 | 2 | 2 | 5 | 6 | 6 | 5 | 6 | 5 | 6 | 5 | 1 | 1 | 6 | 4 | 4 | 1 | 4 | 7 | 3 | 6 |
| 25 | 1 | 1 | 6 | 4 | 1 | 1 | 5 | 7 | 7 | 2 | 1 | 1 | 7 | 4 | 1 | 5 | 5 | 2 | 7 | 6 |
| 26 | 5 | 4 | 5 | 5 | 6 | 5 | 6 | . | . | . | . | . | . | . | . | 3 | . | 7 | 6 | 6 |
| 27 | 1 | 6 | 7 | . | 4 | 4 | 6 | 7 | 4 | 2 | 3 | . | 7 | 4 | 1 | . | 5 | . | 6 | 4 |

| Obs | q8d3 | q8d4 | q8d5 | q9d1 | q9d2 | q9d3 | q9d4 | q9d5 | q8e1 | q8e2 | q8e3 | q8e4 | q9e1 | q9e2 | q9e3 | q9e4 | q8csm | q9csm | q10p1 | q10p2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 4 | 5 | 5 | 4 | 7 | 6 | 5 | 7 | 6 | 5 | 6 | 6 | 7 | 6 | 7 | 6 | 2 | 7 | 6 | 1 |
| 2 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 2 | 7 | 7 | 1 |
| 3 | 6 | 5 | 5 | 7 | 7 | 7 | 6 | 6 | 6 | 6 | 5 | 5 | 7 | 7 | 7 | 7 | 2 | 7 | 6 | . |
| 4 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 7 | 2 | 7 | 6 | . |
| 5 | 7 | 6 | 7 | 5 | 7 | 6 | 7 | 5 | 7 | 5 | 4 | 5 | 5 | 7 | 7 | 7 | 1 | 7 | 7 | . |
| 6 | 5 | 6 | 5 | 6 | 6 | 7 | 6 | 7 | 6 | 4 | 5 | 1 | 4 | 6 | 6 | 6 | 2 | 6 | 6 | . |
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| 8 | 4 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 5 | 6 | 5 | 7 | 5 | 2 | 6 | 5 | 3 |
| 9 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 7 | 6 | 2 | 7 | 2 | 5 |
| 10 | 7 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 6 | 6 | 6 | 7 | 6 | 6 | 7 | 2 | 7 | 5 | 7 |
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| 12 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 7 | 7 | 2 | 6 | 6 | . |
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| 17 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 2 | 7 | 4 | . |
| 18 | 7 | 7 | 4 | . | . | . | . | . | 5 | 7 | 6 | 7 | 5 | . | . | . | 2 | . | 5 | . |
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| 21 | 6 | 7 | 5 | 5 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 7 | 7 | 6 | 2 | 7 | 4 | 5 |
| 22 | 6 | 3 | 6 | 6 | 7 | 7 | 7 | 7 | 6 | 5 | 5 | 5 | 7 | 6 | 7 | 6 | 2 | 6 | 7 | 3 |
| 23 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 5 | 5 | 5 | 6 | 5 | 7 | 6 | 6 | 1 | 7 | 6 | 5 |
| 24 | 6 | 6 | 5 | 6 | 7 | 7 | 6 | 7 | 4 | 6 | 6 | 3 | 6 | 7 | 7 | 7 | 2 | 6 | 6 | 3 |
| 25 | 6 | 6 | 4 | 7 | 7 | 7 | 7 | 6 | 5 | 6 | 6 | 6 | 7 | 7 | 6 | 6 | 2 | 7 | 3 | 7 |
| 26 | 6 | 6 | 6 | 6 | 7 | 7 | 6 | 6 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 6 | 2 | 6 | 5 | . |
| 27 | 6 | 6 | 5 | 7 | 7 | 7 | 4 | 7 | 5 | 4 | 5 | 4 | 7 | 7 | 7 | 4 | 2 | 7 | 7 | 5 |

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| Obs | q10p3 | q10p4 | q10p5 | q10p6 | q10p7 | q10p8 | q10p9 | q10p10 | q10p11 | q11 | q12 | q13 | country | role | q10p2p | q10p3p | q10p9p |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 4 | 7 | 6 | . | 6 | 4 | 1 | 7 | 7 | 4 | 4 | 4 | 1 | 1 | 7 | 4 | 7 |
| 2 | . | 7 | 7 | . | 6 | 6 | 2 | 7 | 6 | 5 | 5 | 2 | 1 | 1 | 7 | . | 6 |
| 3 | 4 | 6 | 6 | . | 4 | 2 | 1 | 7 | 7 | 3 | 4 | 4 | 1 | 1 | . | 4 | 7 |
| 4 | 4 | 7 | 7 | 4 | 3 | 7 | 7 | 7 | 5 | 4 | 3 | 2 | 1 | 1 | . | 4 | 1 |
| 5 | . | 7 | 7 | . | . | 1 | 1 | 7 | 4 | 4 | 4 | 5 | 1 | 1 | . | . | 7 |
| 6 | 3 | 6 | 5 | 5 | 5 | 3 | 4 | 7 | 7 | 4 | 4 | 3 | 1 | 1 | . | 5 | 4 |
| 7 | . | 4 | 3 | . | 5 | 3 | 1 | 6 | 5 | 4 | 3 | 4 | 1 | 1 | . | 1 | 7 |
| 8 | 7 | 7 | 5 | 7 | 5 | 3 | 3 | 7 | 5 | 4 | 2 | 3 | 1 | 1 | 4 | 4 | 5 |
| 9 | 4 | 6 | 6 | 7 | 5 | 3 | 7 | 7 | 5 | 3 | 3 | 2 | 1 | 1 | 5 | 4 | 1 |
| 10 | 4 | 6 | 5 | . | 4 | 2 | 5 | 4 | 3 | 5 | 3 | 2 | 1 | 1 | 3 | 6 | 3 |
| 11 | 2 | 4 | 1 | 6 | 3 | . | 2 | 7 | 7 | 5 | 5 | 3 | 1 | 1 | 1 | 5 | 6 |
| 12 | 3 | 5 | 6 | 6 | 6 | 5 | 5 | 6 | 7 | 5 | 5 | 5 | 1 | 1 | 4 | . | 3 |
| 13 | . | 7 | 7 | . | 7 | 1 | 5 | 6 | 7 | 5 | 4 | 5 | 1 | 1 | . | . | 3 |
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| 15 | . | 5 | 6 | 1 | 5 | 5 | 1 | 7 | 5 | 4 | 4 | 3 | 1 | 1 | . | . | 7 |
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| 17 | . | 6 | 6 | 6 | 7 | 6 | 3 | 7 | 7 | 5 | 5 | 4 | 1 | 1 | . | . | 5 |
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| 19 | . | 6 | . | . | . | . | 6 | . | . | 5 | 5 | 1 | 2 | 1 | . | . | 2 |
| 20 | . | 4 | 4 | 1 | 4 | 3 | 2 | 6 | 5 | 4 | 4 | 3 | 2 | 1 | 3 | 6 | 6 |
| 21 | 2 | 4 | 3 | 6 | 5 | 2 | 1 | 6 | 4 | 3 | 3 | 3 | 2 | 1 | 5 | 6 | 7 |
| 22 | 2 | 7 | 7 | 2 | 7 | 4 | 3 | 7 | 5 | 5 | 2 | 2 | 2 | 1 | 3 | 7 | 5 |
| 23 | 1 | 6 | 7 | 3 | 7 | 6 | 2 | 6 | 7 | 4 | 5 | 5 | 2 | 1 | 5 | 4 | 6 |
| 24 | 4 | 3 | 5 | 5 | 5 | 2 | 1 | 7 | 7 | 5 | 4 | 4 | 2 | 1 | 1 | 7 | 7 |
| 25 | 1 | 5 | 3 | . | 5 | 1 | 5 | 7 | 7 | 4 | 3 | 5 | 2 | 1 | . | 5 | 3 |
| 26 | 3 | 6 | 6 | . | 5 | 3 | 4 | 5 | 5 | 5 | 4 | 3 | 2 | 1 | 3 | 5 | 4 |
| 27 | 3 | 6 | 6 | . | 7 | 1 | 4 | 7 | 7 | 3 | 4 | 4 | 2 | 1 | . | 5 | 4 |

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| Obs | q8d1p | q8d2p | q8d3p | q8d4p | q8d5p | V15 | V16 | V17 | V18 | V19 | V20 | V21 | V22 | V23 | V24 | V25 | V26 | V27 | V28 | V29 | V30 | V31 | V32 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 5 | 2 | 4 | 3 | 3 | 4 | 7 | 7 | 6 | 6 | 4 | 4 | 5 | 7 | 7 | 7 | 6 | 4 | 5 | 5 | 4 | 6 | 7 |
| 2 | 1 | 2 | 2 | 1 | 1 | 6 | 7 | 7 | 6 | 8 | 3 | 4 | 6 | 6 | 5 | 4 | 7 | 6 | L | 4 | 5 | 6 | 7 |
| 3 | 3 | 2 | 1 | 3 | 3 | 6 | 7 | 7 | 6 | 7 | 7 | 6 | 6 | 7 | 7 | 5 | 4 | 4 | 4 | 3 | 3 | 5 | 4 |
| 4 | 1 | 1 | 1 | 1 | 1 | 7 | 6 | 6 | 4 | 7 | 7 | 6 | 6 | 5 | 4 | 5 | 7 | 6 | 7 | 6 | 7 | 7 | 6 |
| 5 | 3 | 4 | 3 | 3 | 2 | 6 | 5 | 5 | 3 | 7 | 6 | 2 | 4 | 6 | 5 | 3 | 7 | 5 | 4 | 3 | 7 | 7 | 4 |
| 6 | 5 | 5 | 2 | 1 | 2 | 4 | 6 | 6 | 5 | 7 | 5 | 6 | 6 | 6 | 6 | 6 | 5 | 4 | 3 | 6 | 6 | 6 | 7 |
| 7 | 2 | 2 | 4 | 2 | 2 | 4 | 4 | 4 | 4 | 6 | 2 | 4 | 6 | 6 | 6 | 6 | 7 | 5 | 7 | 6 | 7 | 5 | 6 |
| 8 | 7 | 7 | 4 | 4 | 5 | 5 | 5 | 5 | 3 | 7 | 6 | 6 | 6 | 7 | 6 | 6 | 5 | 4 | 4 | 6 | 5 | 7 | 5 |
| 9 | 1 | 1 | 1 | 1 | 1 | 5 | 4 | 4 | 2 | 6 | 4 | 5 | 5 | 4 | 4 | 6 | 5 | 5 | 6 | 6 | 7 | 4 | 6 |
| 10 | 1 | 1 | 2 | 2 | 2 | 7 | 7 | 7 | 6 | 7 | 5 | 4 | 6 | 7 | 3 | 2 | 6 | 5 | 7 | 7 | 6 | 7 | 5 |
| 11 | 2 | 2 | 2 | 2 | 2 | 6 | 5 | 4 | 4 | 6 | 3 | 3 | 6 | 6 | 7 | 6 | 7 | 3 | 6 | 2 | 6 | 4 | 6 |
| 12 | 2 | 1 | 1 | 1 | 1 | 7 | 5 | 7 | 3 | 6 | 4 | 5 | 6 | 4 | 5 | 4 | 6 | 6 | 6 | 6 | 5 | 7 | 5 |
| 13 | 1 | 1 | 1 | 4 | 2 | 5 | 5 | 4 | 5 | 7 | 7 | 4 | 4 | 6 | 4 | 7 | 5 | 4 | 5 | 6 | 6 | 6 | 7 |
| 14 | 2 | 1 | 3 | 1 | 3 | 6 | 7 | 7 | 3 | 7 | 5 | 4 | 5 | 6 | 7 | 6 | 7 | 6 | 7 | 4 | 7 | 1 | 4 |
| 15 | 3 | 2 | 1 | 4 | 4 | 6 | 6 | 6 | 4 | 5 | 6 | 5 | 7 | 6 | 3 | 1 | 7 | 6 | 4 | 4 | 4 | 7 | 5 |
| 16 | 6 | 7 | 3 | 1 | 4 | 6 | 3 | 5 | 3 | 6 | 6 | 3 | 4 | 4 | 6 | 5 | 5 | 6 | 3 | 5 | 3 | 7 | 7 |
| 17 | 3 | 1 | 1 | 4 | 3 | 5 | 6 | 5 | 4 | 5 | 6 | 4 | 6 | 6 | 3 | 5 | 4 | 4 | 6 | 6 | 6 | 6 | 6 |
| 18 | 2 | 2 | 2 | 1 | 2 | 4 | 5 | 5 | 3 | 7 | 6 | 6 | 5 | 7 | 6 | 5 | 6 | 6 | 6 | 5 | 4 | 4 | 5 |
| 19 | 4 | 3 | 3 | 5 | 3 | 5 | 4 | 5 | 2 | 6 | 6 | 6 | 6 | 7 | 4 | 5 | 6 | 6 | 6 | 3 | 3 | 7 | 5 |
| 20 | 5 | 1 | 2 | 2 | 4 | 4 | 5 | 5 | 2 | 6 | 5 | 4 | 6 | 6 | 5 | 7 | 6 | 6 | 5 | 6 | 6 | 6 | 5 |
| 21 | 3 | 2 | 2 | 2 | 2 | 4 | 7 | 7 | 2 | 6 | 6 | 6 | 6 | 6 | 5 | 7 | 6 | 5 | 5 | 5 | 5 | 4 | 5 |
| 22 | 2 | 2 | 2 | 3 | 2 | 6 | 6 | 6 | 2 | 7 | 6 | 4 | 6 | 5 | 6 | 2 | 7 | 6 | 5 | 2 | 5 | 7 | 5 |
| 23 | 6 | 2 | 2 | 4 | 3 | 7 | 6 | 6 | 2 | 7 | 3 | 5 | 6 | 6 | 6 | 7 | 6 | 5 | 5 | 1 | 5 | 1 | 5 |
| 24 | 5 | 2 | 2 | 2 | 4 | 6 | 7 | 7 | 2 | 6 | 4 | 5 | 6 | 6 | 6 | 3 | 5 | 6 | 5 | 3 | 5 | 5 | 5 |
| 25 | 1 | 2 | 2 | 2 | 2 | 7 | 2 | 2 | 2 | 7 | 3 | 5 | 6 | 5 | 7 | 4 | 6 | 6 | 5 | 5 | 6 | 4 | 6 |
| 26 | 2 | 4 | 2 | 2 | 3 | 6 | 5 | 4 | 2 | 6 | 4 | 5 | 7 | 7 | 7 | 7 | 6 | 5 | 6 | 7 | 6 | 5 | 6 |
| 27 | | | | | | | | | | | | | | | | | | | | | | | |

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| Obs | V33 | V34 | V35 | V36 | V37 | V38 | V39 | V40 | V41 | V42 | V43 | V44 | V45 | V46 | V47 | V48 | V49 | V50 | V51 | V52 | V53 | V54 | V55 | V56 | V57 | V58 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 4 | 5 | 4 | 6 | 6 | 6 | 7 | 4 | 5 | 3 | 4 | 1 | 6 | 5 | 7 | 6 | 6 | 5 | 5 | 5 | 7 | 7 | 3 | 3 | 3 | 1 |
| 2 | 6 | 7 | 7 | 4 | 6 | 5 | 5 | 4 | 4 | 6 | 6 | 4 | 7 | 7 | 6 | 6 | 6 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 |
| 3 | 5 | 5 | 4 | 4 | 5 | 5 | 5 | 5 | 3 | 4 | 5 | 2 | 6 | 5 | 3 | 4 | 4 | 6 | 6 | 5 | 6 | 7 | 6 | 5 | 3 | 4 |
| 4 | 6 | 7 | 6 | 6 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 6 | 7 | 6 | 6 | 7 | 7 | 5 | 7 | 7 | 6 | 6 | 6 | 7 | 6 | 5 |
| 5 | 5 | 5 | 6 | 5 | 4 | 5 | 4 | 5 | 5 | 6 | 6 | 3 | 4 | 6 | 6 | 5 | 5 | 3 | 3 | 5 | 6 | 4 | 6 | 4 | 3 | 6 |
| 6 | 6 | 5 | 7 | 6 | 5 | 6 | 5 | 6 | 5 | 5 | 6 | 4 | 5 | 6 | 6 | 7 | 7 | 5 | 6 | 4 | 7 | 6 | 4 | 7 | 6 | 6 |
| 7 | 7 | 7 | 5 | 7 | 6 | 6 | 6 | 7 | 7 | 3 | 6 | 5 | 4 | 4 | 5 | 6 | 6 | 6 | 5 | 4 | 5 | 5 | 7 | 7 | 6 | 7 |
| 8 | 5 | 5 | 6 | 5 | 4 | 5 | 5 | 5 | 3 | 7 | 4 | 1 | 7 | 6 | 5 | 7 | 7 | 5 | 5 | 7 | 6 | 5 | 5 | 5 | 6 | 6 |
| 9 | 7 | 5 | 6 | 6 | 5 | 6 | 7 | 6 | 7 | 7 | 7 | 4 | 6 | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 6 | 6 | 2 | 7 | 7 | 5 |
| 10 | 5 | 7 | 5 | 3 | 6 | 4 | 7 | 6 | 4 | 4 | 4 | 5 | 5 | 7 | 7 | 4 | 7 | 5 | 4 | 6 | 5 | 6 | 3 | 3 | 1 | 5 |
| 11 | 2 | 5 | 6 | 2 | 5 | 5 | 7 | 5 | 6 | 6 | 6 | 5 | 7 | 6 | 5 | 6 | 5 | 6 | 5 | 3 | 6 | 6 | 5 | 3 | 5 | 4 |
| 12 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 1 | 3 | 6 | 7 | 7 | 6 | 6 | 6 | 6 | 5 | 6 | 5 | 6 | 5 | 6 |
| 13 | 6 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 5 | 5 | 5 | 7 | 7 | 7 | 6 | 6 | 6 | 6 | 5 | 6 | 7 | 6 | 7 | 6 | 5 | 7 |
| 14 | 7 | 7 | 7 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 2 | 7 | 7 | 6 | 7 | 7 | 3 | 4 | 7 | 4 | 6 | . | . | . | . |
| 15 | 6 | 6 | 3 | 3 | 4 | 7 | 4 | 4 | 5 | 6 | 4 | 2 | 3 | 6 | 7 | 6 | 7 | 3 | 4 | 4 | 7 | 6 | 3 | 4 | 1 | 6 |
| 16 | 3 | 4 | 4 | 6 | 6 | 6 | 5 | 5 | 6 | 5 | 6 | 2 | 7 | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 7 | 6 | 7 | 6 | 5 | 3 |
| 17 | 4 | 6 | 5 | 5 | 7 | 5 | 5 | 5 | 5 | 6 | 7 | 5 | 3 | 5 | 7 | 7 | 6 | 6 | 5 | 7 | 5 | 4 | 5 | 7 | 4 | 6 |
| 18 | 7 | 7 | 6 | 6 | 6 | 6 | 6 | 7 | 4 | 7 | 7 | 2 | 7 | 7 | 6 | 6 | 6 | 3 | 6 | 6 | 7 | 5 | 4 | 4 | 5 | 5 |
| 19 | 6 | 6 | 4 | 5 | 4 | 4 | 7 | 5 | 6 | 5 | 6 | 4 | 6 | 5 | 6 | 5 | 5 | 3 | 7 | 6 | 6 | 5 | 7 | 5 | 4 | 2 |
| 20 | 5 | 6 | 5 | 3 | 5 | 7 | 5 | 4 | 6 | 6 | 5 | 5 | 4 | 4 | 4 | 6 | 5 | 3 | 4 | 7 | 5 | 5 | 4 | 6 | 4 | 4 |
| 21 | 4 | 6 | 3 | 4 | 6 | 6 | 7 | 7 | 6 | 6 | 6 | 4 | 5 | 6 | 4 | 5 | 5 | 7 | 7 | 6 | 6 | 5 | 7 | 6 | 4 | 4 |
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| 23 | 5 | 6 | 4 | 6 | 5 | 5 | 5 | 5 | 6 | 6 | 7 | 4 | 4 | 6 | 7 | 7 | 6 | 3 | 7 | 7 | 5 | 5 | 3 | 5 | 1 | 2 |
| 24 | 6 | 5 | 5 | 4 | 4 | 4 | 6 | 5 | 7 | 6 | 6 | 4 | 5 | 7 | 6 | 4 | 6 | 7 | 5 | 6 | 6 | 5 | 6 | 5 | 3 | 6 |
| 25 | 5 | 5 | 3 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 2 | 7 | 6 | 7 | 5 | 7 | 6 | 5 | 3 | 2 | 2 | 4 | 4 | 3 | 4 |
| 26 | 4 | 5 | 5 | 4 | 4 | 5 | 6 | 6 | 5 | 6 | 7 | 2 | 6 | 6 | 4 | 7 | 6 | 7 | 5 | 5 | 6 | 3 | 3 | 4 | 1 | 6 |
| 27 | 7 | 7 | 4 | 2 | 5 | 4 | 6 | 6 | 6 | 4 | 6 | 3 | 7 | 6 | 6 | 7 | 7 | 7 | 5 | 5 | 6 | 4 | 5 | 4 | 3 | 6 |

| Obs | V59 | V60 | V61 | V62 | V63 | V64 | V65 | V66 | V67 | V68 | V73 | V74 | V75 | V76 | V77 | V69 | V70 | V71 | V72 | V1 | V2 | V3 | V4 | V5 | V6 | V7 | V8 | V9 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 4 | 4 | 7 | 7 | 4 | 6 | 7 | 6 | 5 | 7 | 5 | 2 | 4 | 3 | 3 | 6 | 5 | 6 | 6 | 6 | 7 | 4 | 7 | 6 | . | 6 | 4 | 7 |
| 2 | 7 | 4 | 1 | 4 | 6 | 6 | 7 | 7 | 6 | 7 | 1 | 2 | 2 | 1 | 1 | 7 | 7 | 7 | 7 | 7 | 7 | . | 7 | 7 | . | 6 | 6 | 6 |
| 3 | 4 | 5 | 5 | 2 | 2 | 4 | 6 | 4 | 4 | 5 | 3 | 2 | 2 | 3 | 3 | 6 | 6 | 5 | 5 | 6 | . | 4 | 6 | 6 | . | 4 | 2 | 7 |
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| 5 | 3 | 3 | 2 | 2 | 6 | . | 5 | 4 | 4 | 6 | 3 | 4 | 1 | 1 | 2 | 7 | 5 | 4 | 6 | 7 | . | . | 6 | 7 | . | . | 1 | 7 |
| 6 | 5 | 3 | 2 | 3 | 5 | 5 | 6 | 6 | 4 | 5 | 5 | 5 | 3 | 3 | 2 | 6 | 4 | 5 | 5 | 6 | . | 5 | 6 | 5 | 5 | 5 | 3 | 4 |
| 7 | 7 | 4 | 5 | 6 | 7 | 7 | 6 | 2 | 2 | 6 | 2 | 2 | 2 | 2 | 2 | 4 | 2 | 3 | 1 | 4 | 4 | . | 4 | 3 | . | 5 | 3 | 7 |
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| 9 | 7 | 3 | 3 | 5 | 6 | 7 | 6 | 6 | 6 | 6 | 1 | 1 | 1 | 1 | 1 | 6 | 5 | 7 | 5 | 2 | 3 | 4 | 6 | 6 | 7 | 5 | 3 | 1 |
| 10 | 5 | 3 | 2 | 4 | 5 | 6 | 6 | 2 | 4 | 5 | 1 | 1 | 1 | 1 | 1 | 7 | 7 | 7 | 5 | 5 | 1 | 4 | 6 | 5 | . | 4 | 2 | 3 |
| 11 | 6 | 5 | 5 | 5 | 4 | 6 | 5 | 4 | 4 | 6 | 2 | 1 | 2 | 2 | 2 | 5 | 6 | 6 | 6 | 7 | 4 | 6 | 4 | 1 | 6 | 3 | . | 6 |
| 12 | 4 | 6 | 6 | 6 | 5 | 6 | 6 | 6 | 5 | 5 | 2 | 2 | 2 | 2 | 1 | 6 | 6 | 7 | 6 | 6 | . | 5 | 5 | 6 | 6 | 6 | 5 | 3 |
| 13 | 6 | 4 | 2 | 2 | 6 | 5 | 5 | 7 | 7 | 6 | 1 | 1 | 1 | 1 | 2 | 7 | 6 | 7 | 7 | 7 | . | . | 5 | 6 | . | 7 | . | 3 |
| 14 | 5 | 4 | 1 | 4 | 6 | 7 | 4 | 6 | 6 | 5 | 2 | 1 | 1 | 2 | 3 | 6 | 7 | 7 | 6 | 6 | 7 | 5 | 4 | 5 | . | 5 | 7 | 7 |
| 15 | 6 | 5 | 2 | 5 | 5 | 4 | 6 | 4 | 5 | 5 | 3 | 1 | 1 | 1 | 4 | 7 | 3 | 5 | 7 | 6 | . | . | 6 | 6 | 1 | 5 | 5 | 5 |
| 16 | 7 | 4 | 3 | 5 | 6 | 6 | 6 | 7 | 4 | 7 | 2 | 2 | 3 | 4 | 4 | 3 | 6 | 4 | 2 | 4 | 3 | 5 | 6 | 5 | . | 5 | 3 | 3 |
| 17 | 4 | 7 | 1 | 1 | 4 | 4 | 4 | 5 | 7 | 7 | 6 | 1 | 2 | 1 | 3 | 5 | 4 | 7 | 7 | 5 | 5 | 7 | 4 | 6 | . | 7 | 6 | 6 |
| 18 | 4 | 3 | 3 | 5 | 6 | 5 | 5 | 5 | 7 | 5 | 3 | 1 | 3 | 2 | 2 | 5 | 7 | 6 | 5 | 6 | 3 | . | 7 | 6 | . | 6 | 3 | 3 |
| 19 | 6 | 4 | 4 | 4 | 5 | 6 | 6 | 4 | 5 | 6 | 2 | 2 | 2 | 2 | 3 | 5 | 5 | 7 | 6 | 4 | 5 | . | 6 | . | 1 | 4 | 2 | 5 |
| 20 | 5 | 4 | 3 | 6 | 4 | 4 | 4 | 6 | 4 | 5 | 6 | 3 | 3 | 1 | 4 | 7 | 6 | 5 | 5 | 4 | 3 | 5 | 6 | 4 | 6 | 5 | 4 | 6 |
| 21 | 4 | 2 | 1 | 5 | 3 | 5 | 3 | 5 | 4 | 7 | 5 | 1 | 2 | 2 | 2 | 6 | 5 | 4 | 4 | 5 | 5 | 6 | 4 | 3 | 2 | 7 | 6 | 7 |
| 22 | 2 | 5 | 2 | 1 | 2 | 4 | 2 | 3 | 6 | 6 | 3 | 2 | 3 | 5 | 2 | 5 | 6 | 7 | 5 | 4 | 3 | . | 7 | 7 | 3 | 7 | 2 | 3 |
| 23 | 5 | 3 | 1 | 2 | 5 | 3 | 6 | 2 | 5 | 5 | 2 | 2 | 2 | 2 | 2 | 4 | 5 | 5 | 6 | 7 | 1 | 5 | 6 | 5 | 5 | 5 | 4 | 6 |
| 24 | 3 | 2 | 2 | 1 | 3 | 5 | 4 | 6 | 3 | 6 | 6 | 3 | 2 | 2 | 3 | 5 | 5 | 6 | 3 | 6 | . | . | 3 | 3 | . | 5 | 6 | 3 |
| 25 | 5 | 1 | 1 | 1 | 2 | 6 | 3 | 1 | 1 | 5 | 5 | 5 | 2 | 2 | 4 | 6 | 6 | 6 | 6 | 3 | . | 7 | 5 | 6 | . | 5 | 2 | 4 |
| 26 | 5 | 4 | 5 | 4 | 1 | 5 | 2 | 6 | 5 | 6 | 1 | 2 | 2 | 2 | 2 | 6 | 6 | 6 | 5 | 5 | . | 5 | 5 | 6 | . | 5 | 1 | 4 |
| 27 | 6 | 2 | 1 | 1 | 6 | 7 | 6 | 4 | 4 | 6 | 2 | 4 | 2 | 2 | 3 | 5 | 4 | 5 | 4 | 7 | 3 | 5 | 6 | 6 | . | 7 | 1 | 4 |

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| Obs | V10 | V11 | V14 | V13 | V12 | py | ry | h | rstudent | nscores | n | p | hcutoff | pvalue |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 7 | 7 | 5.6 | 5.6 | 5.6 | 5.48045 | 0.11955 | 0.19117 | 0.11856 | -0.00000 | 199 | 16 | 0.16080 | 0.90576 |
| 2 | 7 | 6 | 7.0 | 7.0 | 2.8 | 5.25742 | -2.45742 | 0.16471 | -2.44171 | -1.91451 | 199 | 16 | 0.16080 | 0.01557 |
| 3 | 7 | 7 | 4.2 | 5.6 | 5.6 | 5.34238 | 0.25762 | 0.17766 | 0.25342 | 0.15379 | 199 | 16 | 0.16080 | 0.80023 |
| 4 | 7 | 5 | 5.6 | 4.2 | 2.8 | 5.32507 | -2.52507 | 0.07589 | -2.38332 | -2.12805 | 199 | 16 | 0.16080 | 0.01819 |
| 5 | 7 | 4 | 5.6 | 5.6 | 7.0 | 4.73765 | 2.26235 | 0.17755 | 2.25958 | 2.28655 | 199 | 16 | 0.16080 | 0.02503 |
| 6 | 7 | 7 | 5.6 | 4.2 | 4.2 | 5.52903 | -1.32903 | 0.17711 | -1.31357 | -1.11077 | 199 | 16 | 0.16081 | 0.19065 |
| 7 | 6 | 5 | 5.6 | 4.2 | 5.6 | 5.61490 | -0.01490 | 0.18181 | -0.01469 | -0.08365 | 199 | 16 | 0.16080 | 0.98829 |
| 8 | 7 | 5 | 5.6 | 2.8 | 4.2 | 4.98281 | -0.78281 | 0.22169 | -0.79288 | -0.78350 | 199 | 16 | 0.16080 | 0.42888 |
| 9 | 7 | 5 | 4.2 | 4.2 | 2.8 | 5.32419 | -2.52419 | 0.08879 | -2.39984 | -2.00987 | 199 | 16 | 0.16080 | 0.01741 |
| 10 | 4 | 3 | 4.2 | 4.2 | 2.8 | 5.16214 | -2.36214 | 0.21348 | -2.41787 | -1.83391 | 199 | 16 | 0.16080 | 0.01660 |
| 11 | 7 | 7 | 7.0 | 7.0 | 4.2 | 4.71282 | -0.51282 | 0.16481 | -0.50084 | -0.55663 | 199 | 16 | 0.16080 | 0.61709 |
| 12 | 6 | 7 | 7.0 | 7.0 | 7.0 | 4.56975 | 2.43025 | 0.07122 | 2.28490 | 2.53918 | 199 | 16 | 0.16080 | 0.02347 |
| 13 | 6 | 7 | 7.0 | 7.0 | 7.0 | 5.61128 | 1.38872 | 0.17479 | 1.37128 | 1.34763 | 199 | 16 | 0.16080 | 0.17198 |
| 14 | 6 | 6 | 7.0 | 5.6 | 5.6 | 5.50932 | 0.09068 | 0.16236 | 0.08836 | -0.01393 | 199 | 16 | 0.16080 | 0.92969 |
| 15 | 7 | 5 | 5.6 | 5.6 | 4.2 | 6.42416 | -2.22416 | 0.15706 | -2.19231 | -1.70129 | 199 | 16 | 0.16080 | 0.02963 |
| 16 | 7 | 7 | 5.6 | 4.2 | 4.2 | 3.68812 | 0.51188 | 0.17890 | 0.50420 | 0.38532 | 199 | 16 | 0.16080 | 0.61473 |
| 17 | 7 | 7 | 5.6 | 7.0 | 5.6 | 4.92096 | 0.67904 | 0.17113 | 0.66609 | 0.60611 | 199 | 16 | 0.16080 | 0.50620 |
| 18 | 6 | 6 | 5.6 | 7.0 | 2.8 | 5.51019 | -2.71019 | 0.11158 | -2.61803 | -2.53918 | 199 | 16 | 0.16080 | 0.00959 |
| 19 | . | . | 7.0 | 7.0 | 1.4 | 3.94787 | -2.54787 | 0.10642 | -2.44784 | -2.28655 | 199 | 16 | 0.16080 | 0.01532 |
| 20 | 6 | 5 | 5.6 | 5.6 | 4.2 | 3.82950 | 0.37050 | 0.16153 | 0.36099 | 0.34069 | 199 | 16 | 0.16080 | 0.71852 |
| 21 | 6 | 4 | 5.6 | 4.2 | 4.2 | 4.74254 | -0.54254 | 0.21519 | -0.54668 | -0.60611 | 199 | 16 | 0.16080 | 0.58527 |
| 22 | 7 | 5 | 4.2 | 5.6 | 2.8 | 5.06853 | -2.26853 | 0.13879 | -2.21281 | -1.76373 | 199 | 16 | 0.16080 | 0.02815 |
| 23 | 6 | 7 | 7.0 | 5.6 | 7.0 | 5.35050 | 1.64950 | 0.20342 | 1.66225 | 1.64485 | 199 | 16 | 0.16080 | 0.09818 |
| 24 | 7 | 7 | 5.6 | 5.6 | 5.6 | 5.36313 | 0.23687 | 0.16572 | 0.23132 | 0.13971 | 199 | 16 | 0.16080 | 0.81732 |
| 25 | 7 | 7 | 7.0 | 4.2 | 7.0 | 6.64042 | 0.35958 | 0.17817 | 0.35388 | 0.31132 | 199 | 16 | 0.16080 | 0.72384 |
| 26 | 5 | 5 | 4.2 | 5.6 | 4.2 | 4.07387 | 0.12613 | 0.18502 | 0.12461 | 0.01393 | 199 | 16 | 0.16080 | 0.90097 |
| 27 | 7 | 7 | 5.6 | 5.6 | 5.6 | 5.25337 | 0.34663 | 0.20112 | 0.34599 | 0.28222 | 199 | 16 | 0.16080 | 0.72975 |

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# APPENDIX F

Structural equation modeling

# Original manifest variables

## PRODUCT QUALITY

Hotel accessibility      V15- The hotel is easily accessible.

**Pleasant setting**      **V16- The hotel's setting is pleasant.**

Visually appealing      V17- The hotel is visually appealing.

**Unique facilities**      **V18- The hotel's facilities are unique.**

Clean facilities      V19- The hotel's facilities are clean.

**Ample parking**      **V20- The hotel has ample car parking.**

Technical equipment      V21- The hotel has state-of-the-art technical equipment.

**Meeting room furnishing**      **V22- Meeting rooms are well-furnished.**

Guest room furnishing      V23- Guest rooms are well-furnished.

**Spacious guest rooms**      **V24- Guest rooms are spacious.**

Leisure facilities      V25- The hotel has good facilities for group leisure activities.

## SERVICE QUALITY

Knowledgeable sales staff      V26- The sales staff are knowledgeable about meeting planner requirements.

**Efficient reservation system**      **V27- The hotel has an efficient reservation system.**

Prompt answers      V28- Meeting space inquiries are answered promptly.

**Prior information used**      **V29- The hotel uses prior meeting information to help meeting planners organise their next function.**

Accurate recording      V30- Meeting requirements are accurately recorded.

**Efficient check-in/out**      **V31- Group check-in and check-out is efficient.**

Professional appearance      V32- Employees have a professional appearance.

**Continuous improvement**      **V33- The hotel is continually improving its offerings.**

**Staff expertise**      V34- Hotel staff have a high level of expertise in handling meetings.

**Attention to details**      **V35- Employees pay attention to details.**

Variety of food      V36- There is an excellent variety of food offerings.

**F & B creativity**      **V37- The hotel is creative in its food and beverage offerings.**

Food quality      V38- The food quality is of a high standard.

**On-time F & B functions**      **V39- Food and beverage functions are served on time.**

Consistent service delivery      V40- The hotel is consistent in the delivery of its services.

**Agreements met**      **V41- The agreements made with the sales department are fully met by the hotel's operating departments.**

Understandable bills      V42- Bills are easy to understand.

**Accurate bills**      **V43- Bills are accurate.**

Post-event review      V44- The hotel conducts a comprehensive post-event review session with meeting planners.

**Hotel safety**      **V45- The hotel is a safe place.**

## RELATIONSHIP QUALITY

| | |
|---|---|
| Fair negotiations | V46- The hotel is fair during negotiations. |
| **Staff reliability** | **V47- If hotel staff say they will do something, they do it.** |
| Relationships of trust | V48- The relationships that meeting planners have with the staff at this hotel are based on trust. |
| **Good working relationships** | **V49- Hotel staff have good working relationships with meeting planners.** |
| Personalised greeting | V50- Employees greet regular meeting planners by name. |
| **Accessible management** | **V51- Management is easily accessible.** |
| Departmental teamwork | V52- The various departments of the hotel work well together. |
| **Courteous employees** | **V53- Employees are courteous.** |
| Employees enjoy work | V54- Employees seem to enjoy working at this hotel. |
| **Low staff turnover** | **V55- The hotel has low staff turnover.** |
| Business appreciated | V56- The business that meeting planners bring to this hotel is appreciated. |
| **MP advice sought** | **V57- The hotel seeks meeting planners' advice in order to improve their service and product offerings.** |


## EXTRA BENEFITS

| | |
|---|---|
| Space availability | **V58- During busy periods, the hotel does everything possible to make space available for the functions of its regular meeting planners.** |
| VIP upgrades | V59- The hotel will provide upgrades for the VIP clients of its regular meeting planners. |
| **Frequent stayer programme** | **V60- The hotel has an attractive frequent stayer programme.** |
| Gifts given | V61- To show appreciation for meeting planners' business, the hotel occasionally gives them gifts. |
| **Hospitality events** | **V62- The hotel invites its regular meeting planners to hospitality events.** |
| Service customisation | V63- The hotel is willing to customise its services in order to fulfill the requirements of its regular meeting planners. |
| **Hotel reputation** | **V64- The hotel has a good reputation with meeting planners.** |
| MPs take pride | V65- Meeting planners take pride in booking meetings at this hotel. |
| **Good citizen** | **V66- The hotel has the reputation as a 'good citizen' in the local community.** |
| Environmental concern | V67- The hotel is concerned about the environment. |
| **Quality name/brand** | **V68- The hotel's name/brand stands for quality.** |

## PROBLEM RESOLUTION

Problem solving attitude      **V69-** **Hotel employees communicate the attitude that meeting planner problems are important to them.**

Errors quickly rectified      V70- When the hotel makes an error, they are quick to rectify it.

**Problems resolved well**      **V71-** **The hotel resolves problems well.**

Empowered employees      V72- Employees have the authority to deal with problems.


## CUSTOMER COSTS

Reasonable prices      V73- Prices charged are reasonable.

**No hidden costs**      **V74-** **There are no hidden costs.**

Fair contract terms      V75- The terms of the contract are fair.

**Little risk**      **V76-** **Meeting planners incur little risk booking meetings at this hotel.**

Hassle-free business      V77-Doing business with this hotel is hassle-free.

# Goodness-of-fit Indexes

The chi-square value for the model was not statistically significant since $\chi^2$

(8)=12.1124, p-value=0.1463. When the proper assumptions are met, this chi-square

statistic may be used to test the null hypothesis that the model fits the data. In practice,

however, the statistic is very sensitive to sample size and will very often result in the

rejection of a well-fitting model. Therefore, reliance on the chi-square test as the sole

measure of fit is not recommended (Bagozzi and Foxall, 1996). Hair *et al* (1998)

discuss an alternative to this, called the normed chi-square, which is the ratio of the

chi-square divided by the degrees of freedom. The ideal normed chi-square is between

1 and 2. A model that may be 'overfitted' and may capitalize on chance characteristics

of the sample has a normed chi-square less than 1.0. A model that is not representative

of the observed data and needs improvement has a normed chi-square greater than 2.

The normed chi- square for this model was 1.51405, which is within the bounds.

Bentler and Bonett's (1980) normed-fit index (NFI) has been proposed as another

alternative to the chi-square test. According to Hair *et al* (1998), the normed-fit index

(NFI) is a relative comparison of the proposed model to the null model. Values of this

index range from 0 to 1, with values over 0.90 indicative of an acceptable fit. For this

model, the NFI was 0.9846. The non-normed fit index (NNFI) has been shown to

better reflect model fit at all sample sizes (Bentler, 1989; Anderson and Gerbing,

1988; Marsh, Balla and McDonald, 1988). NNFI values over 0.9 are viewed

favorably. For this model, the NNFI was 0.9753. Bentler's (1989) comparative fit

index (CFI) provides an accurate assessment of fit regardless of sample size. Values

over 0.9 indicate a relatively good fit. For this model, the CFI was 0.9945.

The parsimony ratio (PR) is a measure of a model's parsimony, which refers to a model's simplicity. The principal of parsimony states that when several theoretical explanations are equally satisfactory in accounting for some phenomenon, the preferred explanation is the one that is least complicated (the one that makes the fewest assumptions). The parsimony ratio (PR) for the initial theoretical model is 0.22. When choosing between two models that display an acceptable and similar fit, the more desirable model will be the one with the higher parsimony ratio. The parsimonious fit index (PNFI) simultaneously reflects both the fit and the parsimony of the model. Higher values of the PNFI indicate a more desirable model. The parsimonious fit index (PNFI) for our model is 0.2188. All together, these indices provide evidence that the structural model fit the data fairly well.

However, some of SAS's modification indices indicated that the model could be improved. Therefore, the model was modified and the final model was obtained (Figure 4.5). In this final model, $\chi^2$ (12)=12.2467, p-value=0.4261, NFI=0.9844, NNFI=0.9990, and CFI=0.9997. In addition, another measure of absolute fit was considered, the goodness-of-fit index (GFI). It is a measure ranging in value from 0 (poor fit) to 1.0 (perfect fit). It represents the overall degree of fit but is not adjusted for the degrees of freedom. Higher values of the GFI indicate better fit. The adjusted goodness-of-fit index (AGFI) is an extension of the GFI, adjusted by the degrees of freedom. A recommended acceptance level is a value greater than or equal to 0.90. The GFI and AGFI for the final model were 0.9873 and 0.9525, respectively.

Standardized factor loadings for the indicator variables of the final model are also

presented in Figure 4.5. The SAS System's CALIS procedure provides approximate

standard errors for these coefficients which allow large-sample t tests of the

population. T tests determine if the items are good indicators of a particular scale

(convergent validity). The t scores obtained for the coefficients in the final model

range from 1.4938 through 10.0356, indicating that all factor loadings were significant

$(p < .10)$. This finding provides evidence supporting the convergent validity of the

indicators (Anderson and Gerbing, 1988). None of the standard errors for the factor

loadings and path coefficients are near zero. In addition, the Parsimony Ratio (PR)

was 0.3333 and the Parsimonious Fit Index (PFI) was 0.3281.

```
options linesize=110;

    data d1;
infile 'e:\again3.dat' DLM ='09'x MISSOVER LRECL=500;

input id q1 q2 q2p1 q2p2 q2p3 q2p4 q3 q3a q4 q4a q5 q5a q6 q7p1 q7p2 q7p3 q7p4 q7p5
q7p6 q7p7 q7p8 q7p9 q7p10 q7p11 q7p12 q7p13 q7p14 q7p15 q7p16 q7p17 q8p1
q8p2 q8p3 q8p4 q8p5 q8p6 q8p7 q8p8 q8p9 q8p10 q8p11 q9p1 q9p2 q9p3 q9p4 q9p5
q9p6 q9p7 q9p8 q9p9 q9p10 q9p11 q8s1 q8s2 q8s3 q8s4 q8s5 q8s6 q8s7 q8s8 q8s9
q8s10 q8s11 q8s12 q8s13 q8s14 q8s15 q8s16 q8s17 q8s18 q8s19 q8s20 q9s1 q9s2
q9s3 q9s4 q9s5 q9s6 q9s7 q9s8 q9s9 q9s10 q9s11 q9s12 q9s13 q9s14 q9s15 q9s16
q9s17 q9s18 q9s19 q9s20 q8r1 q8r2 q8r3 q8r4 q8r5 q8r6 q8r7 q8r8 q8r9 q8r10
q8r11 q8r12 q9r1 q9r2 q9r3 q9r4 q9r5 q9r6 q9r7 q9r8 q9r9 q9r10 q9r11 q9r12
q8x1 q8x2 q8x3 q8x4 q8x5 q8x6 q8x7 q8x8 q8x9 q8x10 q8x11 q9x1 q9x2 q9x3 q9x4
q9x5 q9x6 q9x7 q9x8 q9x9 q9x10 q9x11 q8d1 q8d2 q8d3 q8d4 q8d5 q9d1 q9d2 q9d3
q9d4 q9d5 q8e1 q8e2 q8e3 q8e4 q9e1 q9e2 q9e3 q9e4 q8csm q9csm q10p1 q10p2
q10p3 q10p4 q10p5 q10p6 q10p7 q10p8 q10p9 q10p10 q10p11 q11 q12 q13 country
role;

if role='1' ;
if id^='2';
if id^='67';
if id^='69';

MPQ=V16+V17+V18;
MSQ=V42+V43+V44+V45;
MRQ=V46+V48+V49;
MEB=V58+V59+V63;
MPR=V70+V71;
MCC=V73+V74;

proc corr data=d1 nomiss noprob  outp=corrcorr;
VAR V12-V14 MPQ MSQ MRQ MEB MPR MCC;
run;
```

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```
PROC CALIS data=corrcorr COVARIANCE CORR RESIDUAL MODIFICATION MAXITER=100000;
LINEQS

MPQ=0.8932687 F2+ EMPQ,
MSQ=0.88847116 F3+ EMSQ,
MRQ=0.90017165 F4+ EMRQ,
MEB=0.8491549 F5+ EMEB,
MPR=0.93459082 F6+ EMPR,
MCC=0.88694137 F7+ EMCC,

V12=PV12V13 V13+PV12V14 V14+ E12,
V13=PV13F4 F4+PV13F2 F2 +PV13F7 F7 +E13,
V14= PV14F4 F4+ PV14F6 F6+ PV14F7 F7 +PV14V13 V13+E14;

COV
F2 F3=CF2F3,
F2 F4=CF2F4,
F2 F5=CF2F5,
F2 F6=CF2F6,
F2 F7=CF2F7,
F3 F4=CF3F4,
F3 F5=CF3F5,
F3 F6=CF3F6,
F3 F7=CF3F7,

F4 F5=CF4F5,
F4 F6=CF4F6,
F4 F7=CF4F7,

F5 F6=CF5F6,
F5 F7=CF5F7,
```

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```
STD
EMPQ=1.9494899,
EMSQ=3.734649,
EMRQ=1.4889643,
EMEB=2.7256928,
EMPR=0.605162622,
EMCC=1.2962615,
F2-F7=VARF2-VARF7,
E12-E14=VARE12-VARE14;


VAR V12-V14 MPQ MSQ MRQ MEB MPR MCC;


RUN;
```

The CORR Procedure

9 Variables: V12 V13 V14 MPQ MSQ MRQ MEB MPR MCC

Simple Statistics

| Variable | N | Mean | Std Dev | Sum | Minimum | Maximum |
|---|---|---|---|---|---|---|
| V12 | 206 | 5.17864 | 1.57466 | 1067 | 1.40000 | 7.00000 |
| V13 | 206 | 5.81748 | 1.08456 | 1198 | 1.40000 | 7.00000 |
| V14 | 206 | 6.08932 | 0.95222 | 1254 | 2.80000 | 7.00000 |
| MPQ | 206 | 16.59223 | 3.10605 | 3418 | 6.00000 | 21.00000 |
| MSQ | 206 | 21.54854 | 4.21091 | 4439 | 11.00000 | 28.00000 |
| MRQ | 206 | 17.64563 | 2.80168 | 3635 | 7.00000 | 21.00000 |
| MEB | 206 | 16.32524 | 3.12598 | 3363 | 6.00000 | 21.00000 |
| MPR | 206 | 11.83495 | 2.18687 | 2438 | 2.00000 | 14.00000 |
| MCC | 206 | 4.81068 | 2.46499 | 991.00000 | 2.00000 | 14.00000 |

Pearson Correlation Coefficients, N = 206

| | V12 | V13 | V14 | MPQ | MSQ | MRQ | MEB | MPR | MCC |
|---|---|---|---|---|---|---|---|---|---|
| V12 | 1.00000 | 0.49059 | 0.55265 | 0.18113 | 0.21527 | 0.30345 | 0.30962 | 0.28314 | -0.22651 |
| V13 | 0.49059 | 1.00000 | 0.69263 | 0.40352 | 0.36404 | 0.41655 | 0.33154 | 0.47591 | -0.51586 |
| V14 | 0.55265 | 0.69263 | 1.00000 | 0.33564 | 0.39259 | 0.49793 | 0.41431 | 0.52107 | -0.33858 |
| MPQ | 0.18113 | 0.40352 | 0.33564 | 1.00000 | 0.32040 | 0.25238 | 0.33074 | 0.24571 | -0.17833 |
| MJQ | 0.21527 | 0.36404 | 0.39259 | 0.32040 | 1.00000 | 0.56276 | 0.52854 | 0.53113 | -0.48387 |
| MRQ | 0.30345 | 0.41655 | 0.49793 | 0.25238 | 0.56276 | 1.00000 | 0.57578 | 0.56365 | -0.41096 |
| MEB | 0.30962 | 0.33154 | 0.41431 | 0.33074 | 0.52854 | 0.57578 | 1.00000 | 0.52024 | -0.39966 |

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The CORR Procedure

Pearson Correlation Coefficients, N = 206

|      | V12 | V13 | V14 | MPQ | MSQ | MRQ | MEB | MPR | MCC |
|------|------|------|------|------|------|------|------|------|------|
| MPR  | 0.28314 | 0.47591 | 0.52107 | 0.24571 | 0.53113 | 0.56365 | 0.:2024 | 1.00000 | -0.56416 |
| MCC  | -0.22651 | -0.51586 | -0.33858 | -0.17833 | -0.48387 | -0.41096 | -0.39966 | -0.56416 | 1.00000 |

The CALIS Procedure
Covariance Structure Analysis: Pattern and Initial Values

LINEQS Model Statement

|  | Matrix | Rows | Columns | ------Matrix Type------ | |
|---|---|---|---|---|---|
| Term 1 | | | | | |
| 1 | _SEL_ | 9 | 24 | SELECTION | |
| 2 | _BETA_ | 24 | 24 | EQSBETA | IMINUSI../ |
| 3 | _GAMMA_ | 24 | 15 | EQSGAMMA | |
| 4 | _PHI_ | 15 | 15 | SYMMETRIC | |

The 9 Endogenous Variables

| Manifest | V12 | V13 | V14 | MPQ | MSQ | MRQ | MEB | MPR | MCC |
|---|---|---|---|---|---|---|---|---|---|
| Latent | | | | | | | | | |

The 15 Exogenous Variables

| Manifest | | | | | | | |
|---|---|---|---|---|---|---|---|
| Latent | F2 | F3 | F4 | F5 | F6 | F7 | |
| Error | EMPQ | EMSQ | EMRQ | EMEB | EMPR | EMCC | E12 | E13 | E14 |

The CALIS Procedure
Covariance Structure Analysis: Pattern and Initial Values

Manifest Variable Equations with Initial Estimates

$$V12 = \quad .\!*V13 \;+\; .\!*V14 \;+\; 1.0000\ E12$$
$$\qquad\quad PV12V13 \quad PV12V14$$

$$V13 = \quad .\!*F2 \;+\; .\!*F4 \;+\; .\!*F7 \;+\; 1.0000\ E13$$
$$\qquad\quad PV13F2 \quad PV13F4 \quad PV13F7$$

$$V14 = \quad .\!*V13 \;+\; .\!*F4 \;+\; .\!*F6 \;+\; .\!*F7 \;+\; 1.0000\ E14$$
$$\qquad\quad PV14V13 \quad PV14F4 \quad PV14F6 \quad PV14F7$$

$$MPQ = 0.8933\ F2 \;+\; 1.0000\ EMPQ$$
$$MSQ = 0.8885\ F3 \;+\; 1.0000\ EMSQ$$
$$MRQ = 0.9002\ F4 \;+\; 1.0000\ EMRQ$$
$$MEB = 0.8492\ F5 \;+\; 1.0000\ EMEB$$
$$MPR = 0.9346\ F6 \;+\; 1.0000\ EMPR$$
$$MCC = 0.8869\ F7 \;+\; 1.0000\ EMCC$$

Variances of Exogenous Variables

| Variable | Parameter | Estimate |
| --- | --- | --- |
| F2 | VARF2 | . |
| F3 | VARF3 | . |
| F4 | VARF4 | . |
| F5 | VARF5 | . |
| F6 | VARF6 | . |
| F7 | VARF7 | . |
| EMPQ | | 1.94949 |
| EMSQ | | 3.73465 |
| EMRQ | | 1.48896 |
| EMEB | | 2.72569 |
| EMPR | | 0.60516 |
| EMCC | | 1.29626 |
| E12 | VARE12 | . |
| E13 | VARE13 | . |

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The CALIS Procedure
Covariance Structure Analysis: Pattern and Initial Values

Variances of Exogenous Variables

| Variable | Parameter | Estimate |
|----------|-----------|----------|
| E14      | VARE14    | .        |

Covariances Among Exogenous Variables

| Var1 | Var2 | Parameter | Estimate |
|------|------|-----------|----------|
| F2   | F3   | CF2F3     | .        |
| F2   | F4   | CF2F4     | .        |
| F3   | F4   | CF3F4     | .        |
| F2   | F5   | CF2F5     | .        |
| F3   | F5   | CF3F5     | .        |
| F4   | F5   | CF4F5     | .        |
| F2   | F6   | CF2F6     | .        |
| F3   | F6   | CF3F6     | .        |
| F4   | F6   | CF4F6     | .        |
| F5   | F6   | CF5F6     | .        |
| F2   | F7   | CF2F7     | .        |
| F3   | F7   | CF3F7     | .        |
| F4   | F7   | CF4F7     | .        |
| F5   | F7   | CF5F7     | .        |
| F6   | F7   | CF6F7     | .        |

The CALIS Procedure

Covariance Structure Analysis: Maximum Likelihood Estimation

| | | | |
|---|---|---|---|
| Observations | 206 | Model Terms | 1 |
| Variables | 9 | Model Matrices | 4 |
| Informations | 45 | Parameters | 33 |

| Variable | Mean | Std Dev |
|---|---|---|
| V12 | 5.17864 | 1.57466 |
| V13 | 5.81748 | 1.08456 |
| V14 | 6.08932 | 0.95222 |
| MPQ | 16.59223 | 3.10605 |
| MSQ | 21.54854 | 4.21091 |
| MRQ | 17.64563 | 2.80168 |
| MEB | 16.32524 | 3.12598 |
| MPR | 11.83495 | 2.18687 |
| MCC | 4.81068 | 2.46499 |

Covariances

| | V12 | V13 | V14 | MPQ | MSQ |
|---|---|---|---|---|---|
| V12 | 2.479541558 | 0.837838503 | 0.828648828 | 0.885882074 | 1.42738338 |
| V13 | 0.837838503 | 1.176278475 | 0.715309496 | 1.359355908 | 1.66256216 |
| V14 | 0.828648828 | 0.715309496 | 0.906714658 | 0.992697135 | 1.57417949 |
| MPQ | 0.885882074 | 1.359355908 | 0.992697135 | 9.647549136 | 4.19062278 |
| MSQ | 1.427383377 | 1.662562160 | 1.574179493 | 4.190622780 | 17.73177836 |
| MRQ | 1.338735496 | 1.265735259 | 1.328392138 | 2.196258584 | 6.63923751 |
| MEB | 1.524053990 | 1.124044518 | 1.233246507 | 3.211318968 | 6.95730523 |
| MPR | 0.974994080 | 1.128752072 | 1.085058016 | 1.668955719 | 4.89097798 |
| MCC | -0.879185413 | -1.379114374 | 0.794714658 | -1.365380062 | -5.02247218 |

The CALIS Procedure
Covariance Structure Analysis: Maximum Likelihood Estimation

Covariances

|  | MRQ | MEB | MPR | MCC |
|---|---|---|---|---|
| V12 | 1.338735496 | 1.524053990 | 0.974994080 | -0.879185413 |
| V13 | 1.265735259 | 1.124044518 | 1.128752072 | -1.379114374 |
| V14 | 1.328392138 | 1.233246507 | 1.085058016 | -0.794714658 |
| MPQ | 2.196250584 | 3.211318968 | 1.668955719 | -1.365380062 |
| MSQ | 6.639237509 | 6.957305233 | 4.890977978 | -5.022472176 |
| MRQ | 7.849419844 | 5.042647407 | 3.453421738 | -2.838148236 |
| MEB | 5.042647407 | 9.771749941 | 3.556381719 | -3.079587971 |
| MPR | 3.453421738 | 3.556381719 | 4.782382193 | -3.041155577 |
| MCC | -2.838148236 | -3.079587971 | -3.041155577 | 6.076178072 |

Determinant     21959     Ln     9.996952

NOTE: Some initial estimates computed by approximative factor analysis.


NOTE: Some initial estimates computed by two-stage LS method.

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The CALIS Procedure
Covariance Structure Analysis: Maximum Likelihood Estimation

Vector of Initial Estimates

| | Parameter | Estimate | Type | |
|---|---|---|---|---|
| 1 | PV12V13 | -0.09158 | Matrix Entry: | _BETA_[1:2] |
| 2 | PV12V14 | 1.02047 | Matrix Entry: | _BETA_[1:3] |
| 3 | PV14V13 | 1.83502 | Matrix Entry: | _BETA_[3:2] |
| 4 | PV13F2 | 0.14249 | Matrix Entry: | _GAMMA_[2:1] |
| 5 | PV13F4 | 0.07548 | Matrix Entry: | _GAMMA_[2:3] |
| 6 | PV13F7 | -0.16638 | Matrix Entry: | _GAMMA_[2:6] |
| 7 | PV14F4 | 0.55863 | Matrix Entry: | _GAMMA_[3:3] |
| 8 | PV14F6 | -0.66593 | Matrix Entry: | _GAMMA_[3:5] |
| 9 | PV14F7 | 0.54845 | Matrix Entry: | _GAMMA_[3:6] |
| 10 | VARF2 | 9.00700 | Matrix Entry: | _PHI_[1:1] |
| 11 | CF2F3 | 0.01674 | Matrix Entry: | _PHI_[2:1] |
| 12 | VARF3 | 13.93894 | Matrix Entry: | _PHI_[2:2] |
| 13 | CF2F4 | 0.61935 | Matrix Entry: | _PHI_[3:1] |
| 14 | CF3F4 | 0.21839 | Matrix Entry: | _PHI_[3:2] |
| 15 | VARF4 | 7.45690 | Matrix Entry: | _PHI_[3:3] |
| 16 | CF2F5 | 0.43513 | Matrix Entry: | _PHI_[4:1] |
| 17 | CF3F5 | 0.43097 | Matrix Entry: | _PHI_[4:2] |
| 18 | CF4F5 | 1.16097 | Matrix Entry: | _PHI_[4:3] |
| 19 | VARF5 | 6.27201 | Matrix Entry: | _PHI_[4:4] |
| 20 | CF2F6 | -0.65623 | Matrix Entry: | _PHI_[5:1] |
| 21 | CF3F6 | -0.32031 | Matrix Entry: | _PHI_[5:2] |
| 22 | CF4F6 | -2.58951 | Matrix Entry: | _PHI_[5:3] |
| 23 | CF5F6 | -0.74351 | Matrix Entry: | _PHI_[5:4] |
| 24 | VARF6 | 3.02769 | Matrix Entry: | _PHI_[5:5] |
| 25 | CF2F7 | -0.98380 | Matrix Entry: | _PHI_[6:1] |
| 26 | CF3F7 | -0.27650 | Matrix Entry: | _PHI_[6:2] |
| 27 | CF4F7 | -3.83719 | Matrix Entry: | _PHI_[6:3] |
| 28 | CF5F7 | -1.21670 | Matrix Entry: | _PHI_[6:4] |
| 29 | CF6F7 | 3.68217 | Matrix Entry: | _PHI_[6:5] |
| 30 | VARF7 | 9.35728 | Matrix Entry: | _PHI_[6:6] |
| 31 | VARE12 | 1.76216 | Matrix Entry: | _PHI_[13:13] |

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The CALIS Procedure

Covariance Structure Analysis: Maximum Likelihood Estimation

Vector of Initial Estimates

| | Parameter | Estimate | Type | |
|---|---|---|---|---|
| 32 | VARE13 | 2.00638 | Matrix Entry: | _PHI_[14:14] |
| 33 | VARE14 | 0.01000 | Matrix Entry: | _PHI_[15:15] |

The CALIS Procedure
Covariance Structure Analysis: Maximum Likelihood Estimation

Levenberg-Marquardt Optimization

Scaling Update of More (1978)

| | |
|---|---|
| Parameter Estimates | 33 |
| Functions (Observations) | 45 |

Optimization Start

| | | | |
|---|---|---|---|
| Active Constraints | 0 | Objective Function | 8.3526392032 |
| Max Abs Gradient Element | 2.409425405 | Radius | 11.581535796 |

| Iter | Restarts | Function Calls | Active Constraints | Objective Function | Objective Function Change | Max Abs Gradient Element | Lambda | Ratio Between Actual and Predicted Change |
|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 2 | 0 | 5.80809 | 2.4445 | 3.0958 | 0 | 0.127 |
| 2 | 0 | 3 | 0 | 2.73517 | 3.0729 | 0.2186 | 0.0239 | 0.379 |
| 3 | 0 | 5 | 0 | 0.23323 | 2.5019 | 0.6397 | 0 | 5.245 |
| 4 | 0 | 6 | 0 | 0.06204 | 0.1712 | 0.0472 | 0 | 1.481 |
| 5 | 0 | 7 | 0 | 0.05974 | 0.00229 | 0.00132 | 0 | 1.014 |
| 6 | 0 | 8 | 0 | 0.05974 | 2.989E-6 | 0.000036 | 0 | 1.005 |
| 7 | 0 | 9 | 0 | 0.05974 | 5.277E-9 | 0.000014 | 0 | 1.023 |
| 8 | 0 | 10 | 0 | 0.05974 | 6.55E-11 | 4.854E-7 | 0 | 1.019 |

Optimization Results

| | | | |
|---|---|---|---|
| Iterations | 8 | Function Calls | 11 |
| Jacobian Calls | 9 | Active Constraints | 0 |
| Objective Function | 0.0597399882 | Max Abs Gradient Element | 4.8544792E-7 |
| Lambda | 0 | Actual Over Pred Change | 1.0187131845 |

The CALIS Procedure
Covariance Structure Analysis: Maximum Likelihood Estimation

Optimization Results

Radius          0.0000437028

GCONV convergence criterion satisfied.

Predicted Model Matrix

|      | V12          | V13          | V14          | MPQ          | MSQ          |
|------|--------------|--------------|--------------|--------------|--------------|
| V12  | 2.474572182  | 0.834102072  | 0.822965268  | 1.060862909  | 1.698\3277   |
| V13  | 0.834102072  | 1.176278475  | 0.709786768  | 1.340223722  | 1.91A01926   |
| V14  | 0.822965268  | 0.709786768  | 0.900769827  | 0.972051616  | 1.65807942   |
| MPQ  | 1.060862909  | 1.340223722  | 0.972051616  | 9.661343530  | 4.09852991   |
| MSQ  | 1.698832767  | 1.918019261  | 1.658079423  | 4.098529909  | 17.73177836  |
| MRQ  | 1.265609026  | 1.228289720  | 1.324457731  | 2.216474683  | 6.62850514   |
| MEB  | 1.235100747  | 1.296391751  | 1.249079915  | 3.149187395  | 6.95730523   |
| MPR  | 1.032991698  | 1.064282087  | 1.053564290  | 1.695031882  | 4.90328895   |
| MCC  | -0.954535742 | -1.377013464 | -0.798532019 | -1.369009025 | -4.88346411  |

Predicted Model Matrix

|      | MRQ          | MEB          | MPR          | MCC          |
|------|--------------|--------------|--------------|--------------|
| V12  | 1.265609026  | 1.235100747  | 1.032991698  | -0.954535742 |
| V13  | 1.228289720  | 1.296391751  | 1.064282087  | -1.377013464 |
| V14  | 1.324457731  | 1.249079915  | 1.053564290  | -0.798532019 |
| MPQ  | 2.216474683  | 3.149187395  | 1.695031882  | -1.369009025 |
| MSQ  | 6.628505140  | 6.957305233  | 4.903288948  | -4.883464115 |
| MRQ  | 7.846988323  | 5.050149134  | 3.456285474  | -2.861432264 |
| MEB  | 5.050149134  | 9.771749941  | 3.574053357  | -2.967007702 |
| MPR  | 3.456285474  | 3.574053357  | 4.780909684  | -3.070910351 |
| MCC  | -2.861432264 | -2.967007702 | -3.070910351 | 6.080342126  |

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The CALIS Procedure
Covariance Structure Analysis: Maximum Likelihood Estimation

Determinant      23457      Ln      10.062914

The CALIS Procedure

Covariance Structure Analysis: Maximum Likelihood Estimation

| | |
|---|---|
| Fit Function | 0.0597 |
| Goodness of Fit Index (GFI) | 0.9873 |
| GFI Adjusted for Degrees of Freedom (AGFI) | 0.9525 |
| Root Mean Square Residual (RMR) | 0.0894 |
| Parsimonious GFI (Mulaik, 1989) | 0.3291 |
| Chi-Square | 12.2467 |
| Chi-Square DF | 12 |
| Pr > Chi-Square | 0.4261 |
| Independence Model Chi-Square | 784.51 |
| Independence Model Chi-Square DF | 36 |
| RMSEA Estimate | 0.0100 |
| RMSEA 90% Lower Confidence Limit | . |
| RMSEA 90% Upper Confidence Limit | 0.0722 |
| ECVI Estimate | 0.3982 |
| ECVI 90% Lower Confidence Limit | . |
| ECVI 90% Upper Confidence Limit | 0.4609 |
| Probability of Close Fit | 0.7954 |
| Bentler's Comparative Fit Index | 0.9997 |
| Normal Theory Reweighted LS Chi-Square | 11.8282 |
| Akaike's Information Criterion | -11.7533 |
| Bozdogan's (1987) CAIC | -63.6878 |
| Schwarz's Bayesian Criterion | -51.6878 |
| McDonald's (1989) Centrality | 0.9994 |
| Bentler & Bonett's (1980) Non-normed Index | 0.9990 |
| Bentler & Bonett's (1980) NFI | 0.9844 |
| James, Mulaik, & Brett (1982) Parsimonious NFI | 0.3281 |
| Z-Test of Wilson & Hilferty (1931) | 0.1861 |
| Bollen (1986) Normed Index Rho1 | 0.9532 |
| Bollen (1988) Non-normed Index Delta2 | 0.9997 |
| Hoelter's (1983) Critical N | 353 |

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The CALIS Procedure
Covariance Structure Analysis: Maximum Likelihood Estimation

Raw Residual Matrix

|      | V12          | V13          | V14          | MPQ          | MSO          |
|------|--------------|--------------|--------------|--------------|--------------|
| V12  | 0.0049693764 | 0.0037364317 | 0.0056635603 | -.1749808345 | -.2714493902 |
| V13  | 0.0037364317 | 0.0000000000 | 0.0055227277 | 0.0191321864 | -.2554571010 |
| V14  | 0.0056635603 | 0.0055227277 | 0.0059448304 | 0.0206455186 | -.0838999298 |
| MPQ  | -.1749808345 | 0.0191321864 | 0.0206455186 | -.0137943941 | 0.0920928705 |
| MSO  | -.2714493902 | -.2554571010 | -.0838999298 | 0.0920928705 | 0.0000000000 |
| MRO  | 0.0731264702 | 0.0374455397 | 0.0039344074 | -.0202160992 | 0.0107323691 |
| MEB  | 0.2889532430 | -.1723472333 | -.0158334081 | 0.0621315727 | 0.0000000000 |
| MPR  | -.0579976180 | 0.0644699849 | 0.0314937259 | -.0260761629 | -.0123109707 |
| MCC  | 0.0753503284 | -.0021009093 | 0.0038173608 | 0.0036289631 | -.1390080616 |

Raw Residual Matrix

|      | MRO          | MEB          | MPR          | MCC          |
|------|--------------|--------------|--------------|--------------|
| V12  | 0.0731264702 | 0.2889532430 | -.0579976180 | 0.0753503284 |
| V13  | 0.0374455397 | -.1723472333 | 0.0644699849 | -.0021009093 |
| V14  | 0.0039344074 | -.0158334081 | 0.0314937259 | 0.0038173608 |
| MPQ  | -.0202160992 | 0.0621315727 | -.0260761629 | 0.0036289631 |
| MSO  | 0.0107323691 | 0.0000000000 | -.0123109707 | -.1390080616 |
| MRO  | 0.0024315212 | -.0075017266 | -.0028637356 | 0.0232840279 |
| MEB  | -.0075017266 | 0.0000000000 | -.0176716382 | -.1125802691 |
| MPR  | -.0028637356 | -.0176716382 | 0.0014725083 | 0.0297547749 |
| MCC  | 0.0232840279 | -.1125802691 | 0.0297547749 | -.0041640534 |

Average Absolute Residual                    0.050222
Average Off-diagonal Absolute Residual       0.061868

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The CALIS Procedure
Covariance Structure Analysis: Maximum Likelihood Estimation

Rank Order of the 10 Largest Raw Residuals

| Row | Column | Residual |
|-----|--------|----------|
| MEB | V12 | 0.28895 |
| MSQ | V12 | -0.27145 |
| MSQ | V13 | -0.25546 |
| MPQ | V12 | -0.17498 |
| MEB | V13 | -0.17235 |
| MCC | MSQ | -0.13901 |
| MCC | MEB | -0.11258 |
| MSQ | MPQ | 0.09209 |
| MSQ | V14 | -0.08390 |
| MCC | V12 | 0.07535 |

The CALIS Procedure
Covariance Structure Analysis: Maximum Likelihood Estimation

Asymptotically Standardized Residual Matrix

|      | V12          | V13          | V14          | MPQ          | MSQ          |
|------|--------------|--------------|--------------|--------------|--------------|
| V12  | 0.770343571  | 0.770346045  | 0.770342852  | -0.655176408 | -0.747315470 |
| V13  | 0.770346045  | 0.000000000  | 0.770346022  | 2.001888449  | -1.675793104 |
| V14  | 0.770342852  | 0.770346022  | 0.770341557  | 0.186333147  | -0.570093467 |
| MPQ  | -0.655176408 | 2.001888449  | 0.186333147  | -2.001874582 | 1.675781496  |
| MSQ  | -0.747315470 | -1.675793104 | -0.570093467 | 1.675781496  | 0.000000000  |
| MRQ  | 0.333862522  | 1.444421467  | 0.173846502  | -0.488115471 | 0.227760852  |
| MEB  | 1.062469828  | -1.501350256 | -0.143541239 | 1.501339856  | 0.000000000  |
| MPR  | -0.332362460 | 0.892213507  | 0.805090100  | -0.736324220 | -0.454926588 |
| MCC  | 0.394048899  | -0.109330502 | 0.244061547  | 0.070304011  | -1.638279951 |

Asymptotically Standardized Residual Matrix

|      | MRQ          | MEB          | MPR          | MCC          |
|------|--------------|--------------|--------------|--------------|
| V12  | 0.333862522  | 1.062469828  | -0.332362460 | 0.394048899  |
| V13  | 1.444421467  | -1.501350256 | 0.892213507  | -0.109330502 |
| V14  | 0.173846502  | -0.143541239 | 0.805090100  | 0.244061547  |
| MPQ  | -0.488115471 | 1.501339856  | -0.736324220 | 0.070304011  |
| MSQ  | 0.227760852  | 0.000000000  | -0.454926588 | -1.638279951 |
| MRQ  | 0.175450194  | -0.212720593 | -0.287330629 | 1.565911172  |
| MEB  | -0.212720593 | 0.000000000  | -0.874077520 | -1.768385869 |
| MPR  | -0.287330629 | -0.874077520 | 0.911465787  | 0.920796518  |
| MCC  | 1.565911172  | -1.768385869 | 0.920796518  | -0.227869099 |

Average Standardized Residual                     0.730303
Average Off-diagonal Standardized Residual        0.777952

The CALIS Procedure

Covariance Structure Analysis: Maximum Likelihood Estimation

Rank Order of the 10 Largest Asymptotically Standardized Residuals

| Row | Column | Residual |
|-----|--------|----------|
| MPQ | V13 | 2.00189 |
| MPQ | MPQ | -2.00187 |
| MCC | MEB | -1.76839 |
| MSQ | V13 | -1.67579 |
| MSQ | MPQ | 1.67578 |
| MCC | MSQ | -1.63828 |
| MCC | MRQ | 1.56591 |
| MEB | V13 | -1.50135 |
| MEB | MPQ | 1.50134 |
| MRQ | V13 | 1.44442 |

The CALIS Procedure
Covariance Structure Analysis: Maximum Likelihood Estimation

Distribution of Asymptotically Standardized Residuals

Each * Represents 1 Residuals

| --------Range-------- | Freq | Percent | |
|---|---|---|---|
| -2.25000 | -2.00000 | 1 | 2.22 | * |
| -2.00000 | -1.75000 | 1 | 2.22 | * |
| -1.75000 | -1.50000 | 3 | 6.67 | *** |
| -1.50000 | -1.25000 | 0 | 0.00 | |
| -1.25000 | -1.00000 | 0 | 0.00 | |
| -1.00000 | -0.75000 | 1 | 2.22 | * |
| -0.75000 | -0.50000 | 4 | 8.89 | **** |
| -0.50000 | -0.25000 | 4 | 8.89 | **** |
| -0.25000 | 0 | 4 | 8.89 | **** |
| 0 | 0.25000 | 10 | 22.22 | ********** |
| 0.25000 | 0.50000 | 2 | 4.44 | ** |
| 0.50000 | 0.75000 | 0 | 0.00 | |
| 0.75000 | 1.00000 | 9 | 20.00 | ********* |
| 1.00000 | 1.25000 | 1 | 2.22 | * |
| 1.25000 | 1.50000 | 1 | 2.22 | * |
| 1.50000 | 1.75000 | 3 | 6.67 | *** |
| 1.75000 | 2.00000 | 0 | 0.00 | |
| 2.00000 | 2.25000 | 1 | 2.22 | * |

The CALIS Procedure
Covariance Structure Analysis: Maximum Likelihood Estimation

Manifest Variable Equations with Estimates

```
V12      =    0.3009*V13        +   0.6766*V14        +   1.0000 E12
Std Err       0.1148 PV12V13        0.1312 PV12V14
t Value       2.6208                5.1573

V13      =    0.1067*F2         +   0.0460*F4         +  -0.1978*F7        +   1.0000 E13
Std Err       0.0234 PV13F2         0.0308 PV13F4         0.0345 PV13F7
t Value       4.5652                1.4938               -5.7371

V14      =    0.5382*V13        +   0.0789*F4         +   0.1280*F6        +   0.1138*F7        +   1.0000 E14
Std Err       0.0536 PV14V13        0.0267 PV14F4         0.0413 PV14F6         0.0354 PV14F7
t Value      10.0356                2.9564                3.1017                3.2168

MPQ      =    0.8933 F2         +   1.0000 EMPQ
MSQ      =    0.8885 F3         +   1.0000 EMSQ
MRQ      =    0.9002 F4         +   1.0000 EMRQ
MEB      =    0.8492 F5         +   1.0000 EMEB
MPR      =    0.9346 F6         +   1.0000 EMPR
MCC      =    0.8869 F7         +   1.0000 EMCC
```

Variances of Exogenous Variables

| Variable | Parameter | Estimate | Standard Error | t Value |
|---|---|---|---|---|
| F2 | VARF2 | 9.66484 | 1.19591 | 8.08 |
| F3 | VARF3 | 17.73178 | 2.21873 | 7.99 |
| F4 | VARF4 | 7.84642 | 0.95636 | 8.20 |
| F5 | VARF5 | 9.77175 | 1.33856 | 7.30 |
| F6 | VARF6 | 4.78070 | 0.54063 | 8.84 |
| F7 | VARF7 | 6.08147 | 0.76309 | 7.97 |
| EMPQ | | 1.94949 | | |
| EMSQ | | 3.73465 | | |
| EMRQ | | 1.48896 | | |
| EMEB | | 2.72569 | | |

The CALIS Procedure
Covariance Structure Analysis: Maximum Likelihood Estimation

Variances of Exogenous Variables

| Variable | Parameter | Estimate | Standard Error | t Value |
|----------|-----------|----------|----------------|---------|
| EMPR | | 0.60516 | | |
| EMCC | | 1.29626 | | |
| E12 | VARE12 | 1.66684 | 0.16464 | 10.12 |
| E13 | VARE13 | 0.64617 | 0.07192 | 8.98 |
| E14 | VARE14 | 0.36085 | 0.03980 | 9.07 |

Covariances Among Exogenous Variables

| Var1 | Var2 | Parameter | Estimate | Standard Error | t Value |
|------|------|-----------|----------|----------------|---------|
| F2 | F3 | CF2F3 | 5.16420 | 1.20500 | 4.29 |
| F2 | F4 | CF2F4 | 2.75648 | 0.77870 | 3.54 |
| F3 | F4 | CF3F4 | 8.28795 | 1.18014 | 7.02 |
| F2 | F5 | CF2F5 | 4.15173 | 0.93890 | 4.42 |
| F3 | F5 | CF3F5 | 9.22170 | 1.37832 | 6.69 |
| F4 | F5 | CF4F5 | 6.60681 | 0.92248 | 7.16 |
| F2 | F6 | CF2F6 | 2.03037 | 0.58446 | 3.47 |
| F3 | F6 | CF3F6 | 5.90504 | 0.87681 | 6.73 |
| F4 | F6 | CF4F6 | 4.10831 | 0.58374 | 7.04 |
| F5 | F6 | CF5F6 | 4.50353 | 0.67832 | 6.64 |
| F2 | F7 | CF2F7 | -1.72794 | 0.68326 | -2.53 |
| F3 | F7 | CF3F7 | -6.19712 | 1.01128 | -6.13 |
| F4 | F7 | CF4F7 | -3.58396 | 0.65378 | -5.48 |
| F5 | F7 | CF5F7 | -3.93946 | 0.76126 | -5.17 |
| F6 | F7 | CF6F7 | -3.70468 | 0.52135 | -7.11 |

The CALIS Procedure
Covariance Structure Analysis: Maximum Likelihood Estimation

Manifest Variable Equations with Standardized Estimates

V12   =   0.2074*V13    +   0.4082*V14    +   0.8207 E12
              PV12V13         PV12V14

V13   =   0.3060*F2     +   0.1189*F4     +  -0.4498*F7    +   0.7412 E13
              PV13F2          PV13F4           PV13F7

V14   =   0.6150*V13    +   0.2328*F4     +   0.2949*F6    +   0.2958*F7    +   0.6329 E14
              PV14V13         PV14F4           PV14F6           PV14F7

MPQ   =   0.8934 F2     +   0.4492 EMPQ

MSQ   =   0.8885 F3     +   0.4589 EMSQ

MRQ   =   0.9001 F4     +   0.4356 EMRQ

MEB   =   0.8492 F5     +   0.5281 EMEB

MPR   =   0.9346 F6     +   0.3558 EMPR

MCC   =   0.8870 F7     +   0.4617 EMCC

Squared Multiple Correlations

|   | Variable | Error Variance | Total Variance | R-Square |
|---|----------|----------------|----------------|----------|
| 1 | V12 | 1.66684 | 2.47457 | 0.3264 |
| 2 | V13 | 0.64617 | 1.17628 | 0.4507 |
| 3 | V14 | 0.36085 | 0.90077 | 0.5994 |
| 4 | MPQ | 1.94949 | 9.66134 | 0.7982 |
| 5 | MSQ | 3.73465 | 17.73178 | 0.7894 |
| 6 | MRQ | 1.48896 | 7.84699 | 0.8103 |
| 7 | MEB | 2.72569 | 9.77175 | 0.7211 |
| 8 | MPR | 0.60516 | 4.78091 | 0.8734 |
| 9 | MCC | 1.29626 | 6.08034 | 0.7868 |

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The CALIS Procedure
Covariance Structure Analysis: Maximum Likelihood Estimation

Correlations Among Exogenous Variables

| Var1 | Var2 | Parameter | Estimate |
|------|------|-----------|----------|
| F2 | F3 | CF2F3 | 0.39448 |
| F2 | F4 | CF2F4 | 0.31654 |
| F3 | F4 | CF3F4 | 0.70264 |
| F2 | F5 | CF2F5 | 0.42721 |
| F3 | F5 | CF3F5 | 0.70057 |
| F4 | F5 | CF4F5 | 0.75452 |
| F2 | F6 | CF2F6 | 0.29870 |
| F3 | F6 | CF3F6 | 0.64136 |
| F4 | F6 | CF4F6 | 0.67078 |
| F5 | F6 | CF5F6 | 0.65890 |
| F2 | F7 | CF2F7 | -0.22539 |
| F3 | F7 | CF3F7 | -0.59677 |
| F4 | F7 | CF4F7 | -0.51883 |
| F5 | F7 | CF5F7 | -0.51103 |
| F6 | F7 | CF6F7 | -0.68707 |

The CALIS Procedure
Covariance Structure Analysis: Maximum Likelihood Estimation

Lagrange Multiplier and Wald Test Indices _PHI_[15:15]
Symmetric Matrix
Univariate Tests for Constant Constraints
Lagrange Multiplier or Wald Index / Probability / Approx Change of Value

| | F2 | F3 | F4 | F5 | F6 | F7 | EMPQ | EMSQ |
|---|---|---|---|---|---|---|---|---|
| F2 | 65.3114 . [VARF2] | 18.3666 . [CF2F3] | 12.5304 . [CF2F4] | 19.5535 . [CF2F5] | 12.0680 . [CF2F6] | 6.3958 . [CF2F7] | 4.0075 0.0453 -12.0589 | . . Sing |
| F3 | 18.3666 . [CF2F3] | 63.8700 . [VARF3] | 49.3208 . [CF3F4] | 44.7631 . [CF3F5] | 45.3560 . [CF3F6] | 37.5526 . [CF3F7] | 2.3286 0.1270 2.7111 | . . Sing |
| F4 | 12.5304 . [CF2F4] | 49.3208 . [CF3F4] | 67.3133 . [VARF4] | 51.2943 . [CF4F5] | 49.5317 . [CF4F6] | 30.0511 . [CF4F7] | 2.0864 0.1486 -2.4311 | . . Sing |
| F5 | 19.5535 . [CF2F5] | 44.7631 . [CF3F5] | 51.2943 . [CF4F5] | 53.2932 . [VARF5] | 44.0790 . [CF5F6] | 26.7799 . [CF5F7] | 1.9099 0.1670 1.9307 | . . Sing |
| F6 | 12.0680 . [CF2F6] | 45.3560 . [CF3F6] | 49.5317 . [CF4F6] | 44.0790 . [CF5F6] | 78.1945 . [VARF6] | 50.4950 . [CF6F7] | 1.4254 0.2325 -1.0081 | . . Sing |

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The CALIS Procedure
Covariance Structure Analysis: Maximum Likelihood Estimation

Lagrange Multiplier and Wald Test Indices _PHI_[15:15]
Symmetric Matrix
Univariate Tests for Constant Constraints
Lagrange Multiplier or Wald Index / Probability / Approx Change of Value

| | EMRQ | EMEB | EMPR | EMCC | E12 | E13 | E14 |
|---|---|---|---|---|---|---|---|
| F2 | 0.0244 | . | 0.0095 | 0.6441 | 0.8783 | 4.0075 | 0.0095 |
|    | 0.8759 | . | 0.9225 | 0.4222 | 0.3487 | 0.0453 | 0.9225 |
|    | -0.2772 | Sing | 0.1115 | 0.9204 | -0.2872 | 1.4409 | -0.0153 |
| F3 | 0.0895 | . | 0.1062 | 2.0811 | 0.3871 | 2.3286 | 0.1062 |
|    | 0.7648 | . | 0.7445 | 0.1491 | 0.5338 | 0.1270 | 0.7445 |
|    | 0.4821 | Sing | -0.3731 | -1.1129 | -0.1968 | -0.3239 | 0.0511 |
| F4 | 0.0336 | . | 0.8468 | 3.0503 | 0.0255 | 2.0864 | 0.8469 |
|    | 0.8545 | . | 0.3575 | 0.0807 | 0.8732 | 0.1486 | 0.3574 |
|    | 0.3137 | Sing | 1.1416 | 1.3280 | 0.0336 | 0.2905 | -0.1564 |
| F5 | 0.0349 | . | 0.6466 | 2.6494 | 3.6449 | 1.9099 | 0.6466 |
|    | 0.8517 | . | 0.4213 | 0.1036 | 0.0562 | 0.1670 | 0.4213 |
|    | -0.2372 | Sing | -0.7247 | -0.9877 | 0.4743 | -0.2307 | 0.0993 |
| F6 | 0.3814 | . | 0.8307 | 1.8018 | 0.8181 | 1.4254 | 0.8308 |
|    | 0.5368 | . | 0.3621 | 0.1795 | 0.3657 | 0.2325 | 0.3620 |
|    | -1.0628 | Sing | 2.1569 | 0.6005 | -0.1408 | 0.1205 | -0.2955 |

The CALIS Procedure
Covariance Structure Analysis: Maximum Likelihood Estimation

Lagrange Multiplier and Wald Test Indices _PHI_[15:15]
Symmetric Matrix

Univariate Tests for Constant Constraints
Lagrange Multiplier or Wald Index / Probability / Approx Change of Value

|  | F2 | F3 | F4 | F5 | F6 | F7 | EMPQ | EMSQ |
|---|---|---|---|---|---|---|---|---|
| F7 | 6.3958 | 37.5626 | 30.0511 | 26.7799 | 50.4950 | 63.5137 | 0.0120 | . |
|  | . | . | . | . | . | . | 0.9130 | . |
|  | . | . | . | . | . | . | 0.2193 | Sing |
|  | [CF2F7] | [CF3F7] | [CF4F7] | [CF5F7] | [CF6F7] | [VARF7] |  |  |
| EMPQ | 4.0075 | 2.3286 | 2.0864 | 1.9099 | 1.4254 | 0.0120 | 4.0075 | 2.3286 |
|  | 0.0453 | 0.1270 | 0.1486 | 0.1670 | 0.2325 | 0.9130 | 0.0453 | 0.1270 |
|  | -12.0589 | 2.7111 | -2.4311 | 1.9307 | -1.0081 | 0.2193 | -10.7719 | 2.4087 |
| EMSQ | . | . | . | . | . | . | 2.3286 | . |
|  | . | . | . | . | . | . | 0.1270 | . |
|  | Sing | Sing | Sing | Sing | Sing | Sing | 2.4087 | Sing |
| EMRQ | 0.0244 | 0.0895 | 0.0336 | 0.0349 | 0.3814 | 0.0756 | 1.0636 | 0.0895 |
|  | 0.8759 | 0.7648 | 0.8545 | 0.8517 | 0.5368 | 0.7833 | 0.3024 | 0.7648 |
|  | -0.2772 | 0.4821 | 0.3137 | -0.2372 | -1.0628 | -0.8715 | -0.9965 | 0.4283 |
| EMEB | . | . | . | . | . | . | 1.9099 | . |
|  | . | . | . | . | . | . | 0.1670 | . |
|  | Sing | Sing | Sing | Sing | Sing | Sing | 1.6395 | Sing |

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The CALIS Procedure

Covariance Structure Analysis: Maximum Likelihood Estimation

Lagrange Multiplier and Wald Test Indices _PHI_[15:15]
Symmetric Matrix

Univariate Tests for Constant Constraints
Lagrange Multiplier or Wald Index / Probability / Approx Change of Value

| | EMRQ | EMEB | EMPR | EMCC | E12 | E13 | E14 |
|---|---|---|---|---|---|---|---|
| F7 | 0.0756 | . | 0.2362 | 0.0721 | 0.0053 | 0.0120 | 0.2362 |
| | 0.7833 | . | 0.6270 | 0.7882 | 0.9417 | 0.9129 | 0.6270 |
| | -0.8715 | Sing | -1.3725 | -0.2744 | 0.0171 | -0.0262 | 0.1880 |
| EMPQ | 1.0636 | 1.9099 | 0.7698 | 0.4041 | 0.9958 | 4.0075 | 0.0040 |
| | 0.3024 | 0.1670 | 0.3803 | 0.5250 | 0.3183 | 0.0453 | 0.9494 |
| | -0.9965 | 1.6395 | -0.5338 | 0.4915 | -0.2484 | 1.2871 | -0.0078 |
| EMSQ | 0.0895 | . | 0.1062 | 2.0811 | 0.3871 | 2.3286 | 0.1062 |
| | 0.7648 | . | 0.7445 | 0.1491 | 0.5338 | 0.1270 | 0.7445 |
| | 0.4283 | Sing | -0.3315 | -0.9888 | -0.1748 | -0.2878 | 0.0454 |
| EMRQ | 0.0308 | 0.0349 | 0.1112 | 2.4521 | 0.0141 | 2.1078 | 0.8553 |
| | 0.8607 | 0.8517 | 0.7388 | 0.1174 | 0.9055 | 0.1465 | 0.3551 |
| | 0.2739 | -0.2014 | 0.2588 | 0.9915 | 0.0213 | 0.2600 | -0.1440 |
| EMEB | 0.0349 | . | 0.6466 | 2.6494 | 3.6449 | 1.9099 | 0.6466 |
| | 0.8517 | . | 0.4213 | 0.1036 | 0.0562 | 0.1670 | 0.4213 |
| | -0.2014 | Sing | -0.6154 | -0.8387 | 0.4028 | -0.1959 | 0.0843 |

The CALIS Procedure
Covariance Structure Analysis: Maximum Likelihood Estimation

Lagrange Multiplier and Wald Test Indices _PHI_[15:15]
Symmetric Matrix

Univariate Tests for Constant Constraints
Lagrange Multiplier or Wald Index / Probability / Approx Change of Value

|      | F2 | F3 | F4 | F5 | F6 | F7 | EMPQ | EMSQ |
|------|------|------|------|------|------|------|------|------|
| EMPR | 0.0095 | 0.1062 | 0.8468 | 0.6466 | 0.8307 | 0.2362 | 0.76:8 | 0.1062 |
|      | 0.9225 | 0.7445 | 0.3575 | 0.4213 | 0.3621 | 0.6270 | 0.3803 | 0.7445 |
|      | 0.1115 | -0.3731 | 1.1416 | -0.7247 | 2.1569 | -1.3725 | -0.5338 | -0.3315 |
| EMCC | 0.6441 | 2.0811 | 3.0503 | 2.6494 | 1.8018 | 0.0721 | 0.4041 | 2.0811 |
|      | 0.4222 | 0.1491 | 0.0807 | 0.1036 | 0.1795 | 0.7882 | 0.5250 | 0.1491 |
|      | 0.9204 | -1.1129 | 1.3280 | -0.9877 | 0.6005 | -0.2744 | 0.4915 | -0.9888 |
| E12  | 0.8783 | 0.3871 | 0.0255 | 3.6449 | 0.8181 | 0.0053 | 0.9958 | 0.3871 |
|      | 0.3487 | 0.5338 | 0.8732 | 0.0562 | 0.3657 | 0.9417 | 0.3183 | 0.5338 |
|      | -0.2872 | -0.1968 | 0.0336 | 0.4743 | -0.1408 | 0.0171 | -0.2484 | -0.1748 |
| E13  | 4.0075 | 2.3286 | 2.0864 | 1.9099 | 1.4254 | 0.0120 | 4.0075 | 2.3286 |
|      | 0.0453 | 0.1270 | 0.1486 | 0.1670 | 0.2325 | 0.9129 | 0.0453 | 0.1270 |
|      | 1.4409 | -0.3239 | 0.2905 | -0.2307 | 0.1205 | -0.0262 | 1.2871 | -0.2878 |
| E14  | 0.0095 | 0.1062 | 0.8469 | 0.6466 | 0.8308 | 0.2362 | 0.0040 | 0.1062 |
|      | 0.9225 | 0.7445 | 0.3574 | 0.4213 | 0.3620 | 0.6270 | 0.9494 | 0.7445 |
|      | -0.0153 | 0.0511 | -0.1564 | 0.0993 | -0.2955 | 0.1880 | -0.0078 | 0.0454 |

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The CALIS Procedure
Covariance Structure Analysis: Maximum Likelihood Estimation

Lagrange Multiplier and Wald Test Indices _PHI_[15:15]
Symmetric Matrix
Univariate Tests for Constant Constraints
Lagrange Multiplier or Wald Index / Probability / Approx Change of Value

| | EMRQ | EMEB | EMPR | EMCC | E12 | E13 | E14 |
|---|---|---|---|---|---|---|---|
| EMPR | 0.1112 | 0.6466 | 0.8308 | 1.6194 | 0.6866 | 1.4707 | 0.8308 |
| | 0.7388 | 0.4213 | 0.3620 | 0.2032 | 0.4073 | 0.2252 | 0.3620 |
| | 0.2588 | -0.6154 | 2.0158 | 0.5289 | -0.1125 | 0.1143 | -0.2761 |
| EMCC | 2.4521 | 2.6494 | 1.6194 | 0.0519 | 0.0646 | 0.0046 | 0.1041 |
| | 0.1174 | 0.1036 | 0.2032 | 0.8197 | 0.7993 | 0.9461 | 0.7469 |
| | 0.9915 | -0.8387 | 0.5289 | -0.2044 | 0.0417 | -0.0141 | 0.0959 |
| E12 | 0.0141 | 3.6449 | 0.6866 | 0.0646 | 102.5000 | 0.3592 | 0.0119 |
| | 0.9055 | 0.0562 | 0.4073 | 0.7993 | . | 0.5489 | 0.9132 |
| | 0.0213 | 0.4028 | -0.1125 | 0.0417 | [VARE12] | 0.0732 | -0.0145 |
| E13 | 2.1078 | 1.9099 | 1.4707 | 0.0046 | 0.3592 | 80.7147 | 0.0287 |
| | 0.1465 | 0.1670 | 0.2252 | 0.9461 | 0.5489 | . | 0.8654 |
| | 0.2600 | -0.1959 | 0.1143 | -0.0141 | 0.0732 | [VARE13] | -0.0194 |
| E14 | 0.8553 | 0.6466 | 0.8308 | 0.1041 | 0.0119 | 0.0287 | 82.1866 |
| | 0.3551 | 0.4213 | 0.3620 | 0.7469 | 0.9132 | 0.8654 | . |
| | -0.1440 | 0.0843 | -0.2761 | 0.0959 | -0.0145 | -0.0194 | [VARE14] |

The CALIS Procedure
Covariance Structure Analysis: Maximum Likelihood Estimation

Rank Order of the 10 Largest Lagrange Multipliers in _PHI

| Row   | Column | Chi Square | Pr > ChiSq |
|-------|--------|------------|------------|
| I19   | EMPQ   | 4.00755    | 0.0453     |
| E19   | F2     | 4.00754    | 0.0453     |
| EMPQ  | EMPQ   | 4.00753    | 0.0453     |
| EMPQ  | F2     | 4.00752    | 0.0453     |
| E12   | F5     | 3.64493    | 0.0562     |
| L12   | LMFB   | 3.64493    | 0.0562     |
| FMCC  | F4     | 3.05026    | 0.0807     |
| LMCC  | F5     | 2.64942    | 0.1036     |
| FMCC  | FMLB   | 2.64942    | 0.1036     |
| EMCC  | LMRQ   | 2.45216    | 0.1174     |

The CALIS Procedure
Covariance Structure Analysis: Maximum Likelihood Estimation

Lagrange Multiplier and Wald Test Indices _GAMMA_[9:6]
General Matrix
Univariate Tests for Constant Constraints
Lagrange Multiplier or Wald Index / Probability / Approx Change of Value

|      | F2 | F3 | F4 | F5 | F6 | F7 |
|------|------|------|------|------|------|------|
| V12  | 0.4522 | 0.0762 | 0.0940 | 0.7400 | 0.2405 | 0.1680 |
|      | 0.5013 | 0.7825 | 0.7591 | 0.3897 | 0.6238 | 0.6819 |
|      | -0.0250 | -0.0078 | 0.0134 | 0.0338 | -0.0266 | 0.0212 |
| V13  | 20.8414 | 3.0848 | 2.2315 | 2.4916 | 0.5934 | 32.9147 |
|      | . | 0.0790 | . | 0.1145 | 0.4411 | . |
|      | . | -0.0539 | . | -0.0753 | 0.0434 | . |
|      | [PV13F2] | | [PV13F4] | | | [PV13F7] |
| V14  | 0.0287 | 0.2801 | 8.7405 | 0.8171 | 9.6205 | 10.3480 |
|      | 0.8654 | 0.5967 | . | 0.3660 | . | . |
|      | 0.0032 | 0.0115 | . | 0.0304 | . | . |
|      | | | [PV14F4] | | [PV14F6] | [PV14F7] |
| MPQ  | . | 3.0848 | . | 2.4916 | 0.5934 | . |
|      | . | 0.0790 | . | 0.1145 | 0.4411 | . |
|      | Sing | 0.4512 | Sing | 0.6300 | -0.3629 | Sing |
| MSQ  | . | . | . | . | . | . |
|      | . | . | . | . | . | . |
|      | Sing | Sing | Sing | Sing | Sing | Sing |

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The CALIS Procedure
Covariance Structure Analysis: Maximum Likelihood Estimation

Lagrange Multiplier and Wald Test Indices _GAMMA_[9:6]
General Matrix
Univariate Tests for Constant Constraints
Lagrange Multiplier or Wald Index / Probability / Approx Change of Value

| | F2 | F3 | F4 | F5 | F6 | F7 |
|---|---|---|---|---|---|---|
| MRQ | 0.0287 | 0.0310 | . | 0.0529 | 0.5935 | . |
|  | 0.8654 | 0.8602 | . | 0.8180 | 0.4411 | . |
|  | -0.0365 | 0.0395 | Sing | -0.0803 | -0.8477 | Sing |
| MEB | . | . | . | . | . | . |
|  | . | . | . | . | . | . |
|  | Sing | Sing | Sing | Sing | Sing | Sing |
| MPR | 0.0287 | 0.2801 | . | 0.8171 | . | . |
|  | 0.8654 | 0.5967 | . | 0.3660 | . | . |
|  | -0.0234 | -0.0837 | Sing | -0.2222 | Sing | Sing |
| MCC | 0.0287 | 3.0328 | . | 3.3963 | 0.5934 | . |
|  | 0.8654 | 0.0816 | . | 0.0653 | 0.4411 | . |
|  | -0.0249 | -0.1908 | Sing | -0.3137 | 0.1944 | Sing |

Rank Order of the 10 Largest Lagrange Multipliers in _GAMMA_

| Row | Column | Chi-Square | Pr > ChiSq |
|---|---|---|---|
| MCC | F5 | 3.39635 | 0.0653 |
| V13 | F3 | 3.08481 | 0.0790 |
| MPQ | F3 | 3.08480 | 0.0790 |

The CALIS Procedure

Covariance Structure Analysis: Maximum Likelihood Estimation

Rank Order of the 10 Largest Lagrange Multipliers in _GAMMA_

| Row | Column | Chi-Square | Pr > ChiSq |
|-----|--------|-----------|-----------|
| MCC | F3 | 3.03284 | 0.0816 |
| V13 | F5 | 2.49164 | 0.1145 |
| MPQ | F5 | 2.49163 | 0.1145 |
| V14 | F5 | 0.81711 | 0.3660 |
| MPR | F5 | 0.81710 | 0.3660 |
| V12 | F5 | 0.73999 | 0.3897 |
| MRQ | F6 | 0.59346 | 0.4411 |

The CALIS Procedure

Covariance Structure Analysis: Maximum Likelihood Estimation

Lagrange Multiplier and Wald Test Indices _BETA_[9:9]

General Matrix

Identity-Minus-Inverse Model Matrix

Univariate Tests for Constant Constraints

Lagrange Multiplier or Wald Index / Probability / Approx Change of Value

| | V12 | V13 | V14 | MPQ | MSQ | MRQ | MEB | MPR | MCC |
|---|---|---|---|---|---|---|---|---|---|
| V12 | Sing | 6.8683 [PV12V13] | 26.5976 [PV12V14] | 0.5772 / 0.4474 / -0.0241 | 0.1660 / 0.6837 / -0.0098 | 0.0737 / 0.7860 / 0.0101 | 1.9281 / 0.1650 / 0.0446 | 0.3463 / 0.5562 / -0.0285 | 0.1484 / 0.7001 / 0.0164 |
| V13 | 0.4189 / 0.5175 / 0.0465 | Sing | 0.0934 / 0.7599 / 0.0767 | 4.0076 / 0.0453 / 0.6602 | 2.8083 / 0.0938 / -0.0347 | 2.1078 / 0.1466 / 0.1746 | 2.2540 / 0.1333 / -0.0412 | 0.8075 / 0.3689 / 0.0392 | 0.0046 / 0.9461 / -0.0109 |
| V14 | 0.0119 / 0.9132 / -0.0087 | 100.7132 [PV14V13] | Sing | 0.0125 / 0.9111 / 0.0018 | 0.2070 / 0.6492 / 0.0068 | 0.8553 / 0.3551 / -0.0967 | 0.7640 / 0.3821 / 0.0175 | 0.8309 / 0.3620 / -0.4563 | 0.1041 / 0.7469 / 0.0740 |
| MPQ | 0.6379 / 0.4245 / -0.1136 | 4.0076 / 0.0453 / 1.9920 | 0.0515 / 0.8204 / 0.0750 | Sing | 2.8083 / 0.0938 / 0.2900 | 1.0636 / 0.3024 / -0.6692 | 2.2540 / 0.1333 / 0.3450 | 0.7422 / 0.3889 / -0.3091 | 0.4041 / 0.5250 / 0.3792 |
| MSQ | 0.9915 / 0.3194 / 0.1503 | 2.3286 / 0.1270 / -0.4454 | 0.3651 / 0.5457 / -0.1854 | 2.3286 / 0.1270 / 1.2356 | Sing | 0.0895 / 0.7648 / 0.2877 | Sing | 0.1062 / 0.7445 / -0.5477 | 2.0811 / 0.1491 / -0.7628 |

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The CALIS Procedure
Covariance Structure Analysis: Maximum Likelihood Estimation

Lagrange Multiplier and Wald Test Indices _BETA_[9:9]
General Matrix
Identity-Minus-Inverse Model Matrix
Univariate Tests for Constant Constraints
Lagrange Multiplier or Wald Index / Probability / Approx Change of Value

|     | V12 | V13 | V14 | MPQ | MSQ | MRQ | MEB | IPR | MCC |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| MRQ | 0.0961 | 2.0864 | 0.0302 | 0.2383 | 0.0519 | . | 0.0453 | 0.0825 | 2.4521 |
|     | 0.7566 | 0.1486 | 0.8620 | 0.6255 | 0.8199 | . | 0.8315 | 0.7739 | 0.1174 |
|     | 0.0318 | 0.4047 | 0.0558 | -0.0856 | 0.0351 | Sing | -0.0438 | -0.2004 | 0.7649 |
| MEB | 2.0952 | 1.9099 | 0.0207 | 1.9099 | . | 0.0349 | . | 0.6466 | 2.6494 |
|     | 0.1478 | 0.1670 | 0.8857 | 0.1670 | . | 0.8517 | . | 0.4213 | 0.1036 |
|     | 0.1641 | -0.3032 | -0.0332 | 0.8410 | Sing | -0.1352 | Sing | -1.0169 | -0.6470 |
| MPR | 0.1734 | 1.4254 | 0.7211 | 0.1965 | 0.2070 | 0.1112 | 0.7640 | . | 1.6194 |
|     | 0.6771 | 0.2325 | 0.3958 | 0.6575 | 0.6492 | 0.7388 | 0.3821 | . | 0.2032 |
|     | -0.0317 | 0.1742 | 0.2174 | -0.0503 | -0.0496 | 0.1738 | -0.1276 | Sing | 0.4081 |
| MCC | 0.0763 | 0.0120 | 0.0596 | 0.0049 | 2.6840 | 2.4521 | 3.1273 | 0.8479 | . |
|     | 0.7823 | 0.9129 | 0.8072 | 0.9440 | 0.1014 | 0.1174 | 0.0770 | 0.3572 | . |
|     | 0.0264 | -0.0360 | 0.0987 | 0.0086 | -0.1221 | 0.6659 | -0.1756 | 0.1802 | Sing |

Rank Order of the 10 Largest Lagrange Multipliers in _BETA_

| Row | Column | Chi-Square | Pr > ChiSq |
|-----|--------|------------|------------|
| MPQ | V13 | 4.00756 | 0.0453 |
| V13 | MPQ | 4.00755 | 0.0453 |

The CALIS Procedure

Covariance Structure Analysis: Maximum Likelihood Estimation

Rank Order of the 10 Largest Lagrange Multipliers in _BETA_

| Row | Column | Chi-Square | Pr > ChiSq |
|-----|--------|-----------|-----------|
| MCC | MEB | 3.12727 | 0.0770 |
| V13 | MSQ | 2.80827 | 0.0938 |
| MPQ | MSQ | 2.80827 | 0.0938 |
| MCC | MSQ | 2.68403 | 0.1014 |
| MEB | MCC | 2.64935 | 0.1036 |
| MCC | MRQ | 2.45214 | 0.1174 |
| MRQ | MCC | 2.45208 | 0.1174 |
| MSQ | V13 | 2.32859 | 0.1270 |

Stepwise Multivariate Wald Test

| | -----Cumulative Statistics----- | | | --Univariate Increment-- | |
|-----------|------------|----|-----------|------------|-----------|
| Parameter | Chi-Square | DF | Pr > ChiSq | Chi-Square | Pr > ChiSq |
| PV13F4 | 2.23152 | 1 | 0.1352 | 2.23152 | 0.1352 |

# APPENDIX G

In-depth interviews

# MEETING PLANNER FIELD INTERVIEWS

| Position* | Company |
|---|---|
| A. Conference Manager | UK international accounting and consulting firm |
| B. Conference Planner | UK international consumer product company |
| C. Sales Office Manager | UK international pharmaceutical company |
| D. Convention Manager | UK trade association |
| E. Meeting Director | American association |
| F. Corporate Training Manager | American international postal company |
| G. Meeting Manager | American international insurance corporation |
| H. Corporate Meeting Planner | American international information technology company |

\* All positions are headquarter-based

## Date
Interviews were conducted between January 1998 and February 2000

## Place
Some interviews were conducted in person. Most were conducted by phone.

## Time
Interviews lasted from half an hour to an hour and 15 minutes.

| Years as meeting planner | % of time | Meetings per year |
|---|---|---|
| A. 23 years | 85% | 85 |
| B. 28 years | 100% | +200 |
| C. 14 years | 20% | 15 |
| D. 24 years | 90% | 48 |
| E. 6 years | 80% | 12 |
| F. 8 years | 10% | 45 |
| G. 18 years | 100% | 350 |
| H. 9 years | 100% | 70 |

### Could you please tell me about the **kind of meetings you book?**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Conventions | | B | | D | E | | G | |
| Exhibitions/Trade shows | | | C | D | E | | G | |
| Meetings/Seminars | A | B | C | D | E | F | G | H |
| Incentives | | | C | | | | G | |
| Shareholder meetings | | B | | | | | G | |
| Board meetings | | | | D | | | G | |
| Other (dinner events) | | B | | | | | | |

What are the main **types of venues** that you use for the meetings you book?

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| In-house | A | B | C | | | F | G | H |
| Hotels | A | B | C | D | E | F | G | H |
| Cruise ships | | | | | | | | |
| Convention Centres | A | | | D | | | | |
| Universities | | | | | | F | G | H |
| Public facilities. | | | | | | | G | |
| Other | | | | | | | | |

When you book meetings at hotels, what is the **type of hotel** you primarily use?

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| City centre | A | B | C | D | E | | G | H |
| Resort | | B | C | D | E | | G | H |
| Airport | | | C | | | F | G | H |
| Suburban | | B | | | | F | G | H |
| Other | | | | | | | | |

Comments:

C. Uses resorts for incentives
F. Likes locations away from city centres
G. Increasingly uses hotels that belong to International Conference and Convention
   Association

Do you prefer to book meetings at:

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Chain hotels | A | B | C | D | | G | |
| Non-chain hotels | | B | C | D | | | |
| No preference | | | | | E | F | H |

If you **do** have a preference, would you explain your reasons:

| | |
|---|---|
| A. Chain | Reputation |
| | Recourse to national Sales Manager in case of problems |
| | Ability to build on existing relationship with chain |
| | |
| B. Non-chain | Prefers high quality country hotels |
| | |
| C. Chain | Known high standard of service and product quality |
|    Non-chain | Prefers Leading hotels and Preferred hotels (same reason) |
| | |
| G. Chain | Relationships with corporate Sales and Marketing department |

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Do you feel the following methods are "not important ", "important ", or "very important" in the communication of a hotel's value proposition [*offering*] to the meeting market?

| | Not Important | Important | Very Important |
|---|---|---|---|
| Word of mouth | F | E | ABCDGH |
| Advertising | EFG | ABCDH | |
| Guide books | FH | BDE | A |
| Travel agencies | BDEFGH | A | C* |
| World Wide Web | ACDF | BH | EG |
| Trade shows | CFH | ABDG | E |
| Hotel sales reps | BCD | AEH | FG |
| Reservation systems | BFH | CDEG | A |
| Special promotions | ABCDEFGH | | |
| Awards/Star ratings | BCEFH | ADG | |
| Brand/Image | BEH | ACDFG | |
| Hotel nat'l sales office | BEF | CDH | AG |
| CD-ROM presentations | ADEFH | BCG | |
| Hotel videos | ACDEG | BFH | |
| C & V Bureaux | CF | ABEGH | D |

Comments:
B.  Special promotions          Prefers one-on-one on-site meetings.
    C & V Bureaux          Only used for out-of-town events

If someone asked you if you were "committed" to booking meetings at this hotel, what would the word "**committed**" **mean to you?**

A. To actively seek to place meetings at a venue of choice.
  Use venue as benchmark for other venues.
  Feel confident in recommending a venue to colleagues.

B. Close working relationship with hotel's management and staff.
  Hotel provides added value in terms of quality of service and facilities.

C. Hotel is first choice when booking meetings in this region.

D. Excellent facilities and service.

E. Receiving a consistently high standard of service.

F. Excellent relationship with management and key staff.

G. Long term working relationship.

H. Trusting relationship and close working relationship with sales department.


Would you say that **you are committed** to booking meetings at this hotel?


A. No
Degree of complacency among certain members of conference and banquet staff.
A number of requests had been mis-communicated.
Some staff showed great commitment but this was not reflected in all areas.

B. Yes
Events are handled to my satisfaction.
High quality conference space.
Responsive service.

C. Yes
Easy to do business with.
Understand professional meeting planner's needs.
"Speak the same language".
Efficient level of service (check-in, food served on time).
They are proactive
"I don't have to ask - they know."


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D. Yes    Excellent facilities.
          Good mix of break-out rooms.
          Professional service standards.

E. Yes    Overall high standards of facilities and services.

F. Yes    Partnership.
          We're not just a number.
          Consistent service.
          Value - we're willing to pay more but we want quality for our money.

G. Yes    High quality service.
          Professional sales and conference services departments.
          General manager gets involved.
          Long-term relationships.

H. Yes    Low staff turnover - have dealt with same Sales Manager for years.
          High quality of facilities - especially upkeep.
          Flexible in pricing - willing to make offers in low season.
          High ratio of staff to customers.

<u>Now would you please think about a 4 or 5 star hotel where you have booked
meetings in the past, but where you **don't book meetings any longer.**</u>

<u>What are the **main reasons** that you don't book meetings there any longer?</u>

A.  Lack of quality space.
    Complacency of staff and management.

B.  Lack of consistency.
    Food and meeting breaks not served on time.
    Poor quality of food and service standards.
    Agreements made by sales staff not met by hotel.

C.  Unprofessional staff.
    Everything has to be asked for and detailed.
    Lack of accountability by operating staff.
    Unreliability.

D.  Low service and food standards.
    Run down facilities.

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E. Hotel made promises they didn't live up to.
   Overall bad attitude.

F. Agreements made were broken (added charges later).
   Our business was not valued.
   Frequent changes in management and key department heads.
   New staff did not understand our needs.

G. Unreliable, weak Convention Service Manager.
   Did not receive what was promised.
   Unsatisfactory service.

H. Poor service.
   Extra charges added after signing of contract.

In order of importance, what are the **key factors** for you in your overall evaluation of a 4 or 5 star hotel as a meeting venue?

A. Meeting facilities that match conference requirements.
   Flexibility in understanding of organiser's viewpoint.
   Clear and strong communication lines to all involved to ensure smooth running.
   Continued and consistent commitment from all staff to high levels of service.

B. Quality of meeting space.
   One staff member assigned to co-ordinate all aspects of meeting, providing continuity.

C. Venue understands meetings and meeting planner needs.
   Flexibility of hotel, allowing meeting planner to make changes without hassle.
   Same person with whom meeting arrangements were made is in charge of handling meeting co-ordination (9 out of 10 times, this is not the case).

D. Quality of facilities and service staff.
   Professional support services (A/V).
   Dedicated Conference Co-ordinator.

E. Quality of service.
   Convenient location.
   Quality of guest and meeting rooms.
   Conference Co-ordinator and concierge service.
   Excellent amenities.

F. Adequate high quality meeting space.
   Well furnished and decorated guest rooms.

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G. Hotel must pass unannounced inspection.
   Satisfy quality standards (overall appearance, rooms, food and service).
   Pass risk assessment (questionnaire filled out by hotel in form of a check list
   regarding life safety systems, security, etc.)

H. Overall high standards.
   Value for money.


## Are there any areas where you often **encounter difficulties** in the planning or staging of meetings at 4 or 5 star hotels?

A. Sales staff has insufficient knowledge and details about technical capabilities of
   meeting rooms.
   Site inspections are conducted without F & B staff being present.
   Incorrect posting of invoices.
   Reservation department often in the dark regarding finer points about rooms
   (non-smoking, suite configurations).
   Information provided about meeting facilities (sizes, capacity, etc) on brochures
   is often incorrect.
   Venues should seek advice from meeting planners and production companies
   when planning meeting spaces.

B. Overall quality of space and design.
   Inadequate lighting.

C. Bills can be difficult to decipher.
   Person who made booking and meeting arrangements at the hotel is usually not
   the same person who handles the actual meeting (9 times out of 10).
   Meeting planner therefore needs to go over the details again.

D. Lack of sufficient breakout space and informal lounge to allow for networking.
   Frequent staff turnover.

E. Once booking has been made, response time from convention co-ordinator is too
   long.

F. Larger, more flexible meeting spaces are required.
   For training sessions lasting more than a week, guest rooms should be larger and
   better equipped (coffee making, small refrigerator, improved technology).

G. Indifferent staff.
   Lack of professional training.

H. High hotel staff turnover.
   Inflexibility in pricing (meeting planner must demonstrate value to the client).

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Now I'd like to ask you some questions about **specific areas** relating to the products and services that 4 and 5 star hotels offer to the meeting market that are most important to you:

What are the **product attributes** (for example, the hotel's setting, facilities, design features) that are most important to you in booking meetings at a 4 or 5 star hotel?

A. Quality of meeting facilities.
   Décor and state of repair.
   Hotel setting.
   Standard of hotel bedroom facilities.

B. Daylight in meeting rooms.
   Comfortable chairs.(standard banquet chairs are not good enough).
   Square meeting rooms.
   Dedicated areas for meeting breakouts.

C. Hotels should custom design meeting rooms and breakout areas.
   Facilities are often inefficient and do not provide sufficient flexibility.
   Up-to-date technical and audiovisual equipment is often lacking.
   Informal room required to meet, relax, play games, etc.
   Guest rooms don't need to provide over-the-top amenities but should be spacious and comfortable.

D. Purpose-built conference and meeting facilities should be designed with the input of meeting planners.
   Even many new facilities are inefficient and do not reflect client requirements (layout, décor, technology).

E. All meeting rooms should be on the same floor and near each other.
   There should be choices for dining.
   There should be a casual, informal bar / lounge.
   Need high uniform standards.
   Need flexible business centre providing support services (fax, computer, message centre).

F. Larger meeting rooms.
   Better designed guest rooms and suites (with small refrigerator).
   Well equipped exercise facilities.

G. All breakout rooms on same floor.
   Meeting rooms with daylight.
   High quality up-to-date technology.

H. Meeting rooms fully equipped with state-of-the-art technology.

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Guest rooms with two telephone lines, computer jack, large writing desk (with second telephone and good lighting).
Informal bar / lounge (where women feel comfortable) for networking and informal gatherings.
Staffed business centre.

## Which aspects of **service** do you value the most at a 4 or 5 star hotel where you would book meetings?

A. Prompt reaction from F & B staff.
Consideration towards delegates from all staff.
Flexibility (responsive to last minute changes).

B. Dedicated conference service desk (fax, messages, overheads, etc.).
Well-serviced coffee break area.

C. Qualified staff.
Sufficient number of staff present to service function.

D. High level of staff professionalism.
Low staff turnover.

E. Experienced convention co-ordinator.
Overall 'can-do' attitude of staff and management.
Recognition of meeting planner needs and overall client requirements.
Ability to respond to special requests.

F. Responsiveness of hotel staff.
Efficiency of staff - no hassle.

G. Conference Service Manager makes or breaks conference.

H. Professional, experienced Conference Co-ordinator.
Experienced staff in handling conference technology.
Airport shuttle service.

## Which aspects of your **working relationships** with the hotel's staff and management are most important to you?

A. Honest and frank discussion regarding what can and can't be achieved.
Prompt to response to planning queries.
Genuine sense of teamwork between meeting planner and hotel to achieve meeting success.

B. Continuity of hotel contact.
Low staff turnover.

C. What was promised / agreed is delivered (this is often not the case).
Good internal hotel communication between the different departments (this is often a major weakness).

D. Flexibility in pricing arr ngements. [pricing]
Reliable, stable relationships.

E. Professionalism and positive attitude of Sales Manager and CSM.

F. Commitment is to the people at the hotel, not the facility itself.
Most important to have a trusting relationship between meeting planner and hotel management. Two examples:
   1) Company had a nation wide strike and had to cancel a confirmed booking on short notice. Hotel did not invoice cancellation fees because of long-term relationship with company.
   2) The same hotel was once badly overbooked. Meeting planner agreed to move his group (48 people) for two days to another property, thus helping out the hotel.

G. Excellent relationship with General Manager and CSM.

H. Trustworthy relationship with hotel management.
One contact person for all meeting arrangements and on-site service co-ordination..

## Are there any **extra benefits** that 4 and 5 star hotels provide to the meeting market that are particularly valuable to you?

A. None

B. None.
Meeting planner feels that they are an indirect bribe.
Upgrade to a suite for conference leader or VIP is seen as acceptable.

C. Doesn't like frequent stayer bonus points.
Prefers straight negotiations.

D. None.
Prefers fair pricing to benefits.

E. 50% discount on guest rooms for meeting planner and staff working the event.
Upgrade to VIP suite for association President.

F. Not the main issue.
Nice to have (such as frequent stayer programme).

G. None.
Have ethical problems with extra benefits and 'goodies' for meeting planners.

H. VIP upgrades.
Frequent stayer programme

## Which aspects of a hotel's **pricing structure** for meetings are important to you?

A. Pricing of meeting room hire, F & B charges and accommodation charges should be negotiable.

B. Prefer package: all-inclusive with guest rooms, F & B, meeting rooms and A/V.

C. Likes 24-hour daily delegate rate.
Clarity in pricing.
Billing should be easy to understand and 'up-front'.
Have had problems with beverage charges - insist on payment based on consumption.
Must be able to trust in billing.

D. Transparency in billing.
Hotels should reduce room and F & B rates for larger functions.

E. Many hotels price themselves out of the market with their room rates.

F. Like one-price package but still want flexibility (for example, when own technology equipment is used).
Like to have an itemised breakdown of charges.

G. One package rate is great for standard meetings.
Company insists on a satisfaction guarantee with a penalty clause if 20% or more of conference attendees are not satisfied with hotel's products or services.

H. One package price.
Standard banquet meals are too expensive.
Does not like the automatic service charge added to F & B functions (sometimes as high as 20%).

## Are there any **indirect costs** (like time, effort, convenience) that are particularly important to you?

A. Meeting planner is careful not to book meetings at hotels where travel time and transportation costs are too high for delegates.

B. Hotels that we use consistently should have a record of all our meeting requirements so that we don't have to start from scratch each time (detailed meeting history).

C. We will to deal with people who understand conference and meeting planner needs.
A hotel should have customer data base.
Hotel should be prepared for next meeting (like a tailor who has taken your measurements).

D. Toll-free telephone number.
Efficient, cost-effective dealings with Sales and Conference Co-ordinator.

E. Lack of CSM.
Staff is sometimes unprofessional.

F. Working with the same hotel (they know what I want).
Reduces hassle, easy to do business with.
Likes long-term relationships.

G. Often a result of hotels that are not prepared ahead of time for meeting negotiations and planning.
Meeting planner now sends a Meeting Profile Check List ahead of time to the hotel, listing detailed requirements.

H. Often a result of inefficient Sales and Marketing department.
Hassle in straightening out inaccurate bills or late bills.

Which aspects of **problem resolution** are most important to you?

A. Gaining a sense of teamwork with hotel contacts.
Having constant and immediate access to relevant staff.
Open and honest discussions / communication.

B. Immediate problem resolution.
No hassle.
Hotels should improve employee empowerment down to the lowest level.

C. Staff at all levels should have the authority to solve problems.

D. On the spot problem resolution.
"Can do" attitude.

E. Proactive CSM with problem solving skills.

F. Positive attitude.
Not 'you' or 'I' have a problem, but 'we' have a problem. Let's solve it as partners.
Direct line to GM with invitation to call even at home if needed.

G. All are important.
   Immediate attention is required to solve problems.
H. CSM must have the authority to make on-the-spot decisions (i.e. price
   corrections).


Thinking in general about 4 and 5 star hotels, where do you think hotels could make
the **greatest improvement** in their offerings to the meeting market?

A. Accuracy of publicity material.
   Greater flexibility with option dates.

B. Front-line staff sufficiently trained.
   Hotels request feedback from meeting participants, but don't seem to be
   responsive in taking corrective actions.

C. Improvements in overall quality of product and facilities.
   One dedicated hotel contact person.
   Empowerment of staff.

D. Improvement in meeting facility design and layout.
   Improvement in professionalism of staff through continuous training.

E. Up-keep of facilities (will not use one of the well-known hotel chains because
   their facilities are increasingly run-down).
   Quality and standards of service.

F. Improvements in technology in guest rooms, meeting rooms and breakout rooms.
   Proper design and size of meeting rooms.
   Providing lighter, healthier food.

G. Hotels should be more interested in what the objectives of a meeting are.

H. Lower staff turnover.
   More sophisticated technology.


Are there any emerging **trends** that you are aware of in the meeting market?

A. Improvements in technology.

B. Increased sophistication of A/V presentations.
   Lighter food with more choice.

C. Hotels should be more up-to-date on emerging technologies. [improvement]

D. Improvements in technology and hotel's ability to provide technological services.

E. Communicating with hotels via electronic means to make meeting arrangements, finalise bookings, last minute changes, rooming lists, etc.

F. Purpose-designed meeting facilities. The old banquet rooms will not suffice any longer.
More professionally run meetings.

G. Healthier food.
Improved technology in all rooms.
Meetings more efficiently run.

H. State-of-the-art technology in meeting and guestrooms.
Purpose-built, fully equipped amphitheatre appropriately furnished.

# BIBLIOGRAPHY

Aaker, David A. (1992a), <u>Developing Business Strategies, 3<sup>rd</sup> Ed.</u> John Wiley & Sons, New York.

_____ (1992b), <u>Strategic Market Management, 3<sup>rd</sup> Ed.</u> John Wiley & Sons, New York.

Abrams, M. and Pease M. (1993), "Wining and Dining the Whiners," *Sales and Marketing Management,* (Feb), 73-75.

Albrecht, Karl (1988), <u>At America's Service: How Corporations Can Revolutionize the Workplace.</u> Warner Books, New York.

_____ and Zemke, Ron (1985), <u>Service America!</u> Warner Books, New York.

_____ and Bradford, L.J. (1980), <u>The Service Advantage: How to Identify and Fulfill Customer Needs.</u> Dow Jones Irwin, Homewood, ILL.

Alpert, M.J. (1971), "Identification of Determinant Attributes: A Comparison of Methods," *Journal of Marketing Research,* 8 (May), 184-191.

American Marketing Association (1998), "1999 Advanced Research Techniques Forum: Call for Papers," *AMA Marketing News,* (October 12), 12.

Anderson, Eugene W. and Sullivan, Mary W. (1993), "The Antecedents and Consequences of Customer Satisfaction for Firms," *Marketing Science,* 12, 2 (Spring), 125-143.

_____ and Fornell, Claes (1994), "A Customer Satisfaction Research Prospectus," in Rust, R.T. and Oliver, R.L. (eds), <u>Service Quality: New Directions in Theory and Practice.</u> Sage, Thousand Oaks, CA.

_____, _____, and Lehmann, D R. (1994), "Customer Satisfaction, Market Share and Profitability: Findings from Sweden," *Journal of Marketing,* 58 (July), 53-56.

Anderson, James C. and Gerbing, D.W. (1988), "Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach," *Psychological Bulletin,* 103, 411-423.

_____ and Narus, James A. (1995), "Capturing the Value of Supplementary Services," *Harvard Business Review,* (Jan/Feb), 75-83.

Andreassen, Tor Wallin and Lindestad, Bodil (1998), "Customer Loyalty and

Complex Services: The Impact of Corporate Image on Quality, Customer Satisfaction and Loyalty for Customers With Varying Degrees of Service Expertise," *International Journal of Service Industry Management,* 9, 1, 7-23.

Armistead, C.G. and Clark, G. (1994), "Service Quality and Service Recovery," in The Future of Services Management by Armistead, C. G. (ed), Kogan Page, London.

Armstrong, Robert W., Mok, Connie, Go, Frank M. and Chan, Allan (1997), "The Importance of Cross-Cultural Expectations in the Measurement of Service Quality Perceptions in the Hotel Industry," *International Journal of Hospitality Management,* 16, 2, 181-190.

Arogyaswamy, B. and Simmons, R.P. (1993), Value-Directed Management. Quorum, Westport, CT.

Assael, Henry (1992), Consumer Behavior and Marketing Action, 4th Ed. PWS-Kent, Boston, MA.

Asubonteng, Patrick, McCleary, Karl J. and Swan, John E. (1996), "SERVQUAL Revisited: a Critical Review of Service Quality," *The Journal of Services Marketing,* 10, 6, 62-81.

Babakus, Emin and Boller, Gregory W. (1992), "An Empirical Assessment of the SERVQUAL Scale," *Journal of Business Research,* 24, 253-268.

Bagozzi, Richard P. (1982), "A Field Investigation of Causal Relationships," *Journal of Marketing Research,* 19 (Nov), 562-584.

_____ and Foxall, Gordon R. (1996), "Construct Validation of a Measure of Adaptive-Innovative Cognitive Styles in Consumption," *International Journal of Research in Marketing,* 13, 201-213.

Barlow, Richard G. (1998), "Business Relationships: Use Your Data to Upgrade B-to-B Frequency," *Direct,* (Oct).

Barsky, Jonathan Daniel (1991), Customer Satisfaction in the Hotel Industry: Meaning and Measurement. Unpublished doctoral dissertation, Golden Gate University.

_____ (1992), "Customer Satisfaction in the Hotel Industry: Meaning and Measurement," *Hospitality Research Journal,* 16, 1, 51-73.

_____ and Labagh, Richard (1992), "A Strategy for Customer Satisfaction," *The Cornell Hotel & Restaurant Association Quarterly,* (Oct), 32-40.

Bateson, John E. (1977), "Do We Need Service Marketing?" in Eiglier, P. et al (eds) Marketing Consumer Services: New Insights. Marketing Science Institute, Cambridge, MA.

338

_____ (1995a), <u>Managing Services Marketing, 3<sup>rd</sup> Ed.</u> Dryden Press, Hinsdale, ILL.

_____ (1995b), <u>Managing Services Marketing: Texts and Readings, 3<sup>rd</sup> Ed.</u> Dryden Press, Orlando, FL.

Bear Stearns (1997), <u>U.S. Lodging Almanac,</u> New York.

Bejou, David (1997), "Relationship Marketing: Evolution, Present State, and Future," *Psychology & Marketing,* 14, 8 (Dec), 727-736.

Bendapudi, Neeli, and Berry, Leonard L. (1997), "Customers' Motivations for Maintaining Relationships with Service Providers," *Journal of Retailing,* 73, 1, 15-37.

Bennington, Lynne and Cummane, James (1998), "Measuring Service Quality: A Hybrid Methodology," *Total Quality Management,* 9 (Aug), 6, 395-406.

Bentler, P.M. and Bonett, D.G. (1980) "Significance Tests and Goodness-of-Fit in the Analysis of Covariance Structures," *Psychological Bulletin,* 88, 588-606.

_____ and Chou, C. (1987), "Practical Issues in Structural Modeling," *Sociological Methods & Research,* 16, 78-117.

_____ (1989), <u>EQS Structural Equations Program Manual.</u> BMPD Statistical Software, Los Angeles, CA.

Berry, Leonard L. (1980), "Service Marketing is Different," *Business,* (May/June), 24-29.

_____ (1983), "Relationship Marketing," in <u>Emerging Perspectives on Service Marketing</u> by Berry, Leonard L., Shostack, G. Lynn and Upah, Gregory (eds), American Marketing Association, Chicago, ILL., 25-28.

_____ and Parasuraman, A. (1991), <u>Marketing Services: Competing Through Quality.</u> The Free Press, NY.

_____ and Parasuraman, A. (1992a), "Prescriptions for a Service Quality Revolution in America," *Organizational Dynamics,* (Spring), 5-15.

_____ and _____ (1992b), "Services Marketing Starts from Within," *Marketing Management,* (Winter), 25-34.

_____ and _____ (1993), "Building a New Academic Field - The Case of Service Marketing," *Journal of Retailing,* 69, 1 (Spring), 13-60.

_____, _____ and Zeithaml, V. (1994), "Improving Service Quality in America: Lessons Learned," *Academy of Management Executive,* 8, 2, 32-52.

339

_____ (1995a), "Relationship Marketing of Services - Growing Interest, Emerging Perspectives," *Journal of the Academy of Marketing Science*, 23, 4, 236-245.

_____ (1995b), On Great Service: A Framework for Action. The Free Press, New York.

Binkley, Christina (2000), "Artful Lodges Woo Frequent Travelers in an Effort to 'De -Commodify' Industry," *Wall Street Journal*, (June 20), A1, A12.

Bitner, Mary Jo (1990),"Evaluating Service Encounters: The Effects of Physical Surroundings and Employee Responses," *Journal of Marketing*, 54 (April), 69-82.

_____, Booms, Bernard H. and Tetreault, Mary Stanfield (1990), "The Service Encounter: Diagnosing Favorable and Unfavorable Incidents, " *Journal of Marketing*, 54 (Jan), 71–84.

_____ (1992), "Servicescapes: The Impact of Surroundings on Customers and Employees," *Journal of Marketing*, 56 (April), 57-71.

_____ and Hubbert, Amy R. (1994), "Encounter Satisfaction Versus Overall Satisfaction Versus Quality: The Customer's Voice," in Service Quality: New Directions in Theory and Practice by Rust, Roland T. and Oliver, Richard L. (eds), Sage, Thousand Oaks, CA.

_____ (1995), "Building Service Relationships: It's All About Promises," *Journal of the Academy of Marketing Science*, 23, 4, 246-251.

Blackwell, Steven Allen (1998), An Empirical Investigation of Customer Loyalty. Unpublished dissertation, University of Mississippi.

Bloemer, Josee and de Ruyter, Ko (1998), "On the Relationship Between Store Image, Store Satisfaction and Store Loyalty," *European Journal of Marketing*, 32, 5/6, 499-513.

_____, _____ and Peeters, Pascal (1998), "Investigating Drivers of Bank Loyalty: The Complex Relationship Between Image, Service Quality and Satisfaction," *International Journal of Bank Marketing*, 16, 7, 276-286.

Bolton, Ruth N. and Drew, James H. (1991), "A Multistage Model of Customers' Assessments of Service Quality and Value," *Journal of Consumer Research*, 17 (March), 375-384.

_____ and _____ (1992), "Mitigating the Effect of Service Encounters," *Marketing Letters*, 3 (Jan), 57-70.

_____ and Lemon, Katherine N. (1999), "A Dynamic Model of Customers' Usage of Services: Usage as an Antecedent and Consequence of Satisfaction," *Journal of Marketing Research*, 36 (May), 171-186.

340

_____, Kannan, P.K. and Bramlett, Matthew D. (2000), "Implications of Loyalty Program Membership and Service Experiences for Customer Retention and Value," *Journal of the Academy of Marketing Science*, 28, 1, 95-108.

Boulding, William, Kalra, Ajay, Staelin, Richard, and Zeithaml, Valarie A. (1993), "A Dynamic Process Model of Service Quality: From Expectations to Behavioral Intentions," *Journal of Marketing Research*, 30 (Feb), 7-27.

Bounds, Greg, Lyle, Yorks, Adams, Mel and Ranney, Gipsie (1994), Beyond Total Quality Management: Toward the Emerging Paradigm, McGraw-Hill, New York.

Bowden, Phil (1998), "A Practical Path to Customer Loyalty," *Managing Service Quality*, 8, 4, 248-255.

Bowen, David and Lawler, Edward E. (1995), "Empowering Service Employees," *Sloan Management Review*, 36 (Summer), 73-84.

Bowen, John and Shoemaker, Stowe (1997), Relationship in the Luxury Hotel Segment: A Strategic Perspective, Research Report, Center for Hospitality Research, Cornell University, Ithaca, NY.

_____ and _____ (1998), "Loyalty: A Strategic Commitment," *Cornell HRA Quarterly*, (February), 12-25.

_____ and Breiter, Deborah (1998), "Relationship Management: Bridging Internal and External Quality Management," Unpublished working paper.

Brown, Tom J; Churchill, Gilbert A. Jr. and Peter, J. Paul (1993), "Improving the Measurement of Service Quality," *Journal of Retailing*, 69, 1 (Spring), 127-139.

Bruns, Rick (1998), "Know Thy Guest," *http://www.lodgingmagazineonline*

Buzzell, Robert D. and Gale, Bradley T. (1987), The PIMS Principles: Linking Strategy to Performance, The Free Press, New York.

Cabanas, Burt (1992), "A Marketing Strategy for Resort Conference Centers," *The Cornell Hotel & Restaurant Association Quarterly*, (June), 45-49.

Cadotte, Ernest R., Woodruff, Robert B. and Jenkins, Roger L. (1987), "Expectations and Norms of Consumer Satisfaction," *Journal of Marketing Research*, 24 (Aug), 305-314.

Cardozo, Richard N. (1965), "An Experimental Study of Customer Effort, Expectation, and Satisfaction," *Journal of Marketing Research*, 2 (Aug), 244 - 249.

Carman, James M. (1990), "Consumer Perceptions of Service Quality: An Assessment of the SERVQUAL Dimensions," *Journal of Retailing,* (Spring), 66, 1, 33-55.

Chakrapani, Chuck (1998), How to Measure Service Quality & Customer Satisfaction. American Marketing Association, Chicago, ILL.

Chandon, Pierre, Wansink, Brian and Laurent, Gilles (2000), "A Benefit Congruency Framework of Sales Promotion Effectiveness," *Journal of Marketing,* 64 (Oct), 65-81.

Chase, R. B. and Heskett, J. L. (1995), "Introduction to the Focused Issue on Service Management," *Management Science,* 41, 11, 1717–1719.

Christopher, Martin (1996), "From Brand Values to Customer Value," *Journal of Marketing Practice: Applied Marketing Science,* 2, 1, 55-66.

Churchill, Gilbert Jr. and Surprenant, Carol (1982), "An Investigation into the Determinants of Customer Satisfaction," *Journal of Marketing Research,* 19 (Nov), 491-504.

Clark, Mona, Riley, Michael, Wilkie, Ella and Wood, Roy C. (1998), Researching and Writing Dissertations in Hospitality and Tourism. International Thomson Business Press, London.

Courtright, Hernando (1994), "How to Create Your Own Image of the Beverly Wilshire," Preferred Hotels International Assembly, Wilmington, Delaware.

Cronbach, L. (1951), "Coefficient Alpha and the Internal Structure of Tests," *Psychometrika,* 16, 297-334.

Cronin, J. Joseph and Taylor, Steven A. (1992), "Measuring Service Quality: A Reexamination and Extension," *Journal of Marketing,* 56 (July), 55-68.

_____ and _____ (1994), "SERPERF Versus SERVQUAL: Reconciling Performance-Based and Perceptions-Minus-Expectations Measurement of Service Quality," *Journal of Marketing,* 58 (Jan), 125-131.

Crosby, Lawrence A., Evans, Kenneth R. and Cowles, Deborah (1990), "Relationship Quality in Services Selling: An Interpersonal Influence Perspective," *Journal of Marketing,* 54 (July), 68-81.

Crosby, Philip B. (1984), Quality Without Tears: The Art of Hassle-Free Management. New American Library, New York.

Crouch, Geoffrey I. and Ritchie, J.R. Brent (1998), "Convention Site Selection Research: A Review, Conceptual Model, and Propositional Framework," *Journal of Convention & Exhibition Management,* 1, 1, 49-69.

Cumby, J. A. and Barnes, J. G. (1995), "Strategic Investment in Service Quality: Protecting Profitable Customer Relationships," *Advances in Services Marketing and Management*, 4, 229–248.

Czepiel, J.A. and Rosenberg, L.A. (1977), "Consumer Satisfaction Concept and Measurement," *Journal of Academy of Marketing Science*, 5, 4 (Fall), 403-411.

_____ (1990), "Service Encounters and Service Relationships: Implications for Research," *Journal of Business Research*, 20, 13-21.

Day, George S. (1969), "A Two-Dimensional Concept of Brand Loyalty," *Journal of Advertising*, 9, 3, 29-35.

Dev, Chekitan S. and Ellis, Bernard D. (1991), "Guest Histories: An Untapped Service Resource," *The Cornell Hotel & Restaurant Association Quarterly*, (Aug), 29-37.

Dholakia, Utpal M. (1997)," An Investigation of Some Determinants of Brand Commitment, " *Advances in Consumer Research*, 24, 381-387.

Dick, Alan S. and Basu, Kunal (1994), "Customer Loyalty: Toward an Integrated Conceptual Framework," *Journal of the Academy of Marketing Science*, 22, 2, 99-113.

Dodds, William B., Monroe, Kent B. and Grewal, Dhruv (1991), "Effects of Price, Brand, and Store Information on Buyers' Product Evaluations," *Journal of Marketing Research*, 28 (Aug), 307-319.

Donaldson, Bill (1995), "Customer Service as a Competitive Strategy," *Journal of Strategic Marketing*, 3, 2 (June), 113-126.

Dowling, Grahame R. and Uncles, Mark (1997), "Do Customer Loyalty Programs Really Work?" *Sloan Management Review*, (Summer), 71-82.

Drew, James H. and Bronkhorst, Tina M. (1996), "Customer Satisfaction and the Prediction of Behavior in a Hypothetical Context," *Journal of Customer Satisfaction, Dissatisfaction and Complaining Behavior*, 9, 12-19.

Droge, Cornelia, Halstead, Diane and Mackoy, Robert D. (1997), "The Role of Competitive Alternatives in the Post-Choice Satisfaction Formation Process," *Journal of the Academy of Marketing*, 28, 1, 18-30.

Dube, Laurette, Enz, Cathy A., Renaghan, Leo M. and Siguaw, Judy A. (1999), <u>The Key to Best Practices in the US Lodging Industry</u>. American Hotel Foundation, Ann Arbor, Michigan.

_____ and Renaghan, Leo M. (1999), "How Hotel Attributes Deliver the Promised

Benefits – Guests' Perspectives on the Lodging Industry's Functional Best Practices (Part II)," *The Cornell Hotel & Restaurant Administration Quarterly*, (Oct), 89-95.

_____ and _____ (2000), "Creating Visible Customer Value," *The Cornell Hotel & Restaurant Administration Quarterly*, (Feb), 62-72.

Dutka, Alan (1994), <u>AMA Handbook for Customer Satisfaction</u>. NTC Business Books, Lincolnwood, ILL.

Dwyer, Robert F., Schurr, Paul H., and Oh, Sejo (1987), "Developing Buyer-Seller Relationships," *Journal of Marketing*, (April), 11-27.

Eklof, Jan A., Hackl, Peter and Westlund, Anders (1999), "On Measuring Interactions Between Customer Satisfaction and Financial Results," *Total Quality Management*, 10, 4/5 (July), 514-523.

Esterby-Smith, Mark, Thorpe, Richard and Lowe, Andy (1991), <u>Management Research: An Introduction</u>. Sage Publications, London.

Ettorre, Barbara (1994), "Phenomenal Promises that Mean Business," *Management Review*, (March), 18-23.

Evans, J.R. and Lasking, R.L. (1994), "The Relationship Marketing Process: A Conceptualisation and Application," *Industrial Marketing Management*, 23, 439-452.

Feinberg, R.A., Widdows, R., Hirsch-Wyncott M. and Trappey, C. (1990), "Myth and Reality in Customer Service: Good and Bad Service Sometimes Leads to Repurchase," *Journal of Customer Satisfaction, Dissatisfaction and Complaining Behaviour*, 3, 112-114.

Fisk, Raymond P., Brown, Stephen W. and Bitner, Mary Jo (1993), "Tracking the Evolution of the Services Marketing Literature," *Journal of Retailing*, 69, 1 (Spring), 61-103.

Fornell, Claes and Larcker, D.F. (1981), "Evaluating Structural Equation Models With Unobservable Variables and Measurement Error," *Journal of Marketing Research*, 18, 39-50.

_____ and Wernerfelt, Birger (1987), "Defensive Marketing Strategy by Customer Complaint Management: A Theoretical Analysis," *Journal of Marketing Research*, 24 (Nov), 337-346.

_____ (1992), "A National Customer Satisfaction Barometer: The Swedish Experience," *Journal of Marketing*, 56 (Jan), 6-21.

_____ , Johnson, Michael D., Anderson, Eugene W., Cha, Jaesung, and Bryant,

Barbara Everitt (1996), "The American Customer Satisfaction Index: Nature, Purpose, and Findings," *Journal of Marketing,* 60 (Oct), 7-18.

Gale, B. T. (1994), Managing Customer Value. The Free Press, New York.

Garvin, David A. (1984), "What Does 'Product Quality' Really Mean?" *Sloan Management Review,* (Fall), 25-43.

_____ (1987), "Competing on the Eight Dimensions of Quality," *Harvard Business Review,* (Nov/Dec), 101-109.

General Agreement on Tariff and Trade (1994), World Trade Organization, Geneva, Switzerland.

General Agreement on Services (1997), World Trade Organization, Geneva, Switzerland.

Getty, Juliet M. and Thompson, Kenneth (1994), "A Procedure for Scaling Perceptions of Lodging Quality," *Hospitality Research Journal,* 18, 2, 75-96.

_____ (1996), "Does It Matter Where You Spend the Night?" *Journal of Hospitality and Leisure Marketing,* 4, 3, 3-20.

Geyskens, Inge, Steenkamp, Jan-Benedict E.M., Scheer, Lisa K., and Kumar, Nirmalya (1996), "The Effects of Trust and Independence on Relationship Commitment: A Trans-Atlantic Study," *International Journal of Research in Marketing,* 13, 303-317.

Gill, John and Johnson, Phil (1991), Research Methods for Managers. Paul Chapman Publishing, London.

Gotlieb, J.B., Grewal, D. and Brown, S.W. (1994), "Consumer Satisfaction and Perceived Quality: Complementary or Divergent Constructs," *Journal of Applied Psychology,* 79, 875-885.

Griffin, Jill (1995), Customer Loyalty: How to Earn It, How to Keep It. Lexington Books, New York.

Gronroos, Christian (1984), "A Service Quality Model and Its Marketing Implications," *European Journal of Marketing,* 18, 4, 36-44.

_____ (1988), "Service Quality: The Six Criteria of Good Perceived Service Quality," *Review of Business,* 9 (Winter), 10-13.

_____ (1990a), "Relationship Approach to Marketing in Service Contexts: The Marketing and Organizational Behavior Interface," *Journal of Business Research,* 20, 3-11.

_____ (1990b), Service Management and Marketing: Managing the Moments of

Truth in Service Operations, Lexington Books, Lexington, MA.

_____ (1993), "Toward a Third Phase in Service Quality Research: Challenges and Future Directions," *Advances in Services Marketing and Management*, 2, 49-64.

_____ (1995), "The Relationship Marketing Continuum," *Journal of the Academy of Marketing Science*, 23, 4, 252-254.

_____ (1997), "From Marketing Mix to Relationship Marketing - Towards a Paradigm Shift in Marketing," *Management Decision*, 35, 3-4, 322-340.

Grossman, Aaron (1998), "On-to-One: Net Marketing Opportunities Can Heighten Customer Loyalty, Satisfaction," *Marketing News*, (Jan 19), 13.

Gruen, Thomas W. (1997), "Relationship Marketing: The Route to Marketing Efficiency and Effectiveness," *Business Horizons*, (Nov/Dec), 32-38.

Gummesson, Evert (1987), "The New Marketing - Developing Long-Term Interactive Relationships," *Long Range Planning*, 20, 4, 10-20.

_____ (1991). "Truths and Myths in Service Quality," *Journal for Quality and Participation*, 14 (July/Aug), 28-33.

_____ (1992), "Quality Dimensions: What to Measure in Service Organizations," *Advances in Services Marketing and Management*, 1, 177-205.

_____ (1997), "Relationship Marketing - The Emperor's New Clothes or a Paradigm Shift?" *Marketing and Research Today*, (Feb), 53-60.

Gunderson, Marit G., Heide, Morten and Olsson, Ulf H. (1996), "Hotel Guest Satisfaction Among Business Travelers: What Are the Important Factors?" *The Cornell Hotel & Restaurant Association Quarterly*, 37, 2 (April), 72-81.

Gundlach, Gregory T., Achrol, Ravi S. and Mentzer, John T. (1995), "The Structure of Commitment in Exchange," *Journal of Marketing*, 59 (Jan), 78-92.

Gwinner, Kevin P., Gremler, Dwayne D. and Bitner, Mary Jo (1998), "Relational Benefits in Services Industries: The Customer's Perspective," *Journal of the Academy of Marketing Science*, 26, 2, 101-114.

Hair, Joseph F. Jr., Anderson, Rolph E., Tatham, Ronald L. and Black, William C. (1998), Multivariate Data Analysis, 5th Edition. Prentice Hall, N.J.

Halinen, Aino (1996), "Service Quality in Professional Business Services: A Relationship Approach," *Advances in Services Marketing and Management*, 5, 315-341.

Hallowell, Richard. (1996), "The Relationship of Customer Satisfaction, Customer

Loyalty, and Profitability: An Empirical Study," *International Journal of Service Industry Management*, 7, 4, 27-42.

Harari, Oren (1992), "Thank Heaven for Complainers," *Management Review*, 81 (Jan), 59-60.

Hart, Christopher W.L., Heskett, James L. and Sasser, Earl W. Jr. (1990), "The Profitable Art of Service Recovery," *Harvard Business Review*, 90, 4 (July-August), 148-156.

Hatcher, Larry (1994), A Step-By-Step Approach to Using the SAS System for Factor Analysis and Structural Equation Modeling. SAS Publishing, Cary, NC.

Heide, Morten, Gronhaug, Kjell and Wengset, Marit G. (1999), "Industry Specific Measurement of Consumer Satisfaction: Experiences from the Business Travelling Industry," *Hospitality Management*, 18, 201-213.

Heise, D.R. and Smith-Lovin, L. (1981), "Impressions of Goodness, Powerfulness, and Liveliness From Discerned Social Events," *Social Psychology Quarterly*, 44, 93-106.

Henkoff, Ronald (1994), *Fortune*, (June 27), 48-60.

Hennig-Thurau,T. and Klee, A. (1997), "The Impact of Customer Satisfaction and Relationship Quality on Customer Retention: A Critical Reassessment and Model Development," *Psychology & Marketing*, 14, 8, 737–764.

Heskett, James L., Sasser, Earl W. Jr. and Hart, Christopher W.L. (1990), Service Breakthroughs: Changing the Rules of the Game. The Free Press, New York.

_____, Jones, Thomas O., Loveman, Gary W.,Sasser Jr., Earl W., Schlesinger, Leonard A. (1994). "Putting the Service Profit Chain to Work," *Harvard Business Review*, (March-April), 164-174.

_____, Sasser, Earl W. Jr. and Schlesinger, Leonard A. (1997), The Service Profit Chain: How Leading Companies Link Profit and Growth to Loyalty, Satisfaction, and Value. The Free Press, New York.

Higgins, Kevin T. (1999), "The Value of Customer Value Analysis," *Marketing Research*, 10, 4 (Winter/Spring), 38-44.

Hinkin, Timothy R., Tracey, J. Bruce and Enz, Cathy A. (1997), "Scale Construction: Developing Reliable and Valid Measurement Instruments," *Journal of Hospitality & Tourism Research*, 21, 1, 100-120.

Hocutt, Mary Ann, Chakraborty, Goutam and Mowen, John C. (1997), "The Impact of Perceived Justice on Customer Satisfaction and Intention to Complain in a Service Recovery," *Advances in Consumer Research*, 24, 457-463.

Hoffman, K. Douglas, Kelley, Scott W. and Rotalsky, Holly M. (1995), "Tracking Service Failures and Employee Recovery Efforts," *Journal of Services Marketing,* 9, 2, 49-61.

Holbrook, Morris B. (1994), " The Nature of Customer Value: An Axiology of Services in the Consumption Experience," in Service Quality: New Directions in Theory and Practice by Rust, Roland T. and Oliver, Richard L. (eds). Sage Publicatons, Newbury Park, CA, 21-71.

Huckestein, Dieter and Duboff, Robert (1999), "Hilton Hotels: A Comprehensive Approach to Delivering Value for All Stakeholders," *The Cornell Hotel & Restaurant Association Quarterly,* 40, 4 (Aug), 28-38.

Hunt, Daniel V. (1993), Managing for Quality: Integrating Quality and Business Strategy. Business One Irwin, Homewood, ILL.

Hunt, Shelby D. and Morgan, Robert M. (1994), "Relationship Marketing in the Era of Network Competition," *Marketing Management,* 3, 1, 19-28.

Iacobucci, Dawn, Ostrom, Amy L., Braig, Bridgette M. and Bezjian-Avery Alexa (1996), "A Canonical Model of Consumer Evaluations and Theoretical Bases of Expectations," *Advances in Services Marketing and Management,* 5, 1-44.

James, L. R., Mulaik, S.A. and Brett, J.M. (1982), Causal Analysis. Sage, Beverly Hills,CA.

_____ and Brett, J.M. (1984), "Mediators, Moderators, and Tests for Mediation," *Journal of Applied Psychology,* 69, 2, 307-321.

Johnson, Rose L., Tsiros, Michael and Lancioni, Richard A. (1995), "Measuring Service Quality - A Systems Approach," *Journal of Services Marketing,* 9, 5, 6-19.

Johnston, Robert (1995), "Service Failure and Recovery: Impact, Attributes and Process," *Advances in Services Marketing and Management,* 4, 211-228.

_____ and Fern, Adrian (1999), "Service Recovery Strategies for Single and Double Deviation Scenarios," *The Service Industries Journal,* 19, 2 (April), 69-82.

Jones, T. O. and Sasser, E. W. Jr. (1995), "Why Satisfied Customers Defect," *Harvard Business Review,* (Nov/Dec), 88-99.

Joreskog, K.G. and Sorbom, D. (1989), LISREL 7: A Guide to the Program and Applications, 2nd Edition. SPSS Inc., Chicago.

Judd, D.R. (1995), "Promoting Tourism in US Cities," *Tourism Management,* 16, 3, 175-187.

Juran, J.M. (1995), A History of Managing for Quality: The Evolution, Trends, and Future Directions of Managing for Quality. ASQC Quality Press, Milwaukee, Wisconsin.

Kaplan, Robert S. and Norton David P. (1996a), Translating Strategy Into Action: The Balanced Scorecard. Harvard Business School Press, Boston, MA.

_____ and _____ (1996b), "Linking the Balanced Scorecard to Strategy," California Management Review, 39, 1 (Fall), 53-79.

Keaveney, Susan M. (1995), "Customer Switching Behavior in Service Industries: An Exploratory Study," Journal of Marketing, 59 (April), 71-82.

Keller, Kevin Lane (2000), "The Brand Report Card," Harvard Business Review, (Jan/Feb), 147-157.

Kelley, Scott W., Hoffman, K. Douglas and Davis, Mark A. (1993), "A Typology of Retail Failures and Recoveries," Journal of Retailing, 69, 4 (Winter), 429-452.

Kenny, D.A. (1979), Correlation and Causality. John Wiley & Sons, New York.

Kim, W. Chan and Mauborgne, Renee (1999), "Strategy, Value Innovation, and the Knowledge Economy," Sloan Management Review, 401, 3 (Spring), 41-54.

King, Carol A. and Garey, Jenene G. (1997), "Relational Quality in Service Encounters," International Journal of Hospitality Management, 16, 1, 39-63.

Knutson, Bonnie (1988), "Frequent Travelers: Making Them Happy and Bringing Them Back," The Cornell Hotel & Restaurant Association Quarterly, 29, 1, 83-87.

_____, Stevens, Pete, Wullaert, Colleen, Patton, Mark and Yokoyama, Fumito (1991), "LODGSERV: A Service Quality Index for the Lodging Industry," Hospitality Research Journal, 4, 2, 277-284.

_____, _____, Patton, Mark and Thomson, Colleen (1992), "Consumers' Expectations for Service Quality in Economy, mid-Price and Luxury Hotels," Journal of Hospitality and Leisure, 1, 2, 27-43.

Kotler, P. (1991), Marketing Management, 7th Ed. Prentice-Hall, Englewood Cliffs, NJ.

_____, Bowen, John T. and Makens, James C. (1996). Marketing for Hospitality and Tourism. Prentice-Hall, Englewood, NJ.

Kristensen, Kai, Martensen, Anne and Gremptysetnholdt, Lars (1999), "Measuring the Impact of Buying Behaviour on Customer Satisfaction," Total Quality Management, 10, 4/5 (July), 602-615.

349

LaTour, Stephen A. and Peat, Nancy C. (1979), "Conceptual and Methodological Issues in Consumer Satisfaction Research," *Advances in Consumer Research*, 6, 431-437.

Lehtinen, Uolevi and Lehtinen, Jarmo R. (1991), "Two Approaches to Service Quality Dimensions," *The Service Industries Journal*, 11, 3, 287-303.

Leszinski, Ralf, Weber, Felix, Paganoni, Roberto and Baumgartener, Thomas. (1995), "Profits in Your Backyard," *The McKinsey Quarterly*, 4, 118-127.

Levitt, Theodore (1972), "Production-line Approach to Service," *Harvard Business Review*, 50, 5, 41-52.

_____ (1980), "Marketing Success Through Differentiation - of Anything," *Harvard Business Review*, (Jan/Feb), 83-91.

_____ (1983), "After the Sale is Over...," *Harvard Business Review*, (Sept/Oct), 87-93.

_____ (1991), Thinking About Management. The Free Press, New York.

Lewis, Robert C. and Chambers, Richard E. (1989), Marketing Leadership in Hospitality Foundations and Practices. Van Nostrand Reinhold, New York.

_____ and Shoemaker, Stowe. (1997), "Price-Sensitivity Measurement: A Tool for the Hospitality Industry," *The Cornell Hotel & Restaurant Association Quarterly*, 38, 2 (April), 44-61.

Liljander, Veronica and Strandvik, Tore (1995), "The Nature of Customer Relationships in Services," *Advances in Services Marketing and Management*, 4, 141-167.

Liu, Annie H. (1998), Examining the Role of Customer Value, Customer Satisfaction, and Perceived Switching Costs: A Model of Repurchase Intentions For Business-To-Business Services. Unpublished dissertation, Georgia State University.

Lodging Magazine (1998), "View from the Top," (Jan), *http://www.hotelonline*

Lovelock, Christopher H. (1996), Services Marketing, 3rd Edition. Prentice Hall International, London.

Lowenstein, Michael W. (1997), The Customer Loyalty Pyramid. Quorum Books, Westport, CT.

Maister, David H. and Lovelock, Christopher H. (1982), "Managing Facilitator Services," *Sloan Management Review*, (Summer), 19-31.

Malhotra, N.K. (1996), Marketing Research: An Applied Orientation. Prentice-Hall,
Engelwood Cliffs, NJ.

Maloles, Cesar M. III (1997), The Determinants of Customer Retention.
Unpublished dissertation, The City University of New York, NY.

Marketing Science Institute (1998),"The 1998-2000 Research Priorities,"
*http://www.msi.research program,* 1-5.

Marr, Sheree L. and Crosby, Lawrence A. (1993), Customer Satisfaction
Measurement: A Management Information System for Total Quality.
American Marketing Association, Chicago.

Marsh, H.W., Balla, J.R. and McDonald, R.P. (1988), "Goodness-of-fit Indexes in
Confirmatory Factor Analysis: The Effect of Sample Size," *Psychological
Bulletin,* 103, 391-410.

Martilla, John A. and James, John C. (1977), "Importance-Performance Analysis,"
*Journal of Marketing,* 41, 1 (Jan), 77-79.

Martin, David Winfield (1995), "An Importance/Performance Analysis of Service
Providers' Perception of Quality Service in the Hotel Industry," *Journal of
Hospitality and Leisure Marketing,* 3, 1, 5-17.

Mattila, Ann (1997), An Evaluation of Customers' Value Perceptions of
Luxury Hotels, Cornell Research Report, Center for Hospitality Research,
Ithaca, N.Y.

McCleary, Ken W. and Weaver, Pamela A. (1991), "Are Frequent-Guest Programs
Effective?" *The Cornell Hotel & Restaurant Association Quarterly,* 32, 2
(August), 39-45.

_____, Choi, Bianca M. and Weaver, Pamela A. (1998), "A Comparison of Selection
Criteria Between U.S. and Korean Business Travelers," *Journal of Hospitality
& Tourism Research,* 22, 1, 25-38.

McCollough, Michal A. and Bharadwaj, Sundar G. (1992), "The Recovery Paradox:
An Examination of Customer Satisfaction in Relation to Disconfirmation,
Service Quality and Attribution Based Theories," in Marketing Theory and
Applications by Allen, Chris T. et al (ed), American Marketing Association,
Chicago.

McDougall, Gordon and Levesque, Terrence (1998), "The Effectiveness of Recovery
Strategies After Service Failure: An Experiment in the Hospitality Industry,"
*Journal of Hospitality & Leisure Marketing,* 5, 2/3, 27-49.

Mehta, Subhash C. and Durvasula, Srinivas (1998), "Relationships Between

SERVQUAL Dimensions and Organizational Performance in the Case of Business-to-Business Service," *Journal of Business & Industrial Marketing*, 13, 1, 40-53.

Messerli, Hannah Rietz (1993), Tourism Area Life Cycle Models and Residents' Perceptions. Unpublished dissertation, Cornell University, Ithaca, NY.

Miller, John A. (1977), "Studying Satisfaction, Modifying Models, Eliciting Expectations, Posing Problems, and Making Meaningful Measurement," in Hunt, H. Keith (ed), Conceptualization and Measurement of Consumer Satisfaction and Dissatisfaction. Marketing Science Institute, Cambridge, MA, 72-91.

Miller, William C. (1993), Quantum Quality: Quality Improvement Through Innovation, Learning & Creativity. Quality Resources, Amacon, NY.

Mittal, Banwari and Lassar, Walfried M. (1996), "The Role of Personalization in Service Encounters," *Journal of Retailing*, 72, 1, 95-109.

_____ and _____ (1998), "Why Do Customers Switch? The Dynamics of Satisfaction Versus Loyalty," *The Journal of Services Marketing*, 12, 3, 177- 194.

Montgomery, Rhonda J. and Rutherford, Denney G. (1994), "A Profile of Convention-Services Professionals," *The Cornell Hotel & Restaurant Association Quarterly*, (December), 47-57.

Moorman, Christine, Zaltman, Gerald, and Deshpande, Rohit (1992), "Relationships Between Providers and Users of Marketing Research: The Dynamics of Trust Within and Between Organizations," *Journal of Marketing Research*, 29 (August), 314-329.

Morgan, Robert M. and Hunt, Shelby D. (1994), " The Commitment-Trust Theory of Relationship Marketing," *Journal of Marketing*, 58 (July), 20-38.

Mount, Daniel J. (1997a), "Introducing the Relativity to Traditional Importance-Performance Analysis," *Journal of Hospitality & Tourism Research*, 21, 2, 111-119.

_____ (1997b), "A Factor Analysis of International Service Constructs in the Lodging Industry: The Employee Factors," *Journal of Hospitality & Tourism Research*, 21, 1, 193-210.

Murphy, John A. (1997), "Customer Loyalty and the Art of Satisfaction," *http://www.ftmastering*, 1-3.

Neal, William D. (2000), "When Measuring Loyalty Satisfactorily, Don't Measure Customer Satisfaction," *Marketing News*, June 5, 19.

Nguyen, Nha and Le Blanc, Gaston (1998), "The Mediating Role of Corporate Image on Customers' Retention Decisions: An Investigation in Financial Services," *International Journal of Bank Marketing*, 16, 2, 52-65.

Nield, Kevin and Kozak, Metin (1999), "Quality Certification in the Hospitality Industry," *The Cornell Hotel & Restaurant Association Quarterly*, 40, 2, 40-45.

Oberoi, Usha and Hales, Colin (1990), "Assessing the Quality of the Conference Hotel Service Product: Towards an Empirically Based Model," *Service Industries Journal*, 10, 4, 700-721.

O'Brian, L. and Jones, C. (1995), "Do Rewards Really Create Loyalty?" *Harvard Business Review*, (May-June), 75-82.

Overseas Economic Development Council (1998), National Accounts, Paris.

Oh, Haemoon and Parks, Sara C. (1997), "Customer Satisfaction and Service Quality: A Critical Review of the Literature and Research Implications for the Hospitality Industry," *Hospitality Research Journal*, 20, 3, 35-64.

_____ (1999), "Service Quality, Customer Satisfaction, and Customer Value: A Holistic Perspective," *International Journal of Hospitality*, 18, 67-82.

Oh, Maemoon and Jeong, Miyoung (1996), "Improving Marketers' Predictive Power of Customer Satisfaction on Expectation-Based Target Market Levels," *Hospitality Research Journal*, 19, 4, 65-85.

Oliver, Richard L. (1980), "A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions," *Journal of Marketing*, 17 (Nov), 460-467.

_____ (1981), "Measurement and Evaluation of Satisfaction Processes in Retail Settings," *Journal of Retailing*, 57, 3 (Fall), 25-48.

_____ and DeSarbo, Wayne S. (1988), "Response Determinants in Satisfaction Judgments," *Journal of Consumer Research*, 14 (March), 495-507.

_____ and Swan, John E. (1989), "Consumer Perceptions of Interpersonal Equity and Satisfaction in Transactions: A Field Survey Approach," *Journal of Marketing*, 53 (April), 21-35.

_____ (1993), "A Conceptual Model of Service Quality and Service Satisfaction: Compatible Goals, Different Concepts," *Advances in Services Marketing and Management*, 2, 65-85.

_____ (1996), "Varieties of Value in the Consumption Satisfaction Response," *Advances in Consumer Research*, 23, 143-147.

353

_____ (1997), Satisfaction: A Behavioral Perspective on the Consumer. McGraw-Hill, New York.

_____ , Rust, Roland T. and Varki, Sajeev (1997), "Customer Delight: Foundations, Findings, and Managerial Insight," *Journal of Retailing,* 73, 3, 311-336.

O' Malley, Lisa (1998), "Can Loyalty Schemes Really Build Loyalty?" *Marketing Intelligence & Planning,* 16, 1, 47-55.

Palmer, Adrian (1994), Principles of Services Marketing. McGraw-Hill, Berkshire, England.

Parasuraman, A., Zeithaml, Valarie A. and Berry, Leonard L. (1985), "A Conceptual Model of Service Quality and Its Implications for Future Research," *Journal of Marketing,* 49 (Fall), 41-50.

_____ , _____ and _____ (1988), "SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality," *Journal of Retailing,* 64, 1 (Spring), 12-37.

_____ , _____ and _____ (1994), "Reassessment of Expectations as a Comparison Standard in Measuring Service Quality: Implications for Future Research," *Journal of Marketing,* 58 (Jan), 111-124.

_____ (1997), "Reflections on Gaining Competitive Advantage Through Customer Value," *Journal of the Academy of Marketing Science,* 25, 2, 154-161.

_____ (1998), "Customer Service in Business-to-Business Markets: An Agenda for Research," *Journal of Business & Industrial Marketing,* 13, 4/5, 309-321.

Partlow, Charles G. (1993), "How Ritz-Carlton Applies 'TQM'," *The Cornell Hotel & Restaurant Association Quarterly,* (August), 16-24.

Patterson, Paul G. and Spreng, Richard A. (1997),"Modelling the Relationship Between Perceived Value, Satisfaction and Repurchase Intentions in a Business-to-Business Services Context: An Empirical Examination," *International Journal of Service Industry Management,* 8, 5, 414-434.

Patton, Mark, Stevens, Pete and Knutson, Bonnie (1994), "Internationalizing LODGSERV as a Measurement Tool: A Pilot Study," *Journal of Hospitality and Leisure Marketing,* 2, 2, 39-55.

Perkins, D.S. (1991), "A Consumer Satisfaction, Dissatisfaction and Complaining Behavior Bibliography: 1982-1990," *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior,* 4, 194-228.

Petrof, John V. (1997), "Relationship Marketing: The Wheel Reinvented?" *Business Horizons,* (Nov/Dec), 26-31.

PKF Consulting (1997), "Trends in the Hotel Industry: USA Edition, 1996," Pannell Kerr Forster PC, New York.

Powers, Tom and Barrows, Clayton W. (1999), Introduction to the Hospitality Industry 4<sup>th</sup> Edition. John Wiley & Sons, New York.

Pritchard, Mark P. and Howard, Dennis R. (1997), "The Loyal Traveller: Examining a Typology of Service Patronage," *Journal of Travel Research,* (Spring), 35, 4, 2-10.

_____, Havitz, Mark E. and Howard, Dennis R. (1999), "Analyzing the Commitment-Loyalty Link in Service Contexts," *Journal of the Academy of Marketing Science,* (Summer), 27, 3, 333-349.

Ravald, Annika and Gronroos, Christian (1996), "The Value Concept and Relationship Marketing, " *European Journal of Marketing,* 30, 2, 19-30.

Reeves, Carol A. and Bednar, David A. (1994), "Defining Quality: Alternatives and Implications," *Academy of Management Review,* 19, 3, 419-445.

_____ and _____ (1995), "Quality as Symphony," *The Cornell Hotel & Restaurant Association Quarterly,* (June), 72-79.

Reichheld, Frederick F. and Sasser, Earl W. Jr. (1990), "Zero Defections: Quality Comes to Services," *Harvard Business Review,* 68 (Sept/Oct), 105-111.

_____ (1993), "Loyalty-Based Management," *Harvard Business Review,* (March-April), 64-73.

_____ (1996a), The Loyalty Effect: The Hidden Force Behind Growth, Profits, and Lasting Value. Harvard Business School Press, Boston.

_____ (1996b), "Learning from Customer Defections," *Harvard Business Review,* (March-April), 56-69.

Reid, R. Dan and Sandler, Melvin (1992), "The Use of Technology to Improve Service Quality," *The Cornell Hotel & Restaurant Association Quarterly,* (June), 68-73.

Reynolds, T., Cockle, B. and Rochon, J. (1990), "The Strategic Imperatives of Advertising: Implications of Means-End Theory and Research Findings," *Canadian Journal of Marketing Research,* 9, 3-13.

Richard, Michael D. and Allaway, Arthur W. (1993), "Service Quality Attributes and Choice Behavior," *Journal of Services Marketing,* 7, 1, 59-68.

Riley, Michael and Perogiannis, Nikos (1990), "The Influence of Hotel Attributes on the Selection of a Conference Venue," *International Journal of Contemporary Hospitality Management,* 2, 17-22.

Riley, Roger (1996), "Revealing Socially Constructed Knowledge Through Quasi-Structured Interviews and Grounded Theory Analysis," in Recent Advances in Tourism Marketing Research by Fesenmaier, Daniel R., O'Leary, Joseph T. and Uysal, Muzaffer (eds), The Haworth Press, New York, 21-40.

Robinson, Stewart (1999), "Measuring Service Quality: Current Thinking and Future Requirements," *Marketing Intelligence & Planning,* 17, 1, 21-32.

Rogers, Tony (1998), Conferences: A 21st Century Industry. Addison Wesley Longman Limited, Harlow, England.

Rogosa, D. (1979), "Causal Models in Longitudinal Research: Rationale, Formulation, and Interpretation," in Longitudinal Research in the Study of Behavioral Development by Nesselroade, J.K. and Baltes, P.B. (eds), Academic Press, New York, 263-302.

Rosen, Deborah E. and Surprenant, Carol (1998), "Evaluating Relationships: Are Satisfaction and Quality Enough?" *International Journal of Service Industry Management,* 9, 2, 103-125.

Rust, Roland T. and Zahorik, Anthony J. (1993), "Customer Satisfaction, Customer Retention, and Market Share," *Journal of Retailing,* 69, 2 (Summer), 193-215.

_____ and Oliver Richard L. (1994), "Service Quality: Insights and Managerial Implications from the Frontier, " in Service Quality: New Directions in Theory and Practice by Rust, Roland T. and Oliver, Richard L, (eds), Sage Publications, Thousand Oaks, 1-19.

_____, Zahorik, Anthony J. and Keiningham,Timony L. (1995), "Return on Quality (ROQ): Making Service Quality Financially Accountable," *Journal of Marketing,* 59 (April) 58-70.

Rutherford, Denney G. and Unbreit, W. Terry (1993), "Improving Interactions Between Meeting Planners and Hotel Employees, " *The Cornell Hotel & Restaurant Association Quarterly,* 34, 1 (Feb), 68-80.

Ruyter, Ko de, Wetzels, Martin and Bloemer, Josee (1998), "On the Relationship Between Perceived Service Quality, Service Loyalty and Switching Costs," *International Journal of Service Industry Management,* 9, 5, 436-453.

Saleh, Farouk and Ryan, Chris (1991), "Analyzing Service Quality in the Hospitality Industry Using the SERVQUAL Model," *Service Industries Journal,* 11, 3, 324-345.

SAS Institute Inc. (1989), SAS/SAT Users Guide, Version 6, 4th Ed. Vol. 1. SAS Institute Inc., Cary, N.C.

Sasser, W. E. Jr, Olsen, P. R. and Wyckoff, D. D. (1978), Management of Service Operations: Texts and Cases. Allyn & Bacon, Boston.

Scanlan, Laurel and McPhail, Janelle (2000), "Forming Service Relationships With Hotel Business Travelers: The Critical Attributes to Improve Retention," *Journal of Hospitality & Tourism Research*, 24, 4 (Nov), 491-513.

Schlentrich, Udo A. (1993), "Industry Trends: The World of Hospitality," *Hospitality Journal*, (Dec/Jan), 14–16.

_____ (1996), "Business Travel Marketing," in Marketing Tourism Products: Concepts, Issues, Cases by Seaton, A.V. and Bennett, M.M. (eds), International Thomson Business Press, London.

_____ (1999), "Conference and Convention Management," in Accommodation Management: Perspectives for the International Hotel Industry by Verginis, Constantinos S. and Wood, Roy C. (eds), International Thomson Business Press, London.

Schlesinger, Leonard A. and Heskett, James L. (1991), "The Service-Driven Service Company," *Harvard Business Review*, (Sept/Oct), 71-81.

_____ and _____ (1992), "De-industrializing the Service Sector: A New Model for Service Firms," *Advances in Services Marketing and Management*, 1, 159-176.

Schmit, Mark J. and Allscheid, Steven P. (1995), "Employee Attitudes and Customer Satisfaction: Making Theoretical and Empirical Connections," *Personnel Psychology*, 48, 853-882.

Schulz, Don E. (1998), "Are We Too Loyal to Our Concept of Loyalty?" *Marketing News*, 32, 13, 11.

_____ (2000), "Maxims for Maximum Customer Relations," *Marketing News*, (June 5), 14.

Senge, Peter M. (1990), The Fifth Discipline: The Art & Practice of the Learning Organization. Doubleday, New York.

Shaw, M., Lewis, R.C. and Khorey, A. (1991), "Measuring Meeting-planner Satisfaction with Hotel Convention Services: A Multivariate Approach," *International Journal of Hospitality Management*, 10, 2, 137-146.

Sheaves, Daphne E and Barnes, James G. (1996), "The Fundamentals of Relationships: An Exploration of the Concept to Guide Marketing Implementation," *Advances in Services Marketing and Management*, 5, 215-245.

Sheth, Jagdish N, Newman, Bruce I. and Gross, Barbara L. (1991), "Why We Buy

What We Buy: A Theory of Consumption Values, " *Journal of Business Research*, 22, 159-170.

_____ and Parvatiyar, Atul (1995), "Relationship Marketing in Consumer Markets: Antecedents and Consequences," *Journal of the Academy of Marketing Science*, 23, 4, 255-271.

Shostack, G. Lynn (1977), "Breaking Free From Product Marketing," *Journal of Marketing*, 41 (April), 73-80.

_____ (1987), "Service Positioning Through Structural Change," *Journal of Marketing*, 51 (Jan), 34-43.

Singh, J. and Wilkes, R.E. (1996), "When Consumers Complain: A Path Analysis of the Key Antecedents of Consumer Complaint Estimates," *Journal of the Academy of Marketing Science*, 24 (Fall), 350-365.

Sinha, Indrajit and DeSarbo, Wayne S. (1998), "An Integral Approach toward the Spatial Modeling of Perceived Customer Value," *Journal of Marketing Research*, 35 (May), 236-244.

Sisodia, Rajendra S. (1992), "Marketing Information and Decision Support Systems for Services," *The Journal of Services Marketing*, 6, 1 (Winter), 51-64.

Smith, Amy K., Bolton, Ruth N. and Wagner, Janet (1999), "A Model of Customer Satisfaction with Service Encounters Involving Failure and Recovery," *Journal of Marketing Research*, 36, 356-372.

Smith, Craig N. and Nagle, Thomas T. (1995), "Frames of Reference and Buyers' Perceptions of Price and Value," *California Management Review*, 38, 1 (Fall), 98.

_____ (1996), "Ethics and the Typology of Customer Value," *Advances in Customer Research*, 23,148-153.

Smith Travel Research (1998), First Half 1998 US Lodging Industry Results, *http://www.hotelonline*

Soderland, Magnus (1998), "Customer Satisfaction and Its Consequences on Customer Behaviour," *International Journal of Service Industry Management*, 9, 2, 169-188.

Spreng, Richard A., Dixon, Andrea L. and Olshavsky, Richard W. (1993), "The Impact of Perceived Value on Consumer Satisfaction," *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 6, 1, 50-55.

_____, Harrell, Gilbert D. and Mackoy, Robert D. (1995), "Service Recovery: Impact on Satisfaction and Intentions," *Journal of Services Marketing*, 9, 1,15-23.

_____, MacKenzie, Scott B. and Olshavsky, Richard W. (1996), "A Reexamination of the Determinants of Consumer Satisfaction," *Journal of Marketing*, 60, 3 (July), 15-32.

Storbacka, Kaj, Strandvik, Tore, and Gronroos, Christian (1994), "Managing Customer Relationships for Profit: The Dynamics of Relationship Quality," *International Journal of Service Industry Management*, 5, 5, 21-38.

Sweeney, Jillian C. (1994), An Investigation of a Theoretical Model of Consumer Perceptions of Value. Unpublished dissertation, School of Management and Marketing, Curtain University of Technology, Perth, Australia.

_____, Soutar, Geoffrey N. and Johnson, Lester W. (1997),"Retail Service Quality and Perceived Value," *Journal of Retailing and Consumer Services*, 4, 1, 39-48.

_____, _____, and _____ (1999), "The Role of Perceived Risk in the Quality-Value Relationship: A Study in a Retail Environment," *Journal of Retailing*, 75, 1, 77-105.

Taher, Ahmad, Leigh, Thomas W. and French, Warren A. (1996), "Augmented Retail Services: The Lifetime Value of Affection," *Journal of Business Research*, 35, 217-228.

Taninecz, G. (1990), "1990 Business Traveler Survey," *Hotel & Motel Management*, 57 (June 25), 29-32.

Tax, Stephen S. and Brown, Stephen W. (1998), "Recovering and Learning from Service Failure," *Sloan Management Review*, 40, 1 (Fall), 75-88.

_____, _____ and Chandrashekaran, Murali (1998), "Customer Evaluations of Complaint Experiences: Implications for Relationship Marketing," *Journal of Marketing*, (April), 60-76.

Taylor, Steven A. and Baker, Thomas L. (1994), "An Assessment of the Relationship Between Service Quality and Customer Satisfaction in the Formation of Consumers' Purchase Intentions," *Journal of Retailing*, 70, 2, 163-178.

_____ (1997), "Assessing Regression-Based Importance Weights for Quality Perceptions and Satisfaction Judgements in the Presence of Higher Order and/or Interaction Effects," *Journal of Retailing*, 73, 1, 135-159.

Teas, R. Kenneth (1993), "Expectations, Performance Evaluation and Consumers' Perceptions of Quality," *Journal of Marketing*, 57 (Oct), 18-34.

_____ (1994), Expectations as a Comparison Standard in Measuring Service Quality: An Assessment of a Reassessment," *Journal of Marketing*, 58, (Jan), 132-139.

The Economist (1997), "Finance and Economics: Dealing for Dollars, " (Dec 6), 81–82.

The Malcolm Baldrige National Quality Award (1987, 1999), United States Department of Commerce, Technology Administration, National Institute of Standards and Technology, Washington, D.C.

Toh, Rex S., Rivers, Mary-Jean and Withiam, Glenn (1991), "Frequent Guest Programs: Do They Fly?" *The Cornell Hotel & Restaurant Association Quarterly,* 32, 2, 46-52.

_____, Hu, Michael Y. and Withiam, Glenn (1993), "Service: The Key to Frequent -Guest Programs," *The Cornell Hotel & Restaurant Association Quarterly,* 34, 3, 66-71.

Treacy, Michael and Wiersema, Fred (1993), "Customer Intimacy and other Value Disciplines," *Harvard Business Review,* (Jan/Feb), 84-93.

Turley, L. W. and Fugate, Douglas L. (1992), "The Multidimensional Nature of Service Facilities: Viewpoints and Recommendations," *Journal of Services Marketing,* 6, 3 (Summer), 37-45.

Tzokas, Nikolaos and Saren, Michael (1997), "Building Relationship Platforms in Consumer Markets: A Value Chain Approach," *Journal of Strategic Marketing,* 5, 105-120.

Ulrich, Dave (1989), "Tie the Corporate Knot: Gaining Complete Customer Commitment," *Sloan Management Review,* (Summer), 19-28.

Van Maanen, J. (1983), Qualitative Methodology. Sage Publications, London.

Vantrappen, H. (1992), "Creating Customer Value by Streamlining Business Processes," *Long Range Planning,* 25 (Feb), 53-62.

Vavra, Terry G. (1997), Improving Your Measurement of Customer Satisfaction. ASQ Quality Press, Milwaukee, Wisconsin.

Vogt, C.A., Roehl, W.S. and Fesenmeier, D.R. (1994), "Understanding Meeting Planners' Use of Meeting Facility Information," *Hospitality Research Journal,* 17, 3, 119-130.

Voss, C.A., Blackmon, K., Chase, R. and Roth, A.V. (1998), "International Differences in Service Management: An Anglo-U.S. Benchmarking Study in the Hotel Sector," Research Paper, London Business School.

Wakefield, Kirk L. and Blodgett, Jeffrey G. (1996), "The Effect of Servicescapes on Customers' Behavioral Intentions in Leisure Service Settings," *Journal of Services Marketing,* 10, 6, 45-61.

360

Ward, James, Bitner, Mary Jo and Gossett, Dan (1989), "SEEM: A Measure of Service Environment Meaning," in <u>Designing Winning Service Strategy</u> by Bitner, Mary Jo and Crosby, L.A. (eds.), 7<sup>th</sup> Annual Service Marketing Conference Proceedings, 34-39.

Weber, Karin (2000), "Meeting Planners' Perceptions of Hotel-chain Practices and Benefits: An Importance-Performance Analysis," *Cornell Hotel & Restaurant Administration Quarterly*, 41, 4 (Aug), 32-38.

Webster, Cynthia and Sundaram, D.S. (1998), "Service Consumption Criticality in Failure Recovery," *Journal of Business Research*, 41, 153-159.

Webster, Frederick E. Jr. (1992), "The Changing Role of Marketing in the Corporation," *Journal of Marketing*, 56 (Oct), 1-17.

Weiser, Charles R. (1995), "Championing the Customer," *Harvard Business Review*, (Nov/Dec), 113-116.

Wells, Melanie (1993a), "Brand Ads Should Target Existing Customers," *Advertising Age*, (April 26), 47.

Wells, William D. (1993b), "Discovery-Oriented Consumer Research," *Journal of Research*, 19 (March), 489-504.

Westbrook, Robert A. and Reilly, Michael D. (1983), "Value-Percept Disparity: An Alternative to the Disconfirmation of Expectations Theory of Consumer Satisfaction," in Bagozzi, Richard P. and Tybout, Alice M. (eds), <u>Advances in Consumer Research</u>. Association for Consumer Research, Ann Arbor, MI, 256-262.

Williams, L.J. and Hazer, J.T. (1986), "Antecedents and Consequences of Satisfaction and Commitment in Turnover Models: A Reanalysis Using Latent Variable Structural Equation Methods," *Journal of Applied Psychology*, 71, 219-231.

Wood, Michael (1997), "The Notion of the Customer in TQM," *TQM*, 8, 4, 181-194.

Wood, Roy C. (1994), "Hotels and Social Control," *Annals of Tourism Research*, 21, 1, 65–80.

Woodruff, Robert B., Cadotte, Ernest R. and Jenkins, Roger L. (1983), "Modeling Consumer Satisfaction Processes Using Experience-Based Norms," *Journal of Marketing Research*, 20 (Aug), 296-304.

_____ (1997), "Customer Value: The Next Source for Competitive Advantage," *Journal of the Academy of Marketing Science*, 25, 2,139-153.

Wuest, Beth E.S., Tas, Richard F. and Emenheiser, Daniel A. (1996), "What Do Mature Travelers Perceive as Important Motel/Motel Customer Services?" *Hospitality Research Journal*, 20, 2, 77-93.

Wyckhoff, A. (1996), "A Survey of the World Economy: An Acknowledged Trend," *The Economist*, (September 28), 43–44.

Wyner, Gordon A. (1998), "The Many Faces of Customer Value," *Marketing Research*, 10, 1 (Spring), 34-35.

Yi, Youjae (1991), "A Critical Review of Customer Satisfaction, " in Review of Marketing 1990 by Zeithaml, Valerie A. (ed), American Marketing Association, Chicago, 68-123.

Yuksel, Atila and Rimmington, Mike (1998), "Customer-Satisfaction Measurement," *The Cornell Hotel & Restaurant Association Quarterly*, 39, 6 (Dec), 60-70.

Zeithaml, Valarie A. (1981), "How Consumer Evaluation Processes Differ Between Goods and Services," in Marketing of Services by Donnelly, James H. and George, William R. (eds), American Marketing Association, Chicago.

_____, Parasuraman, A. and Berry, Leonard L. (1985), "Problems and Strategies in Services Marketing," *Journal of Marketing*, 49 (Spring), 33–46.

_____ (1988), "Consumer Perceptions of Price, Quality and Value: A Means-End Model and Synthesis of Evidence," *Journal of Marketing*, 52 (July), 2-22.

_____, _____ and _____ (1990), Delivering Quality Service: Balancing Customer Perceptions and Expectations. The Free Press, New York.

_____, Berry, Leonard L. and Parasuraman A. (1996),"The Behavioral Consequences of Service Quality," *Journal of Marketing*, 60 (April) 31-46.

_____ and Bitner, Mary Jo. (1996), Services Marketing, McGraw-Hill, New York.

_____ and _____ (2000), Services Marketing, 2$^{nd}$ Ed. McGraw-Hill, New York.

Zemke, R. and Schaaf, R. (1989), The Service Edge: 101 Companies that Profit from Customer Care, NAL Books, New York.