High growth firms in Scotland: Customer perceived value creation and rapid firm growth

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This thesis is the result of the author's original research. It has been composed by the author and has not been previously submitted for examination which has led to the award of a degree.

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Abstract

The past twenty years have seen an increasing level of importance attached to rapidly growing “high growth firms” (HGFs) within the academic and policy-making communities. However, despite decades of research, our knowledge about how these firms achieve such strong performance remains limited. The literature is dominated by studies seeking to correlate firm characteristics with growth, rather than attempting to explore the nature of rapid firm growth itself. This thesis contributes to the high growth firm literature by exploring the process of rapid firm turnover growth, specifically at the impact that customer perceived value has on firm performance.

Drawing on data collected from a large scale questionnaire and Critical Incident Technique interviews, this thesis presents a number of important findings. It identifies the important role played by critical events or key “trigger points” in firm growth and provides a conceptualisation of this firm growth process. This process emphasises that the manner in which a trigger is sensed, seized and managed is of greater significance than the trigger itself. Competencies such as a propensity for risk-taking, a focus on strategic planning and operational flexibility are identified to be of particular importance to successfully capitalise on critical trigger points.

This thesis also explores at length firm-level competencies and firm-customer interactions that help to facilitate customer perceived value creation. At the firm-level, the data demonstrates that high growth firms exhibit strongly customer-centric ideologies, significant operational flexibility and a propensity for learning. At the firm-customer interaction level, high growth firms demonstrate significant competencies, such as engaging deeply with customers and participating in co-creation activities. These competencies allow HGFs to have a significant influence on customer perceived value creation, which in turn has a positive effect on firm performance through higher repeat purchases and referrals. These competencies differentiate HGFs from their more moderately-performing counterparts.

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Chapter 1 About this research

1.1 Introduction

For many companies growth is a key ambition; for many more, it is a strategic priority. Given the plethora of press articles, trade publications, textbooks and business advice books discussing firm performance and growth, it is perhaps unsurprising that this issue receives widespread interest from academics, practitioners and policy makers. Much of this widespread (and growing) attention is due in large part to the identification of a small number of "high growth firms" (HGFs). These particularly successful firms see growth rates far exceeding those of their industries and competitors and have been recognised as major job creators and key contributors to economic growth (OECD, 2010).

Given that company growth is considered to have positive spillover effects on wider economic development (e.g. from job creation, innovation and supply chain development), high growth firms have become an item of particular interest to policy makers around the world. This is very much the case within the UK (Derbyshire, 2012) and, more specifically, Scotland, where the Scottish Government has made it a strategic priority to increase the number of high growth businesses within Scotland by 2015 and has increased its investment to support firms with significant growth ambitions and potential (Scottish Enterprise, 2012).

However, despite the focus on - and prioritisation of - these firms, our knowledge base about the characteristics, attributes and competencies of high growth firms remains very limited.

1.2 Research context

The body of empirical research on high growth firms has been growing slowly over the past twenty years, resulting in quite a substantial body of work. Its roots lie in Economics (e.g. Acs, 1992; Chandler & Hanks, 1993; Audretsch, 2000), however HGF research now touches many different fields and is widely considered to sit under the umbrella of entrepreneurship as "high growth entrepreneurship" (Naudé, 2010; Davis & Shaver, 2012). Given its beginning, it is unsurprising that the early empirical work examining high growth firms involved quantitative analyses of aggregate databases, with authors looking for correlations that might help to explain growth. Unfortunately, this methodological approach continues to dominate the literature, with authors focused on identifying correlations between firm growth and growth factors. As a result, our understanding of high growth firms remains relatively limited, particularly in terms of the how these firms develop over time to achieve such considerable growth.

The empirical literature explores the relationship between growth and a number of contributing factors including environmental factors such as location (e.g. Hoffman and Junge, 2006) and the macroeconomic environment (e.g. Teruel and de Wit, 2011), as well as internal firm characteristics such firm demographics like age and size (e.g. Moreno and Casillas, 2007), founder capabilities (e.g. Goedhuys and Sleuwaegen, 2010) and growth intentions (e.g. Stenholm, 2011). A number of authors have also attempted to determine whether any firm-level competencies and business practices (e.g. business strategy, innovation behaviours, management strategy) set high growth firms apart from their slower-growth counterparts.

It is widely noted that in the marketing literature that creating value for customers can yield significant competitive advantage and superior financial performance for companies (Day and Wensley, 1988; Rintamäki *et al*., 2007; Sirmon *et al*., 2007; O'Cass and Ngo, 2011). Interestingly, within the HGF literature a number of authors have noted that HGFs themselves are differentiated from slower growing firms by their ability to *offer and create unique value for their customers* (Barringer *et al*., 2005; Zhang *et al*., 2008). However, these observations lack empirical evidence to support them and no subsequent work has been undertaken to empirically explore such a relationship in any depth. How is such value created? Does this ability to create value result in growth, or is a by-product of already having already achieved growth? Given the important impact that value creation is recognised to have on companies, this is a significant gap within the HGF literature and one that requires attention. This thesis will contribute to the literature by exploring the relationship between HGFs and customer perceived value creation, in the context of the process of rapid firm growth.

1.3 Research aims and contribution

This thesis contributes to the high growth firm literature by exploring the process of rapid firm turnover growth, including the impact of customer perceived value on firm performance. It is built on two fundamental assumptions about the nature of firm growth:

1. If rapid growth occurs, a firm has experienced an increase in its turnover and is therefore experiencing growth in sales volume and/or sales value; and
2. In order to have seen a significant increase in sales growth (either in quantity or in value), a high growth firm must hold some sort of competitive advantage in their marketplace.

With these assumptions in mind, this thesis aims to explore two key issues: what causes HGFs to grow faster than other firms and whether the creation of customer perceived value is in fact an enabler of rapid firm growth. All of the research questions below have been formulated after a thorough review of the HGF and the customer value literature. They have also been tested and refined through exploratory interviews with HGFs to ensure their relevancy and usefulness in line with the objectives of this thesis.

<u>What causes HGFs to grow faster than other firms?</u>

Who and what are HGFs seeing greatest sales growth from? Whilst it has been observed that HGFs prefer to service a small number of customers (Feindt *et al*., 2002; Brush *et al*., 2009; Hinton and Hamilton, 2009), are these new customers or existing customers? What type of customers are HGFs seeing their greatest turnover growth from? And what are they selling to their customers? Do they tend to focus on physical products, intangible services or a combination of both? Is there a particular type of product offering that is responsible for significant turnover growth? Do HGFs differ here from other slower-growing firms?

What does a HGF's growth process look like? How do high growth firms grow? Do they follow a traditional "lifecycle" model of growth (Churchill and Lewis, 1983; Scott and Bruce, 1987), or is rapid growth more idiosyncratic and random as increasingly believed (Landström, 2005; Vinnell and Hamilton, 1999; Garnsey *et al*., 2006)? Are there any critical events which might instigate growth (Bessant *et al*., 2005; Phelps *et al*., 2007) and, if so, do these differ between high growth firms and non-high growth firms? What is the role of customers in this growth process?

With minimal understanding (and consensus) in the literature on HGFs grow over time, including what forces propel a firm to become "high growth", it is essential that this growth process be thoroughly explored, before investigating any potential enablers of growth. Without an understanding of what growth looks like over time, including when, how and why growth trajectories change, it is arguably impossible to discuss why rapid growth occurs, let alone whether or not certain elements have the capacity to influence such rapid growth. For the purposes of this research, a basic understanding of the HGF growth process is required before it is possible to address this thesis' second research objective – to explore the effect of customer value creation on growth.

<u>Is the creation of customer perceived value an enabler for rapid firm growth?</u>
Are HGFs positively influencing perceived value creation through interactions with customers? Is there evidence to substantiate the claim that HGFs are customer focused and create unique value for their customers (Birley and Westhead, 1990; Smallbone *et al.*, 1995; Kim and Mauborgne, 1997; Barringer *et al*., 2005; Zhang *et al*., 2008) in a way that differentiates them from other firms? *If so, how does this process occur and does it influence rapid growth?*

Whilst there is arguably no single "magic bullet" for growth - and therefore no one single answer for why some firms grow faster than others - there is great value in understanding *how* growth occurs, particularly rapid and transformational growth, as well as what factors act as enablers of such rapid growth. This thesis is thus exploratory in nature, focused on theory building rather than theory testing and will explore the growth process in HGFs, including the role of critical events or “trigger points”; whether the creation of unique value for customers is indeed a source of competitive advantage for HGFs and an enabler of rapid turnover growth; and how this unique value is ultimately created and delivered. It provides a number of contributions to the current high growth firm literature (in terms of theory and methodology), including insight into the role of critical growth triggers which has led to a better understanding (and new conceptualisation of) firm growth, as well as identification of the importance of customer value creation through interaction. Further implications for practice and policy are also identified and discussed.

1.4 Outline of contents

This thesis comprises nine chapters. With the background to - and outline of - this thesis discussed here in Chapter 1, Chapter 2 presents a review of the high growth firm literature, noting a number of significant gaps, specifically empirical studies to support claims of a link between customer value and firm growth. Chapter 3 then reviews the value literature, focusing on customer perceived value and how this can be positively influenced by companies at the ideological level of the firm, as well as through interactions with customers. Based on the literature reviews in Chapters 2 and 3, Chapter 4 presents an initial conceptual framework to conceptualise a relationship between customer perceived value and firm growth, articulating the key research questions and associated suppositions that underpin this thesis. Chapter 5 identifies the philosophical foundation of this thesis, Critical Realism, and discusses in depth the methodological approach used for this thesis, including the research design and data collection methods (questionnaire and semi-structured interviews). Chapters 6 and 7 present the data collected for this thesis, with Chapter 6 noting results from a large-scale quantitative questionnaire and Chapter 7 noting findings from a number of interviews using the critical incident technique. These findings are then discussed in detail in Chapter 8, before Chapter 9 concludes by identifying implications for theory, methodology, managers and policy makers and noting limitations and areas for further research.

Chapter 2 The study of high growth firms

2.1 Introduction

Business growth has always been of considerable interest for academics, policy makers and business leaders, who seek to better understand what makes firms grow, as well as how such growth can be encouraged and facilitated. Governments have been particularly interested in firm growth, given that it can have a significant positive impact on the larger economy through job creation and other positive spillover effects (Henrekson and Johansson, 2010). While many firms experience periods of success and growth, there are some that undergo particularly rapid and transformational expansion; these extraordinary organisations are often referred to as "high growth firms" (HGFs).

In essence, HGFs are a select group of firms that manage to grow significantly faster than others operating in their respective industry, increasing turnover or employment at a particularly rapid rate. Despite being very rare, often only around 10% of the UK's 10+ employee business base[1], HGFs provide disproportionate benefits to economies and are widely thought to be key contributors to economic growth (OECD, 2010). However, despite a widespread acknowledgement of their importance, as well as a large body of research on HGFs, there is still much to learn about these firms and many questions to be asked. With most businesses never achieving a significant level of growth, let alone transformational levels, how is it that some firms become HGFs? What factors or determinants enable them grow faster? Do they operate differently from their competitors? What sets them apart and makes them such a rare phenomenon and what does their growth path entail?

This chapter will attempt to clarify some of these questions. It will begin with an overview of firm growth theory, followed by a discussion on defining, identifying and measuring HGFs. It will then provide a thorough review of the HGF literature, covering the three main streams of research on high growth firms. The final section

[1] In the period 2007-2010, HGFs comprised only 12.9% of the UK business base of firms with 10+ employees. Calculations by Aston University for Scottish Enterprise.

will address major gaps in the literature, particularly the link between value creation and rapid growth, which will be discussed in more depth in Chapter 3.

2.2 What is firm growth

Before examining "high growth" as a phenomenon, however, it would be remiss not to discuss firm growth theory in general. A central topic in economics, industrial organisation, small business economics and entrepreneurship (Stam, 2010), this area has evolved dramatically over time, particularly since the mid-twentieth century, with current thought and theory quite removed from more traditional posturing. It is in this dynamic context that high growth firms were first identified and changing conceptions of firm growth have had an important influence of the development of high growth firm research to this day.

2.3 Growth theory

2.3.1 Traditional view of growth: market equilibrium and economies of scale

The study of firm growth has traditionally been based on the principles of Adam Smith's classical economics, specifically the general equilibrium theory of markets (Kirchhoff and Greene, 1998). Outlined in his 1759 work *The Theory of Moral Sentiments,* Smith believed that any given market would be subject to several forces, notably supply and demand. These two forces would determine the allocation of resources in society, thus establishing market equilibrium, a situation self-regulated by the "invisible hand" of market forces (Smith, 2007: 187). Should there be any deviation from equilibrium, forces would be set in motion that would move the market back to its balanced and static state (Kirchhoff and Greene, 1998).

At firm level, the theory of equilibrium was equally important: a firm's production decisions would be based on the supply and demand conditions of the external market, with quantity of output and prices adjusted accordingly (Viner, 1932). This would yield a firm of "optimal size", where marginal costs per unit of production were equal to, or less than, the price per unit, thus ensuring a profit maximising level of production (Viner, 1932; Stigler, 1958; Coad, 2009). As the production volume of a firm increased, the average unit cost of production would *decrease*, thus the largest producer would have the lowest cost of production, a situation referred to as an "economy of scale" (Viner, 1932; Stigler, 1958). These economies of scale did indeed have a competitive advantage. With cost savings during the production process, and therefore higher profit margins per unit sold, these large firms had considerably more resources to re-invest back into the firm (in land, labour, capital, etc.) to support and encourage growth (Mill, 1998). Smaller firms, on the other hand, had more limited growth prospects. Without large-scale production, cost savings became minimal, leaving small firms without the capacity to finance future growth. Thus, for firms seeking growth, size was of paramount importance: the larger the firm, the more secure its operations and future growth potential would be (Coad, 2009).

For a long time the belief that large-scale production was conducive to economic development, and that bigger firms were most likely to grow, was firmly rooted in society (Landström, 2008). However, in 1931 Robert Gibrat challenged this thinking with his Law of Proportionate Effect: he postured that the expected growth rate of a firm is independent of its size (Gibrat, 1931) and that changes in firm size over time are random (Geroski, 2005). Since his findings were published, "Gibrat's Law" (which is really more a proposition, given limited explanatory power) has captivated the attention of growth researchers. Many studies build on the assumption that firm growth is independent of size (and thus random) and many more studies have attempted to test the validity of this assumption. Santarelli *et al.* (2006) provide a useful discussion of this body of literature.

Despite decades of attention, the empirical evidence to accept or reject Gibrat's Law is often inconsistent (Coad, 2009) and divisive. Some authors reject Gibrat's law outright, believing that growth is not purely random (Sutton, 1997; Stam, 2010), a number of studies demonstrate an inverse relationship between firm size and growth rates (Evans, 1987; Hall, 1987; Hart and Oulton, 1996) and yet others claim that Gibrat's law holds true, but to large, rather than small, organisations (Geroski, 1995; Caves, 1998). Nonetheless, Gibrat's seminal work has had a profound impact on firm growth research; he was arguably a catalyst for the shift from the old world of classical economics and market equilibrium into the more modern world of creative destruction and dynamic growth.

2.3.2 Post-Schumpeterian view of growth: creative destruction and dynamic growth

The middle of the twentieth century, after the great depression, saw an important and sizable shift in economic thinking. This was due in large part to growing dissatisfaction with the conventional approaches of classical economic theory in an increasingly turbulent business environment. In an attempt to align economics more closely with the realities of business, emphasis began to be placed on uncertainty, change and bounded rationality (Coad, 2009), a belief that decision making capabilities are constrained by inherent information limitations.

Perhaps one of the most influential thinkers of this new order was an Austro-Hungarian economist named Joseph Schumpeter. In 1942, Schumpeter proposed a new way of looking at markets, one that completely contradicted the classical model. He believed that markets were not prone to reach equilibrium, but rather were characterized by constant innovation driven by entrepreneurs. These entrepreneurs, referred to as "creative destroyers", enter markets with the intention of creating demand and taking market share, which is achieved by destroying existing market structures through the use of innovations (Schumpeter, 1987). Indeed, he believed that "[o]nce equilibrium has been destroyed by some disturbance, the process of establishing a new one is not so sure and prompt and economical as the old theory of perfect competition made it out to be; and the possibility is that the very struggle for adjustment might lead to such a system farther away from instead of nearer to a new equilibrium" (Schumpeter, 1987: 103). This notion of "creative destruction" from smaller and more innovative firms was particularly ground-breaking, as it contradicted the accepted view that markets (and firms) were most efficient when dominated by economies of scale. The notion that an entrepreneur could enter a market consisting of several large competitors, capture market share and monopoly rents through innovation and redistribute wealth away from the large existing firms

(Aghion and Howitt, 1992; Landström, 2005) must have seemed heretical, but Schumpeter was firm in his belief that "the function of entrepreneurs is to reform or revolutionize the pattern of production by exploiting an invention or, more generally, an untried technological possibility for producing a new commodity or producing an old one in a new way" (Schumpeter, 1987: 132).

Another person to test the status quo was Edith Penrose who, in her 1959 book *The Theory of the Growth of the Firm*, also called into question the assumptions of the day pertaining to firm growth. Like Schumpeter before her, Penrose felt that the neoclassical economic "theory of the firm" (pertaining to perfectly competitive markets, relative prices and Pareto optimal resource allocation) had its limitations, specifically regarding how individual firms operate (Penrose, 1995). She sought to understand firm growth in the context of a dynamic society, with her seminal work providing the fascinating insight that "economies of growth" are more important than "economies of scale" and that growth capabilities are not necessarily linked to the larger size of a firm (Penrose, 1995). However, Penrose and others (e.g. Stinchcombe, 1965) have acknowledged that growth is linked to the demographic characteristics of firms, of which size is certainly a consideration. It has also been suggested that one should view Penrose's work as a theory of the method underlying growth of a firm, rather than as an examination of the growth (and growth rate) of a firm itself (Hinton and Hamilton, 2009).

Based on Schumpeter and Penrose's contributions, society's interest and focus began to shift away from the economies of scale towards more "evolutionary economics", which stressed a dynamic view of firms and industries and the heterogeneity of firms and innovation (Coad, 2009: 6). Researchers in particular were becoming increasingly sceptical of the large-scale production argument (Burns and Stalker, 1961; Woodward, 1961; Chandler, 1962) and many felt that smaller firm units would be preferable to larger ones (Landström, 2008), particularly from a growth perspective. This growing focus on dynamic and innovative firms brought small firms from the shadow of economies of scale and into the spotlight.

2.3.3 Shifting focus from large to small firms

In light of the pervasiveness of Schumpeterian principles of growth, as well as the changing global political and economic climate post World War II, there was a significant shift of interest and attention away from the old economies of scale and towards small firms, despite industrial policy interest in the 1960s for "national champions"[2]. This interest was piqued in the early 1970s, by observations of what appeared to be an increase in the share of employment of small firms in the USA (Acs *et al.*, 1999). Initially thought to be an American phenomenon, this trend soon developed in most Western countries (Landström, 2008). There may be several explanations for this shift toward small firm employment. Carlsson (1992) notes that it could have been due to (i) a fundamental change in the world economy, related to the intensification of global competition, the increase in the degree of uncertainty, and the growth of market fragmentation, or to (ii) changes in the characteristics of technological progress, precursors to more "flexible specialisation" (Piore and Sabel, 1984). It may also have been that globalization and technological advances, and the resulting knowledge economy, were the driving force behind the move from large to small businesses (Audretsch and Thurik, 2000).

Regardless, it was in this context of this increased focus on small firms, entrepreneurship, innovation, industrial dynamics, and job creation (Acs, 1992) that the economist David Birch, the father of high growth research, published his pioneering research on rapid firm growth.

2.3.4 Rise of job creation research

In 1979, Birch published a report - *The Job Generation Process* - which looked at the main sources of job creation in the USA between 1969 and 1976. Affiliated with M.I.T.'s Centre for the Study of Neighbourhood and Regional Change, Birch developed an innovative database, based on Dun and Bradstreet data, which allowed

[2] During the post-war period, a number of European governments, including the UK, sought to create selected mega-corporations or "national champions" to capitalise on economies of scale to compete internationally e.g. British Steel and Rolls Royce. These were often companies deemed to be strategically important to the nation.

him to longitudinally track business dynamics within the US. Despite only selling 12 copies (Landström, 2005: 162), the study's findings were particularly noteworthy: Birch observed that within his sample of 5.6 million businesses, on average 60% of all net new jobs in the US were created by firms with under twenty employees, whilst large firms comprising more than five hundred employees generated less than 15% of new jobs (Birch, 1979). In addition, eighty per cent of replacement jobs were created by young firms that were up to four years old (Birch, 1979).

Though heavily criticised for its methods, notably weak documentation, limited replicability of results, and questionable measurements (Armington and Odle, 1982; Storey, 1994; Landström, 2005), there is no denying that this work made seminal contributions to the study of business growth. Not only did Birch manage to piece together a dataset that provided the first opportunity to study business dynamics in industries across the United States, he also pioneered the systematic study of small businesses (Acs *et al*., 2008; Henrekson and Johansson, 2010), specifically dynamic job generation research (Kirchhoff and Greene, 1998). As Landström (2005: 160) notes, "it was [Birch's] systematic studies and empirical results that gave small businesses a place on the research map".

In 1981, Birch published a follow-up work titled "Who creates jobs?", in which he made a startling observation that would act as a catalyst for significant economic change. Birch noted that "[w]hatever they are doing…large firms are no longer the major providers of new jobs for Americans" (Birch, 1981:8). This finding was in line with the Schumpeterian view of business dynamics as a process of creative destruction led by entrepreneurs, thus further supporting the argument that conventional "equilibrium theory" was no longer an appropriate means to view firm growth (Kirchhoff and Greene, 1998). Birch went on to suggest that as the American economy advanced, a number of young firms, *growing rapidly in their youth*, would be generating the bulk of new net jobs within the economy, rather than the traditional businesses of scale (Birch, 1981: 8). This statement caused governments and policy makers around the world to re-evaluate their perceptions of the role played by fast-growing small firms within domestic economies. As Storey (1994: 161) observes, this thought was so influential that, in the UK, it even "provided the *raison d'être* for Mrs. Thatcher's new administration to highlight the benefits of a vibrant and flexible small firm sector as a way of both creating new jobs and reducing unemployment". However, this new-found faith that small firms were the next wave of job creators was not without its critics. Brown *et al.* wisely observed that while small firms might initially generate new jobs, they "do not create a particularly impressive share of jobs in the economy, especially when we focus on jobs that are not short lived" (Brown *et al.*, 1990: 1-2) – larger firms offer greater durability of jobs (Davis *et al.*, 1996).

In an attempt to address the debate concerning the relationship between small firms and job creation, Birch chose to collaborate with one of the main critics of the job creation argument, James Medoff. Their work highlighted several agreements reached by both Birch and Medoff. In addition to acknowledging that small firms' role in job creation varies depending on location and time period, as well as the fact that there is inherent instability in a nation's stock of jobs, they concluded that most small firm job creation in the US occurs within a relatively few small fast-growing firms – subsequently termed "gazelles" (Birch and Medoff, 1994: 157). This final finding corroborated work by Storey and Johnson (1987), who stressed that it is the quality rather than quantity of these small growing firms that determines job creation and the positive performance of an economy. Termed by Kirchhoff and Greene (1998) the "small business job creation hypothesis", this concept has attracted considerable attention since the 1990s: there is currently a great deal of literature discussing the positive relationship between small firms and job creation (Gallagher *et al.*, 1990; Reynolds and Maki 1990; Kirchoff 1994; Gallagher 1986 etc.).

Thirty years later, the rapidly-growing HGFs (or "gazelles", as highlighted by Birch and Medoff) remain the subject of great attention from the business media, academic community and policy makers who seek to better understand the growth potential of individual enterprises and their impact on wider economic development. Still viewed as major job creators, high growth firms have risen up the academic and policy agendas (Lerner, 2010), with the development and promotion of HGFs increasingly a key objective for many economic development and business support agencies (Patton *et al.*, 2003). But what exactly *is* a high growth firm?

2.4 What is a high growth firm

Amazingly, despite considerable international interest in HGFs since the early 1990s, as well as a plethora of detailed empirical studies on the phenomenon, at present there is no consensus on what constitutes a high growth firm. At its most simplistic, a high growth firm is an enterprise growing at a faster rate than other firms, particularly in its respective industry. This simple description, however, immediately requires further detail and clarification. Do HGFs grow faster than other firms in terms of turnover? Or in terms of their number of employees? Is the rate of growth an annual figure, or is it an average over a defined period? Does growth need to be organic, or do acquisitions count? These practical concerns, among many others, have yet to be formally addressed and resolved.

Over the past twenty years, academics and policy makers have put forward numerous definitions of high growth firms, along with corresponding growth indicators and measures. However, these have often been tailored to suit an individual author's particular research interest or study data, which has thus resulted in a sizable, but very fragmented, body of literature investigating HGFs. With limited (if any) comparability between studies, this field lacks a cumulative and coherent theoretical and practical foundation upon which to base further research of HGFs. Therefore, concrete understanding of the high growth phenomenon unfortunately remains limited. This is of significant concern, with many experts in the field calling for the creation of a single universal definition of high growth firms (Delmar *et al.*, 2003; Acs *et al.*, 2008; Henrekson and Johansson, 2010 etc.) as well as an appropriate and compatible growth indicator.

2.5 Defining high growth firms

A very common concern cited in the HGF literature is the lack of a universally accepted definition. While such fixation on a definition may seem somewhat pedantic, it is particularly necessary to this research field if there is to be (i) accurate differentiation of high growth firms from other slower-growing firms, as well as (ii) comparability across studies. At present, without a concrete and widely accepted definition of HGFs, the literature remains very fragmented and confused, with little conceptual development of the high growth phenomenon.

Before addressing the debate regarding definitions, it is important to clarify what terminology will be used in this paper. As with definitions, there are numerous terms in use to describe various aspects of the HGF phenomenon. Gallagher and Miller (1991) refer to "fliers" and "sinkers" when discussing high and low growth firms, whereas Storey (1994) refers to "trundlers" and "flyers". Other terms in use include rapid growth firms (Fischer and Reuber, 2003; Barringer *et al.*, 2005), high impact firms (Acs *et al.*, 2008) and fast growing firms (Almus, 2002). The most commonly used term in the literature is "high growth firms" (Feindt *et al.*, 2002; Delmar *et al.* 2003; Hinton and Hamilton, 2009; Mason and Brown, 2013 etc.),

In an effort to promote the use of consistent terminology, this paper will refer to *high growth firms* (HGFs) as the general category of rapidly growing organisations. This term is commonly used in relation to such firms, within both the academic community (e.g. Teruel and de Wit, 2011) and the policy community (e.g. Mason and Brown, 2010).

2.5.1 Definitions in the literature

As noted, at present a universally accepted definition of high growth firms is lacking. The HGF literature encompasses a variety of definitions, many of which have been inspired by the work of David Birch. Birch initially defined a high growth firm as ''[a] business establishment which has achieved a minimum of 20% sales growth each year over the interval, starting from a base-year revenue of at least $100,000'' (Birch *et al.*, 1995: 46). Many authors have chosen to use their own definitions: Barringer *et al.* (2005) consider HGFs to be those firms with a 3-year compound annual growth rate of 80% or higher; Moreno and Casillas (2007) note that HGFs have higher than average sales growth in their relevant sector during a three year period; Hölzl (2009) defines them as those firms in the top 10% of employment growth, which had a firm size of less or equal to 250 employees in the base-year.

As discussed by Ahmad and Gonnard (2007) from the Statistics Directorate at the OECD, attempts to define HGFs within the literature essentially fall under two approaches: (i) targeting a certain percentage or number of top performing firms (e.g. Feeser and Willard, 1990; Delmar *et al.*, 2003; Littunen and Tohmo, 2003; Hölzl, 2009), for example using firms included on the *Inc. 500* list (Markman and Gartner, 2002) or the Deloitte Fast 50 list (Hinton and Hamilton, 2009), or (ii) defining a base level percentage of growth over a period of time, above which firms are deemed to be high growth (e.g. Kirchhoff, 1994; Schreyer, 2000; Hoffman and Junge, 2006; Moreno and Casillas, 2007). While both approaches may have their merits, the second method is seen as preferable (Ahmad and Gonnard, 2007: 3), as measuring growth from a baseline arguably best identifies a collective group of firms demonstrating the highest growth. Targeting a top percentage of firms, on the other hand, is much more problematic. Whilst there are a number of commercial lists available that identify top performing companies (e.g. Inc. 500, Fast Track 100), these lists seldom take factors other than turnover growth (excluding, for example, firm age or size) into account, and therefore often "compare apples with oranges". It is much easier for a formerly pre-revenue company to see sales growth of 100% than it is for an established £30 million business to see the same sales growth. Measuring from a baseline attempts to reduce such irregularities.

With this in mind, a number of key high growth scholars have chosen to ground definitions on the concept of baseline growth. Storey (2001) opted to define HGFs as those firms that have achieved a sales growth of at least 25% in each of the 4 years for businesses with current sales of £5-10 million, or of at least 15% for businesses with current sales amounting to £10-100 million. Likewise, in their influential work discussing how HGFs should be identified, Hoffman and Junge (2006: 3) chose to use a refined version of Birch's definition, one focused on absolute growth, and described high growth firms as those organisations "with a growth rate (in either employment or turnover) higher than 60 per cent in the period from t to t+2 [with] a positive growth in both time periods of at least 20%". Parker *et al.* (2010) were perhaps more optimistic when they demanded compound annual sales growth of at least 30% per annum over their four year study period. Acs *et al.* (2008: 17) followed a similar path, defining HGFs as enterprises that have at least doubled their sales over the most recent four-year period, with an employment growth quantifier of at least two[3].

While these definitions may be similar, there are clearly important differences between them in terms of the growth period, growth rate and type of growth (relative or absolute). Given this variety, as well as the aforementioned need for consistency in definition and measurement across studies, many authors have called for a convergence in terms of defining HGFs. In line with this call, the OECD crafted a proposed definition for high growth firms. They recommend that a HGF be defined as:

> [A]n enterprise with average annualised growth (in number of employees or turnover) greater than 20% per annum, over a three year period, with a minimum of 10 employees at the beginning of the growth period (Eurostat-OECD, 2008: 61).

This definition includes three important criteria: (i) a growth rate (20% p.a.), (ii) a growth variable (employees or turnover), and (iii) a timescale (3 years). While this definition has yet to receive universal recognition, recent literature is starting to reflect its adoption (Deschryvere, 2008; BERR, 2008; Blackburn and Brush, 2009; Hinton and Hamilton, 2009; Mason and Brown, 2010; Mason and Brown, 2013).

Upon careful consideration of the various definitions offered within the academic literature, including their applicability to this particular study, the author chose to use the OECD (turnover) definition of HGFs, rather than one of those proposed by other scholars (e.g. Storey, 2001; Acs *et al*., 2008). This was not a straightforward decision, but rather a result of significant consideration as to which definition would be the most appropriate for this research project. The OECD's timescale (3 years)

[3] The employment growth quantifier (EGQ) is the product of the absolute and percent change in employment over a four-year period of time, expressed as a decimal. Acs *et al.* (2008) use this EGQ

was determined to be of adequate length, and the focus on baseline turnover growth in line with the objective of this thesis to explore HGF turnover growth. The researcher also places significant value on consistency of definitions and wanted to use a definition that was consistent to that used by other HGF scholars. Whilst it might be argued that the OECD definition - created by policy makers - is policy-oriented and therefore not ideal for academic pieces of work, arguably it has undergone a more transparent conceptualisation and development process derived from the wider academic literature (see Ahmad and Gonnard, 2007) than the majority of other definitions and has gained significant traction within the academic community for studies of HGFs. The OECD definition is generally well accepted within the academic HGF community and the researcher felt that its use would not be problematic in the context of this research.

2.5.2 Sub-sets of HGFs

Within the HGF literature, there is yet another area of confusion regarding definitions. When Birch *et al.* (1995) originally discussed fast growing firms they termed them “gazelles” – the young, small, rapidly growing firms that were major contributors to job creation. Since then, the terms “high growth firm” and “gazelle” have often been used interchangeably in the literature to refer to firms of any size or age with a higher than average rate of growth (e.g. Henrekson and Johansson, 2010; Parker *et al.,* 2010). Whilst this mixing of terminology does nothing to help reduce confusion within the literature, given that HGFs are typically younger firms, the fluidity of use of these definitions is somewhat understandable.

However, some authors have felt that it is important to differentiate between firms in terms of age, arguing that age is an important issue in business dynamics: it has a strong influence on firm development from initial growth rates to the expansion of establishments (Armington and Acs, 2004; Acs and Mueller, 2008). Ahmad and Gonnard (2007: 10) agree and believe that gazelles are in effect a sub-set of high growth firms, differentiated on the basis of age, where the age is fundamentally a

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to mitigate the impact of measuring employment change solely in either percent or absolute terms, since the former tends to favour small companies and the latter large ones.

question of convention. Their work has led the differentiation of gazelles from HGFs in the OECD guidance on business demography indicators. Commonly accepted sub-sets of high growth firms, based on size and age, now include *gazelles*, *mice* and *elephants*.

Gazelles

This is arguably the most important and widely recognized sub-set of high growth firms, despite the term still being frequently used as a catch-all name for high growth firms[4]. To differentiate them from HGFs, the OECD has formally defined gazelles as high-growth enterprises with average annualised growth greater than 20% per annum, over a three year period, that *are up to 5 years old* (Eurostat-OECD, 2008: 63). These are the young, small and particularly successful firms first identified by Birch; they are major players in economic development. As they grow, they add both primary and secondary business locations with corresponding employment creation (Acs and Mueller, 2008), along with positive spillover effects on the local economy. However, one must remember that a gazelle (or any HGF, really) is necessarily a temporary construction (Hölzl, 2009). These firms will eventually fail and exit the market, remain small, or transform themselves into larger, more stable-growth enterprises.

Mice

Firms that start life with a period of high growth but remain small (less than 20 employees) are often referred to as Mice (Birch, 1987; Davidsson and Delmar, 2003; Acs and Mueller, 2008). Despite starting as gazelles, these firms are minimal contributors to employment growth and tend to end up as traditional small businesses (Henrekson and Johansson, 2010).

[4] This is particularly true for Scandinavian authors, as the term “Gazelle” is generally accepted to be synonymous with the term high growth firm.

Elephants

The term elephant is often used for those gazelles that have successfully transformed into large organisations of over 500 employees (Birch, 1987; Acs and Mueller, 2008) – companies of scale that are often publicly traded (Henrekson and Johansson, 2010). During their formative years, however, these firms are synonymous with shedding jobs rather than generating them (Dertouzos *et al.*, 1989), as they tend to reduce employment in their first few years after market entry (Acs *et al.*, 2008). Net employment creation occurs over a much longer period.

Whilst these sub-sets of high growth firms are useful conceptual classifications, this thesis will not differentiate between firms based on size and age and thus will not refer to any of these specific groups. Instead, this thesis presents a study of high growth firms in general – those companies with at least 10 employees, seeing average annualised growth of at least 20% per year over a 3 year period. This group contains young small gazelles, as well as the more common older and larger HGFs (Acs *et al.*, 2008; Mason and Brown, 2010).

2.6 Identifying high growth firms

After discussing the challenges faced in attempting to define high growth firms, it may come as no surprise that trying to identify these firms is similarly complex – their definition and measurement are inextricably linked. Whilst best practice in estimating and measuring organisational performance is already well represented in the firm growth literature (e.g. Brush and Vanderwerf, 1992; Chandler and Hanks, 1993; Sutton, 1997), there is little consensus on how to best isolate HGFs from their peers. This is due in large part to the lack of a single accepted growth measure specifically for high growth firms.

There are many ways of measuring growth, with an indicator often looking at a chosen *growth variable* increasing at a set *rate* over a certain *timescale*. As with definitions, the HGF literature offers many recommended growth measures (see Appendix 1 for growth measures used in key HGF studies), yet these vary widely from study to study and are often selected at an author's discretion. With discussions regarding the appropriateness of these growth measures generally missing from the literature, authors need to be particularly careful when adopting a particular measure. They must ensure that any chosen measure fits properly with the research's aim and defining parameters (Birley and Westhead, 1990), rather than selecting a measure that might simply be convenient. In many cases, growth criteria and the measures chosen, seem to be determined by convenience and available data, rather than on conceptual and methodological justification (Janssen, 2009: 28).

The following are key considerations to be addressed when attempting to measure and identify high growth firms.

2.6.1 Considerations when identifying HGFs

<u>Growth variables</u>

A key difficulty in constructing a growth measure for high growth firms is the sheer number of variables from which one can calculate growth rates, such as assets, employment, market share, physical output, profits and sales (Delmar, 1997; Ardishvili *et al.*, 1998). Whilst asset valuation had been a popular choice of growth determinant for several authors (Carpenter and Peterson, 2002; Johnsen and McMahon, 2005), the vast majority of the literature has focused on two particular determinants: *employment* and *turnover*. These are the most widely used determinants in empirical growth research and arguably the most widely appropriate, as they can be applied across most firms and industries (Delmar *et al.*, 2003). However, each has its strengths and weaknesses.

Employment

Determining high growth through changes in employment is a sensible option and is found predominantly in the older literature, or in papers with a policy or regional development focus (Kirchhoff, 1991; Kirchhoff, 1994; Picot and Dupuy, 1998; Acs and Mueller, 2008; Hamilton, 2012). Given that the original interest in high growth firms stemmed from a desire to understand how they contributed to job creation, employment changes have long been considered to provide a good measure of economic impact (Dunkelberg and Cooper, 1982; Kirchhoff, 1991). In terms of practicalities, employment has an advantage over sales as a growth measure, given that changes in employee numbers is often less volatile than changes in sales volume and turnover (Delmar, 1997; Stenholm, 2011), although employment growth can be influenced relatively easily by changes in the labour market and its institutions (e.g. registration requirements) (Hoffman and Junge, 2006). However, relying on employment to measure growth may not necessarily provide the most accurate picture of a firm's success. For example, if a firm increases staff numbers without simultaneously securing appropriate revenues, there is a risk that firm will be seen to "grow", but it will not necessarily remain financially successful and viable. Employment may have increased temporarily, but revenue is an essential factor in a firm's sustainable growth and success. It is also important to note that not all businesses will agree that an increase in employment is desirable (Leitch *et al.*, 2010b) and many businesses have a "maximum business-size threshold" which constrains employment growth (Cliff, 1998).

Turnover

As an alternative to employment, a good number of HGF studies have focused on turnover, or net sales, as a growth variable (Smallbone *et al.*, 1995; Littunen and Tohmo, 2003; Moreno and Casillas, 2007; Mason and Brown, 2010). This approach is particularly relevant to most businesses, as managers tend to think about and express their firm's growth objectives in terms of sales growth (Hughes, 1998). However, sales are sensitive to demand, inflation and currency exchange rates (Brush and Vanderwerf, 1992), whilst in the case of some start-up firms, it is possible that employment will grow before any sales will occur (Delmar *et al.*, 2003). Arguably a HGF must be a financially viable entity in order to support rapid growth rates, thus counting a change in employees without having corresponding revenue seems futile. Although using sales as a growth measure will exclude certain pre-revenue companies from HGF inventories, this should not dramatically affect any research, as including pre-revenue companies would likely only skew HGF study results due to their unique circumstances.

Marrying employment and turnover

With neither employment nor turnover change providing a completely accurate picture of firm growth, there has been mention in the literature of using multiple growth measures to account for differences in growth patterns across firms and industries (O'Gorman, 2001; Delmar *et al.*, 2003; Johnsen and McMahon, 2005). This debate regarding this issue will be discussed further in section 2.63.

<u>Growth Rate</u>

An essential component of any growth formula, the rate of growth at which a firm is deemed to be a HGF is particularly ill-discussed. A number of studies have used Birch's (1995) proposed 20% annual growth rate (Fischer and Reuber, 2003; Hoffman and Junge, 2006; BERR, 2008), but none justify why this particular rate of growth is preferable to any other. Even the OECD, in line with Birch, advocates using this rate, noting that the 20% growth rate is a matter of "convention" within the HGF field (Eurostat-OECD, 2008). Whilst such an assumption is problematic, it is unfortunately not unique. Many authors have chosen to use other growth rates, with some preferring rates of 30% per annum (Fischer and Reuber, 2003; Parker *et al.*, 2005; O'Regan *et al.*, 2006), some 50% over the study period (Janssen, 2009) and others demanding that the selected growth variable be doubled over the study period (Littunen and Tohmo, 2003; Acs *et al.*, 2008). In these studies, the rationale for the specific growth rate is often notable by its absence.

This issue of growth rate – particularly the selection of growth rates without sufficient justification – is problematic for researchers and needs to be addressed further in the literature. At present, with so many different growth rates being used, there is no way to compare results across studies, thereby severely hindering the development of a theoretical and conceptual underpinning for the HGF phenomenon (Garnsey *et al.*, 2006). Any consensus on a "best practice" rate could make a tremendous difference in promoting the use of a single growth measure for HGFs, thus allowing for future high growth firm research to form a coherent body of literature.

Timescale

The third component of any growth measure is a timescale, the time over which a firm's growth is measured. The time period chosen is very important and will likely vary depending on what a researcher is looking to analyse. In the high growth literature, studies tend to be cross-sectional[5] rather than longitudinal[6], despite the fact that firm growth is by nature a phenomenon that happens over time (Davidsson *et al.*, 2005) and thus should be examined over time. A longer-term examination of growth allows researchers to look beyond fluctuations in size, thereby focusing on the growth process in between size changes (Dobbs and Hamilton, 2007). There are a few longitudinal studies in the literature (e.g. Birley, 1987; Vinnell and Hamilton, 1999; Delmar and Wiklund, 2008; St. Jean *et al.*, 2008; Littunen and Niittykangas, 2010), however there is general consensus that longitudinal studies are of great value and at present very much underrepresented (Chandler and Lyon, 2001; Davidsson *et al.*, 2006; Davidsson and Wiklund, 2006; Delmar and Wiklund, 2008). Despite their short-term focus, a number of authors have successfully used cross-sectional designs to investigate important features of firms that have exhibited above average growth (e.g. Smallbone *et al.*, 1995; Davidsson and Henrekson, 2002).

In their formative work, Birch *et al.* (1995) originally chose to measure firm growth over a period of five years. Others have since recommended that the time period be reduced to three years in order to increase sample sizes (Hoffman and Junge, 2006), or be kept at 5+ years in order to reduce irregular short-term fluctuations and allow for a more reliable estimate of firm performance (Weinzimmer *et al.*, 1998; Janssen, 2009). Dobbs and Hamilton (2007: 314) believe that study periods should be even longer than 5 years, as "researchers need to examine growth over an extended period… [to] identify the underlying processes of growth rather than just the concomitants of the phenomenon." However, this might be more difficult than it

[5] Research that takes place at a single point in time, or looks at a single period of time.
[6] Research involving observations and measurements taken over a long period of time.

sounds, as the absence of longer study periods in HGF research has been largely attributed to the rarity of longitudinal data sets for small and new firms (Terleckyj, 1999).

The OECD, in line with their definition, has stated that, for HGFs, growth should be measured over a period of 3 years (Eurostat-OECD, 2008). This reflects assertions within the literature that a shorter timescale will best benefit HGF research (Autio *et al.*, 2000; Barringer *et al.*, 2005). However, as with the growth rate, more discussion and clarity around chosen timescales (from the OECD and within other academic studies) will be required to ensure appropriate transparency and rigour.

Types of growth

In addition to the considerations addressed above, a key issue when isolating HGFs concerns the type of growth a firm is experiencing. This is seldom directly addressed in definitions or indicators. However, given that different types of growth significantly affect methodological considerations for research studies, they should thus be included in any discussion pertaining to growth measurement.

Absolute versus relative growth

A key consideration when measuring firm growth is the decision to measure absolute growth[7] (Smallbone *et al.*, 1995; Davidsson and Henrekson, 2002; Moreno and Casillas, 2007) or relative growth[8] (Feeser and Willard, 1990; O'Gorman and Doran, 1999). This choice can have a substantial impact on research findings (Shepherd and Wiklund, 2009). Using relative measures to ascertain growth tends to favour smaller firms, in comparison to focusing on absolute growth, while some factors identified as having a positive effect on absolute growth, have been found to be unrelated, or even negatively related, to growth in relative terms and vice versa (Delmar, 1997; Dobbs and Hamilton, 2007).

[7] Absolute Growth is measured in terms of a total change in size: $(x_{it} - x_{it-1})$
[8] Relative Growth measures a proportional change in size over a study period: $(x_{it} - x_{it-1}) / (x_{it-1})$

In general, the implications of choosing between relative and absolute growth measures seems to be well understood by researchers and receives significant discussion in the literature (Delmar *et al.*, 2003). However, it is nonetheless an important factor to take into consideration when attempting to measure firm growth, particularly for HGFs.

Organic growth versus acquisition

Despite increasing recognition that there are many different pathways to growth, one surprisingly neglected discussion in the literature pertains to how firms grow, whether through organic growth, acquisition, or a combination of both (Delmar *et al.*, 2003:196). This is an area of the literature that sorely needs further investigation. Some authors provide a brief acknowledgement of this concern, yet few think to discuss how their choice of growth pathway will impact methodology and study outcomes, likely because it is not always possible to differentiate between types of growth. Organic and acquisition growth each place unique demands on managers and firms, thus having a differential impact on performance and development (Delmar *et al.*, 2003).

Organic growth is often seen as the preferable method of growth, due to the belief that it has a larger effect on net employment than acquisition growth (Delmar *et al.*, 2003; Henrekson and Johansson, 2010), particularly in smaller firms, younger firms, and emerging industries (Penrose, 1995; Deschryvere, 2008). However, this approach tends to focus on single establishment firms, thus providing a narrower (and arguably unrealistic) view of HGFs. Growth through acquisition, on the other hand, is also important as it is responsible for reallocating employment and other resources to more productive uses, especially in mature industries (Delmar *et al.*, 2003; Klepper and Simons, 2005; Henrekson and Johansson, 2010), where organic growth is less likely (Davidsson *et al.*, 2006). Acquisition growth, while perhaps more turbulent than organic growth (Penrose, 1995), is essential to keep industries operating at their most efficient and is therefore not something to be ignored.

Ahmad and Gonnard (2007: 5) believe that both organic and acquisition growth are important but that measures of growth should attempt to categorise these events separately, the key focus being on organic growth, with a second indicator focusing on acquisition oriented growth. This is because organic growth is considered to lead to genuine job creation (Delmar *et al.*, 2003), whereas acquisition growth does not necessarily yield net new jobs. However, the practicality of this approach is highly debatable. Not only does the literature lack comprehensive conceptual understanding of how acquisition growth differs from organic growth, but there does not appear to be any practical way to differentiate acquisition growers from organic growers. Unfortunately, few commercial databases and their derived datasets offer anything near such functionality. Realistically, growth measures will need to include both acquisition and organic growth; any differentiation between the two will need to be done manually by researchers. This is certainly an area that would benefit from further research and investigation.

2.6.2 The HGF Growth measure

After discussing the key considerations to be addressed when attempting to measure and isolate high growth firms, it is clear to see why there have been significant difficulties in developing a universal HGF indicator. With no consensus on definition and indicator components (growth variable, growth rate and timescale), it is little wonder that there is on-going debate about how to best identify HGFs. One might argue that such a lack of consensus on what constitutes a HGF indicates that a single definition may not be necessary. However, such a lack of consensus is pervasive within the entrepreneurship literature more generally in terms of definitional issues. While Delmar *et al.* (2003: 190) make a convincing argument that there is no "one best way" to measure HGFs, and that trying to find one diverts researchers from "acknowledging that firm growth is fundamentally a multidimensional rather than unidimensional phenomenon", there does appear to be a need for initial guidance on what a HGF might look like.

Without a standardized definition and indicator to determine what constitutes a HGF, there is arguably little hope of furthering our understanding the HGF phenomenon, as high growth firms must first be isolated from their competitors to allow for subsequent detailed study. While a HGF definition and measure may not, and should not, be the proverbial "holy grail" of researchers, the researcher believes that it is an important first step to allow for a greater understanding of the phenomenon and to finally provide a degree of comparability across studies.

To complement their definition of high growth firms, the OECD has produced a mathematical indicator to identify HGFs based on the concept of *average annualised growth* (Eurostat-OECD, 2008: 62). Given the debate between using employment or turnover as the growth variable, the OECD's formula allows for the use of either variable to suit different studies' requirements:

$$\sqrt[3]{\frac{employees_{(xx)}}{employees_{(xx-3)}}} - 1 > 0.2 \qquad \sqrt[3]{\frac{turnover_{(xx)}}{turnover_{(xx-3)}}} - 1 > 0.2$$

In line with the researcher's rationale for following the OECD definition, this study will use the associated HGF (turnover) measure above. As with the OECD definition, the above measure may be viewed as policy-focused rather than wholly academic, despite the increased adoption of this metric within the academic literature (e.g. Mason and Brown, 2013; Hölzl and Janger, 2013). In the researcher's opinion, this metric is relevant to this particular research project, particularly the ability to look at turnover growth.

Within the literature there is an emerging consensus that, if there was only to be one measure of firm growth, the measure would be based on turnover (Barringer *et al.*, 2005; Mason and Brown, 2010 Du *et al*., 2013) and turnover-based measures are now the most frequently used within the firm growth literature (Achtenhagen *et al*., 2010). Whilst turnover may not be a perfect indicator, it does provide more accurate guidance on whether or not a company is financially viable (Davidsson *et al.*, 2006). Arguably, can pre-revenue companies, no matter their employment levels, really be considered high growth if they are not securing revenue? Turnover as a growth measure is also in line with how firms themselves have been found to measure growth; very few managers think of growth in terms of employees (Robson and Bennett, 2000). Any measure used should ultimately reflect the growth conceptualisation of the firms being studied and in this way turnover appears to be superior to employment.

However, in this vein, there are arguably other metrics that could be used to measure growth which are more closely aligned to those used by practitioners themselves. It is recognised that profitability is of more importance to firms than just turnover (Davidsson *et al*., 2009). However, there are significant methodological issues associated with using changes in profit as a growth measure, as accounting practices allow for the manipulation of profitability figures submitted to companies house which makes it much more difficult to accurately identify which firms have seen significant growth and which have not. Concerns have also been raised in the literature that growth measures should "softer" and reflect issues such as firm perceptions of growth or increased development of the company and its resource base (Achtenhagen *et al*., 2010). Such softer measures have long been criticised for being unreliable and context-specific (e.g. Chandler and Hanks, 1993; Delmar, 1997), however they are worth further consideration and development in the literature.

2.6.3 Limitations in defining and measuring HGFs

Whilst the OECD formulas provide a starting point to address HGF measurement technicalities, they do not fully solve the issue of comparability across studies. Authors are still able to choose between the two proposed formulae (employment or turnover) to suit their own intents and purposes. With each formula favouring certain types of firms, they thus provide only a partial picture of the HGF presence.

As mentioned previously, there has been discussion in the literature about the merits of using multiple growth measures in the form of a composite measurement tool (e.g. O'Gorman, 2001; Johnsen and McMahon, 2005). This would allow researchers to best account for HGFs from different sized firms across all industries and to have a better understanding of what empirical relationships exist (Delmar, 1997; Delmar *et* *al.*, 2003), particularly given that many of the key growth measures (turnover, employment, etc.) are "attributes of the same underlying theoretical concepts of growth and therefore tend to be correlated" (Delmar *et al.*, 2003: 194). Many authors have attempted to verify this assertion and several have successfully shown a definitive positive correlation between changes in turnover and changes in employment (Chrisman and McMullan, 2000; Hoffman and Junge, 2006; Coad, 2007; Coad *et al.*, 2012). On the other hand, Janssen (2009: 41-42) finds the opposite, and counters that the "variables affecting employment growth are largely different from those that influence sales growth…growth cannot be measured through composite indicators", while Weinzimmer *et al.* (1998: 250) note that researchers studying sales growth are likely interested in very different concepts than those studying employment growth.

Despite this lack of consensus on correlation and fit between growth variables, Ahmed and Gonnard (2007) have proposed a simple composite HGF indicator that takes into account both employment and turnover as growth variables. Similar to the Fisher price index, their proposed indicator takes the squared root of employment and turnover changes to find the geometric mean of the two indices, with turnover deflated to base year t:

$$\sqrt{\left(\frac{Emp_{t+n}}{Emp_t}\right)\left(\frac{Trn_{t+n}}{Trn_t}\right)}$$

While this indicator is not in common use, should its popularity increase it would be interesting to see a "sustainability element" included to ensure that HGFs isolated are relatively stable financially. An interesting observation from Birch's work was that only a small number of "gazelle" firms were successful after their initial period of high growth (Birch, 1981). This has been corroborated other authors, who observe that growth is a fundamentally risky process and higher rates of growth have the potential to wreak havoc within firms not prepared to cope with rapid change. As a result sustained growth is rare – high growth is almost always a temporary state (Dobbs and Hamilton, 2007; Parker *et al.*, 2010).

2.6.4 Why focus specifically on high growth firms

As discussed earlier in this chapter, HGFs are considered to be a subset of the wider business base – a group of particularly rapidly growing firms. Given the significant interest in these companies, over the past three decades a large body of literature has emerged which focuses specifically on HGFs. This literature base has been developed in parallel to the considerable body of more general firm growth literature. This area includes work focused growth in different types of firms, specifically new firm growth and small business and SME growth (a major part of the firm growth literature), as well as work looking at growth processes and patterns (see section 2.7.3). Given the plethora of work on business growth generally, it is not possible to undertake a full review of these fields within this thesis, however there a number of useful reviews available (for new firm growth see Gilbert *et al.*, 2006; for small business growth see Davidsson *et al.*, 2005 or Dobbs and Hamilton, 2007; for a review of the growth process literature see McKelvie and Wiklund, 2010). However, for authors exploring growth – regardless of the type of firm they are focused on – the issue of defining and measuring growth is a common theme across the HGF literature and the wider firm growth literature.

As within the HGF literature, across the wider firm growth literature there is a continued debate as to how to define and measure firm growth. Many authors look back to Penrose's (1995) conceptualisation of growth as a change in the amount of a firm's assets and resources (Leitch *et al.*, 2010b), although she did note that such growth occurs as part of a process of firm development. However, given this "fuzzy" definition of growth that is open to interpretation, researchers have had little in terms of a theoretical foundation upon which to conceptualise and understand "growth". As a result, there is a distinct lack of clarity in terms of the concept of "growth firms" within the wider growth literature, with many authors (and seminal papers) failing to note how they have conceptualised growth (e.g. Garnsey, 1998). The HGF literature has been distinctive in this regard.

From the outset, authors working within the HGF literature have put forward their definitions of "growth" and "high growth". The terminology that has evolved within this sphere (particularly the use of the term “high growth firms” which, as noted in section 2.5, has eclipsed other terms for this cohort) has reflected the belief that there is a subset of firms that is differentiated from other “growing firms” by the rapidity of their growth rate. As some firms grow faster than others, there is arguably a continuum of firm growth, with HGFs at one end and other “growing firms” comprising the remainder of the continuum. Some may query the need to differentiate HGFs from other growth firms, when differentiating firms that grow from those which do not grow might suffice. However, a firm seeing 30% turnover growth per annum over a period is arguably a different entity to one seeing 5% growth and needs to be conceptualised as such, as there could be important qualitative differences in terms of how growth ultimately manifests itself. Though of in a different way, whilst the Olympic medallist Mohamed Farah and a finisher in a local marathon are both runners capable of endurance and speed that rival the capabilities of the casual jogger. However the two athletes themselves in comparison are arguably two extremes of “top” performance and speed – they do not exhibit the same capabilities.

Bearing in mind the complexity of the HGF phenomenon as discussed, it is highly unlikely that any one definition and corresponding measure of “high growth firms” will ever please all people. However, exploring HGFs is arguably an important part of understanding the growth process not only within this particular subset of firms, but also how these firms fit within the wider continuum of “growth firms”.

2.7 HGF research

Whilst high growth firm research is still a relatively new field of study, since the early 1990’s there has been an increasing number of studies published examining various aspects of the high growth firm phenomenon. Deriving from the general firm growth literature, the majority of the early HGF work was firmly grounded in economics (e.g. Acs, 1992; Chandler and Hanks, 1993; Audretsch, 2000). Now, however, HGF research touches many different fields, from marketing (Hinton and Hamilton, 2009) to strategy (Blackburn and Brush, 2009) to finance (Carpenter and Peterson, 2002) and is widely considered to sit under the umbrella of entrepreneurship as "high growth entrepreneurship" (Naudé, 2010; Davis and Shaver, 2012), given that "growth is the very essence of entrepreneurship" (Sexton, 1997: 97). This body of literature is varied and extensive, so it is fortunate that a number of authors have provided thorough reviews of the research (Brush and Vanderwerf, 1992; Chandler and Hanks, 1993; Murphy *et al.*, 1996; Delmar, 1997), although many authors have had a more narrow focus, for example looking specifically at small business growth (Storey 1994; Weinzimmer *et al.*, 1998; Dobbs and Hamilton 2007), or only those studies explicitly examining job creation (Henrekson and Johansson, 2009) .

Despite the wide variety of studies, within the literature research tends to fall into three broad categories: (i) high growth firm inventories, (ii) analyses of the HGF characteristics that contribute to fast growth and (iii) studies focused on the growth patterns of HGFs.

2.7.1 HGF inventories

An important sub-set of high growth firm research, comprising some of the earliest work on this phenomenon, is the "inventory" of high growth firms – a catalogue of the number of HGFs, location and basic demographic characteristics of high growth firms in any given region. These inventories are monumental tasks, requiring authors to differentiate the HGF population from other slower-growing firms before examining spatial and demographic dimensions. However tedious, these inventories are a necessary first step in high growth research as they not only provide an understanding of a HGF population in a particular regions but they also in turn isolate a sample pool for more detailed research. Even today, the vast majority of HGF studies, no matter their focus, will include an element of inventory.

One of the literature's most influential inventories was produced by Hoffman and Junge (2006), in response to the EU Commission's Green Paper on Entrepreneurship. This sought to determine how to produce more entrepreneurs within Europe and how to produce more high growth firms (Commission of the European Communities, 2003). Using an international database of business accounts

(ORBIS[9]), Hoffman and Junge were able to calculate the population of high growth firms in 14 European countries, as well as in Japan, Korea and the USA. This inventory not only provided an understanding of HGF populations, it also discussed a number of problems related to firm data analysis, specifically some pressing issues relating to cross-country comparisons. Their key finding was particularly interesting: European HGFs do not grow as fast as American HGFs and are not as numerous. Thus, they recommend that governments should focus on improving the business environment to stimulate growth within existing organisations, rather than pushing for the entry of new firms (Hoffman and Junge, 2006: 2). However, it is unsurprising that the USA should have such a high proportion of HGFs and is not indicative of sub-par performance in Europe: countries with a large domestic market tend to offer more opportunities for development and growth, thus creating more high growth firms than are found in countries with limited domestic markets (Davidsson, 1991; Teruel and de Wit, 2011).

Rather than have an international dimension, other authors have chosen to undertake more regionally focused inventories of HGFs: Almus (2002) sought to identify HGFs in post-reunification Eastern and Western Germany; Delmar *et al.* (2003) examined high growth firms in Sweden, using six growth variables to explore heterogeneity in firm growth; Stam (2005) focused on the Netherlands; the Department for Business Enterprise and Regulatory Reform (BERR, 2008) undertook a study of HGFs in the UK to assess how UK firms perform compared to US organisations; Zhang et al. (2008) examined HGFs in the Chinese context; Acs *et al.* (2008) outline the distribution of high growth firms in the USA; Mason and Brown (2010) provide an overview of Scottish HGFs; and Goedhuys and Sleuwaegen (2010) analyse HGFs across 11 Sub-Saharan African countries. These inventories have largely found that high growth firms are found in all industries and in all regions of countries (Schreyer, 2000; Hölzl, 2009; Mason and Brown, 2010). Whilst cities do have a proportionately higher percentage of high growth firms, rural areas are by no means devoid of HGFs.

[9] ORBIS, a product of Bureau van Dijk, is a database providing comprehensive financial information on companies worldwide.

Whilst these inventory studies are both interesting and practical in terms of providing a basic understanding of HGF populations, they provide little insight into the growth dynamics of these firms as well as factors influencing growth. With this in mind, the majority of authors have preferred to focus their attention on examining the impact of a variety of firm characteristics on rapid growth.

2.7.2 Characteristics of HGFs

Given the argument that rapid firm growth is not a random event, but rather "associated with specific firm attributes, behaviours, strategies and decisions" (Barringer *et al*., 2005: 665) studies examining the characteristics of HGFs are plentiful, with researchers having identified and tested the relationship between a number of characteristics and firm growth. These studies comprise the vast majority of the research to date on high growth firms, but are not without their shortcomings. As they have largely been cross-sectional, quantitative analysis of variance on aggregate databases (Garnsey *et al.*, 2006) their explanatory power is very limited: it is common for a study to find that a certain attribute is correlated with growth, whilst another author determines that the same attribute is negatively correlated with growth. With up to 80% of sample variance often left unexplained in these studies (Curran and Blackburn, 2001), such work should be seen as indicative of how certain characteristics can potentially influence growth, rather than as an identification of a definitive link between such variables and growth.

In their review of the literature, Barringer *et al.* (2005) note that, of the variables studied, the most influential fall into the following four categories: (i) founder characteristics, (ii) firm attributes, (iii) business practices and (iv) HRM practices. This observation demonstrates the prevalence of studies on the internal characteristics of firms; an observation corroborated in Gibb and Davies' (1990) summary of past studies. However, despite a plethora of studies examining the internal (firm specific) characteristics, the high growth literature is also replete with work focusing on the influence of external (operating environment) characteristics on firm growth (Birley and Westhead, 1990; Andersson and Tell, 2009).

Whilst the general literature may roughly focus on either external or internal factors, a number of authors have chosen to look at both aspects in an attempt to provide a more holistic view of the factors affecting rapid firm growth. Littunen and Virtanen (2006) examine growth generation in relation to motivation, strategy and external influences, while both Moreno and Casillas (2007) and O'Regan *et al.* (2006) focus on firm demographics (size, age, ownership etc.) and the environments in which the firms operate. Janssen (2009) too prefers a combined view of HGF growth factors, testing characteristics of the manager, characteristics of the firm, strategy and operating environment traits.

However, given the complicated nature of the high growth phenomenon, such a holistic perspective is rate, with the majority of authors preferring to provide a detailed understanding of particular characteristics, rather than too broad-brush a view a high growth. As a result, most studies focus only on either external environment or internal firm characteristics.

External environment characteristics

Although firm growth is often thought of as driven internally by an organisation, growth rates are in fact quite sensitive to variations in the external environment. Whilst in simple terms a firm's external environment can be thought to encompasses suppliers, buyers and competitors, there are numerous other characteristics that can contribute to changes in firm growth. These can include geographic location, potential market entrants, interest rates, company taxation, sectoral trends, government policies, exchange rate fluctuations and social, legal and political conditions (Birley and Westhead, 1990). Firms are particularly sensitive to these external forces, with evidence suggesting that firm growth is, to a certain extent, determined by the external environment (Davidsson *et al*., 2005).

As the external environment changes, or becomes increasingly complex, firms are forced to seek new ways of conducting business to create wealth and thus remain competitive (Stopford, 2001). The more dynamic or turbulent the environment, the more innovative, proactive and externally-oriented a firm will need to become (Naman and Slevin, 1993; Dess *et al.*, 1997; Crant, 2000), at times leading to stronger growth intentions (Wiklund and Shepherd, 2003). Authors have examined numerous environmental characteristics including the relationship between physical location and growth (Cetindamar and Laage-Hellman, 2003; Audretsch and Dohse, 2007; Autio *et al.*, 2007; Tong *et al.*, 2008), macroeconomic factors (Beck *et al.*, 2005; Henrekson and Johansson, 2008) and support to HGFs by government, policy makers and external resources providers (Fischer and Reuber, 2003). Despite some authors concluding that the external environment has a low impact on growth (Baum *et al.*, 2001; Wiklund and Shepherd, 2003), there is empirical work demonstrating that a firm's operating environment has a direct impact on its overall performance and growth (e.g. Nicholls-Nixon *et al.*, 2000; Zhang *et al*., 2008).

Physical Location

When investigating the impact of a firm's location on growth, it is important to take into account different aspects of its environment, as entrepreneurship and business growth is highly context specific (Gertler, 2010; Welter, 2011). Dess and Beard (1984) posit that business environments vary along four dimensions: dynamism, heterogeneity, hostility and munificence. With the literature clearly demonstrating that rapidly growing firms are found most often in dynamic regions (Jovanovic, 1982; Davidsson and Delmar, 1997; Carroll and Hannan, 2000), environmental conditions play a very important role in determining organizational growth - growth is considered to be a function of a firm's environment and industry selection (Kangasharju, 2000). This observation suggests that a firm's choice of location might have a stronger influence on growth than any strategic choices the firm makes, or behaviours it exhibits, within that location (Smallbone *et al.*, 1995; O'Gorman, 2001; Hawawini *et al.*, 2002). Mason and Harrison (1985) have also concluded that the local environment is an important influence on firm growth prospects, as different locations offer varying degrees of access to knowledge resources (Barringer *et al.*, 2005) and therefore to "knowledge spillover" effects (Jaffe *et al.*, 1993), as well as opportunities for growth (Wiklund and Shepherd, 2003). However, Littunen and

Tohmo (2003) disagree and note that physical location is not a significant explanatory variable of firm growth.

Macroeconomic factors

A variety of literature exists on how macroeconomic factors can influence a firm's growth, with Higson *et al.* (2002; 2004) observing that mean firm growth rates are sensitive to macroeconomic fluctuations in the business cycle. In addition to cyclical irregularities, authors have tried to understand how the current global marketplace promotes or hinders growth around the world. Bartelsman *et al.* (2005) determined that, post-market entry, firm growth is higher in the USA than in Europe; they suggest that this is due to the fact that Europe has more institutional barriers to growth in place. These include a lack of market-based financial systems, high administrative costs that can deter smaller firms at entry and tighter hiring and firing restrictions. Other authors support the argument that certain institutions deter the growth of independent businesses through regulation of certain economic sectors, taxation, wage-setting institutions and labour market legislation (Carlsson, 2002; Davidsson and Henrekson, 2002). However, Geroski and Gugler (2004) warn that one should look for patterns and compare growth rates between industries, where the majority of the variation occurs, rather than across countries.

Support from external providers

One final external characteristic impacting firm growth is the support organisations can receive from external providers. Research suggests that firm growth may be constrained by lower quantity and quality of available public and private services (O'Farrell and Hitchins, 1988). This is line with recent findings by Hinton and Hamilton (2009), who conclude that a key differentiator between high growth firms and other organizations is the fact that, from start-up, these companies have sought external business help. These firms approach external advisors while still in their infancy and continuously seek on-going external strategic advice as they develop. Fischer and Reuber (2003), disagree with this, as they find HGFs prefer to obtain advice from their peers, rather than from external sources. In fact their study respondents also rejected the notion that a high growth firm could actually be recognized and thus targeted at an early stage for assistance or for support either by governments or by external resource providers (Fischer and Rueber, 2003: 356). Identifying HGFs (or those firms with growth potential) for support is certainly problematic (Freel, 1998; Garnsey *et al.*, 2006; Brown and Mawson, 2013), but of great importance (Mason and Brown, 2013), as HGFs are recognised to positively affect the growth of other firms, particularly those in the same industrial cluster (Brown 2011). Regardless of whether support comes from government, peers, or other providers, support networks are important contributors to firm growth (Jarillo, 1989).

Internal environment characteristics

As one can see, a firm's external environment can impact firm growth. However, growth is heavily influenced by a firm's internal environment, specifically its attributes and behaviours and how these impact strategic planning and decision making. This has been a key focus of HGFs scholars, with the majority studies seeking to correlate a firm's internal environmental characteristics to firm growth. This internal environment comprises the organisation's resources and can include, *inter alia*, leadership characteristics of the owner-managers, attitudes to growth, occupational backgrounds, the level of the owners' education and personal values (Birley and Westhead, 1990), as well as strategic planning, resourcing and decision making.

Although there is certainly a strong focus in the literature on the characteristics of a HGF's founder/manager, the literature's scope of internal environment characteristics is considerably broader than this one particular aspect. As noted by Storey (1994), there a number of internal environment factors that one must consider when assessing and examining the growth potential of an organisation: (i) firm demographics; (ii) founder characteristics; and (iii) business practices and strategy. These areas are well represented in the HGF literature and have been, to date, the three key areas of focus for authors investigating the high growth phenomenon.

Firm demographics

Of particular concern to HGF researchers, firm demographics, specifically firm *age* and *size*, are considered to play an important role in firm growth. They thus feature prominently in much of the high growth literature, particularly in some of the earlier work on HGFs (e.g. Cliff, 1998) deriving from a focus on Gibrat's Law.

Recently, many discussions on firm age and size have referred to the organizational sociology literature, which illustrates that firm size can affect organizational performance (Dobbs and Hamilton, 2007). It is widely recognised that small young firms can suffer from the "liability of newness" (Stinchcombe, 1965), with puts the organisation's growth and longevity at risk. Firms may strive to emulate other successful firms (Nelson and Levesque, 2007), thus overstretching themselves and limiting growth, or they may feel pressured to "grow or die" (Coad *et al.*, 2012). However, as firms get older (and wiser) and increase in size, this risk can be mitigated though in improvements in organizational learning, bureaucratization and structural change which can enable growth (Rutherford *et al.*, 2001). Yet, size and age can also act to hinder performance. Firms are not immune to "liabilities of senescence" (Barron *et al.*, 1994), whereby efficiency declines as a firm ages, perhaps explaining observations in the literature that growth rates decrease as firms become older and larger (Evans, 1987; Hall, 1987). Although a number of authors find that growth rates are independent of a firm's size (Hart and Oulton, 1996; Becchetti and Trovato, 2002) and age (Moreno, and Casillas, 2007), a majority of the research has found both firm age and firm size to be significant factors in explaining high growth (Davidsson and Delmar, 1997; Glancey, 1998; Davidsson *et al.*, 2002; Delmar *et al.*, 2003; Yasuda, 2005 etc.).

Early HGF research stemmed from the belief that a number of small young "gazelle" firms were the ones seeing rapid growth (Birch, 1981) and this observation has been corroborated by many authors since. Young small firms have been shown to grow particularly rapidly (Terleckyj, 1999; Kangasharju, 2000; Lotti *et al.*, 2003). However, that is not to say that growth is confined solely to small and young firms at the expense of older and larger organisations. A number of studies have demonstrated that high growth firms exhibit a variety of size and age characteristics (Smallbone and North, 1995; Rutherford *et al.*, 2001) and are, in many instances, older and larger than previously assumed (Acs *et al.*, 2008; Henrekson and Johansson, 2010; Mason and Brown, 2010). These older and larger firms often grow faster in terms of employees than their "gazelle" counterparts and thus have a more significant effect on regional employment generation (Acs *et al.*, 2008). Bearing in mind that we know HGFs are not always small and young, there is still much work to be done in terms of understanding how age and size actually impact growth, particularly from a qualitative perspective.

Founder characteristics

Another set of factors influencing a firm's growth relate to its founder. This is considered an important area for research, as it is widely believed that a firm's founder leaves a lasting legacy on the company's culture and behaviour, even after they have left the business (Mullins, 1996), thus influencing future performance and growth. Many studies have sought to understand what the ideal founder of a high growth firm would look like by evaluating what characteristics are linked to high growth. Founder characteristics are plentiful and can include previous relevant industry experience, higher education, entrepreneurial experience, a broad social and professional network, whether the firm was started by team or by an individual and the growth motivation of the founder (Birley and Westhead, 1990: 667). Within the literature, there are two key distinctions: (i) there are certain traits and characteristics possessed by founders that promote high growth and (ii) that growth is guided by the founders' intents and aspirations (Andersson, and Tell, 2009: 589).

Authors have examined various characteristics to determine which influence high growth within firms, including, *inter alia*, the gender of the founder (as well as the management team) (Catley and Hamilton, 1998; Gundry and Welsch, 2001; Nelson and Levesque, 2007), the human capital of the founder (Almus, 2002) the background of the founder (Gray and Mabey, 2005; Richbell *et al.*, 2006) and their social and professional network (Johannisson, 1990). Gundry and Welsch (2001:

454) summarize the qualities of an idealized HGF entrepreneur, differentiating them from founders of lower growth firms by having:

> [S]trategic intentions that emphasize market growth and technological change, stronger commitment to the success of the business, greater willingness to sacrifice on behalf of the business, earlier planning for growth of the business, utilisation of a team-based form of organisational design, concern for reputation and quality, adequate capitalization, strong leadership, and utilization of a wider range of financing sources for the expansion of the venture.

However, some authors feel that investigating the ideal characteristics of HGF founders, whilst thought provoking and relevant, has not been fruitful: these traits appear to have only a modest effect on business growth performance (Smallbone and Wyer, 2000). This could very well be due to the positivistic and deterministic way in which these traits are measured and correlated with growth. In quantitatively assessing personal traits at a point in time, it is easy to “ignore the capacity of people to change and learn over time” (Gibb and Davies, 1990: 18), thus fundamentally limiting understanding of the relationship between a founder’s personal characteristics and growth. After all, these characteristics alone do not guarantee growth: only when these they are translated into concrete action do they have the potential to affect growth (Wiklund and Shepherd, 2003).

The growth motivation of HGF founders (and managers) has also received significant attention in the literature (Wagner, 1992; Smallbone *et al.* 1995; Gundry and Welsch, 2001; Wiklund and Shepherd, 2003; Wiklund *et al*., 2003 etc.). Various studies have shown a strong correlation between the motivations and growth intentions of founders/managers and firm growth (e.g. Smallbone *et al.* 1995; Kolvereid and Bullvag, 1996; Delmar and Wiklund, 2008; Stenholm, 2011), while others demonstrate that such growth aspirations and intentions are also influenced by the firm’s environment (Wiklund and Shepherd, 2003; Kozan *et al.*, 2006) and social capital (Florin *et al*., 2003). However, as Birley and Westhead (1990: 667) remark, one must differentiate between a founder’s *growth motivation* and the *growth oriented vision and mission* that this motivation may inspire within a firm.

While a growth-oriented vision is characteristic of many high growth firms (Doorley and Donovan, 1999), it may not necessarily be the direct result of a founder's particular growth motivation. Sometimes enthusiasm is simply not enough and founders do not always succeed with their growth strategies (Andersson, 2003) – they often have a portfolio of issues to deal with and may have to prioritize other issues over growth (Wiklund *et al.*, 2003; Barringer and Jones, 2004). Additionally, it is important to realise that most business founders have modest growth aspirations for their firms (Cliff, 1998; Delmar and Davidsson, 1999), so may not encourage any sort of transformational growth. The vast majority of business owners prefer to keep their firms small; of those who seek growth, most desire moderate rather than rapid growth (Ginn and Sexton, 1990; Acs *et al.*, 2008).

Business practices and strategy

Finally, arguably the most important factor relating to firm growth is an organisation's business practices and strategy. This is consistent with the belief that growth is not entirely random, but rather influenced and driven by an organisation's strategy and processes (Barringer *et al.*, 2005). The strategy of a firm is often considered to be "the determination of the basic long-term goals and objectives of an enterprise, and the adoption of courses of action and the allocation of resources necessary for carrying out these goals" (Chandler, 1962: 13) and is a particularly interesting topic when discussed in relation to high growth firms. The HGF literature covers various aspects of strategy, including business management strategy (Smallbone *et al.*, 1995; Blackburn and Brush, 2009), competitive strategies (Baum *et al.*, 2001), strategic decision-making (Porter, 1980; Porter, 1985; Storey, 1994), innovation (Freel and Robson, 2004; O'Regan *et al.*, 2006; Coad and Rao 2008; Mason *et al.*, 2009) and flexibility (Hansen and Hamilton, 2011), R&D behaviour (Hölzl, 2009), quality management systems (Kaynak 2003; Davila *et al*., 2010) and marketing behaviour (Storey, 1994; Brush *et al.*, 2009; Hinton and Hamilton, 2009). However, three areas of business practice and strategy are of particular importance: (i) markets and internationalisation; (ii) customers and customer engagement; and (iii) value creation.

Markets and internationalisation

For many companies, growth stems from product or market expansion, particularly into new international markets. This notion of market entry and presence in the context of HGFs is particularly interesting, as this part of literature is still quite limited and often lacks consensus. Whilst some authors note that HGFs tend to be risk-taking “market creators” (Brush *et al.*, 2009), and market “prospectors” rather than defenders (O’Regan *et al.*, 2006) given their largely novel products, other research finds that high growth firms are actually risk-averse, preferring to operate within existing markets, thus mitigating development costs and risk of failure (Smallbone *et al.*, 1995; Hinton and Hamilton, 2009). This is somewhat counterintuitive, as it is those firms that enter new markets with existing products, no matter the risk, which are most likely able to broaden their customer base and thus experience growth (Littunen and Tohmo, 2003; Kelley and Nakosteen, 2005). Whilst studies on domestic market development and expansion are largely absent for HGFs, there has been some work done on internationalisation, albeit in small quantity (Burgel *et al.*, 2000; Crick and Spence, 2005).

Despite the inherent risks associated with a geographical diversification strategy (Parker *et al*., 2010), high growth firms have been found to facilitate growth by entering new geographical markets, particularly those beyond their own local area (Barringer and Greening 1998; Iacobucci and Rosa 2005). As a result, HGFs exhibit high levels of internationalisation (Mason and Brown, 2010), are characterised by exporting (Zahra *et al.*, 2000; O’Gorman, 2001) and are much more likely to engage with international markets than their slower-growing counterparts (BIS, 2010). This propensity for international expansion might be due to high growth firms having a strong market orientation (Parker *et al*., 2010) and export orientation (Parsley and Halabisky, 2008), or previous success and growth through exporting (Robson and Bennett, 2000; Beck *et al.*, 2005). Alternatively, in peripheral economies with limited domestic markets (e.g. New Zealand, Scotland, Denmark etc.), internationalisation might be a necessary process for firms who want to grow, thus helping to explain why so many HGFs appear to be “born global” firms (Mason and Brown, 2013), internationalising sooner and faster than as per the traditional internationalisation models (Rialp *et al.*, 2005). Unfortunately, little is known about why high growth firms choose to internationalise, let alone how they do so, and what the impact of international expansion is on firm growth and operations. This is certainly an area that would benefit from further investigation.

Customers and customer engagement

With high growth firms epitomising rapid sales growth, a critical question is *who do they sell to*? Are HGFs seeing increased sales from existing customers, or new customers, and how do they engage with these customers? Given that customers are arguably an essential part of the high growth equation, contributing to a change in sales volume and/or value, it is utterly startling how little is known about how high growth firms target and engage with potential and existing customers. In general, HGFs have been found to shy away from large consumer markets, preferring instead to develop close relationships with a small number of customers (Feindt *et al.*, 2002; Brush *et* al., 2009; Hinton and Hamilton, 2009), usually in the business-to-business sphere (BERR, 2008; Mason and Brown, 2010).

Despite neither knowing who HGFs sell to, nor where increased sales volume comes from, it has been recognised that high growth firms are more likely than non-HGFs to develop close customer contact (Siegel *et al.*, 1993), have a keen sense of customers' needs and desires (Barringer *et al.*, 2005) and demonstrate strong customer engagement (Parker *et al.*, 2010), often engaging with end-users and customers to develop product offerings (Mason and Brown, 2010). Whilst there is a good body of literature discussing the use of quality improvement or continuous product and service innovation measures to satisfy or create customer needs (Chakrabarti, 1990; Deeds *et al.*, 2000; O'Gorman, 2001; Barringer and Jones, 2004), studies investigating how HGFs target, engage with and ultimately retain customers are sorely absent. This is a gap in the literature that urgently needs to be addressed, as without understanding how HGFs work with their customers it is arguably impossible to ever understand the phenomenon of high growth.

Value creation

Ironically, despite an almost complete lack of information about who HGFs sell to and how they engage with customers, a number of authors have recognised that high growth firms offer more value to their customers than other non-high growth firms. HGFs are considered to be customer oriented and focused on strategically creating unique value for their customers (Birley and Westhead, 1990; Smallbone *et al.*, 1995; Kim and Mauborgne, 1997; Barringer *et al.*, 2005; Zhang *et al*., 2008; Puhakka & Sipola, 2011; Lindič *et al*., 2012) in a way that differentiates them from other firms. This value creation can be achieved in many ways, but often "by providing a new or more affordable way of accomplishing a task, solving a problem, or satisfying a need that was at best inconveniently satisfied in the past" (Barringer *et al.*, 2005: 673), whether through product refinement or innovation. Active management of product development and innovation processes allows firms to move up the "value chain" (Porter, 1985), thus providing their customers with better product/service offerings which in turn creates value for customers (Smallbone *et al.*, 1995) and stimulates growth (Doorley and Donovan, 1999; Hanan, 1987)

However, despite authors noting the importance of value creation as a growth differentiator, this is not a variable that is often discussed in the HGF literature (Barringer *et al.*, 2005). This is not surprising, given the complexity of value creation as a concept, let alone as a measurable and operationalisable construct (to be discussed further in Chapter 3). However, without understanding how HGFs engage with their customers, and how they influence value creation through this engagement, it is imprudent for authors to categorically state that HGFs provide unique value to their customers. This is another part of the high growth literature that sorely needs to be further explored.

2.7.3 Growth pattern studies

The final category of work within the high growth literature comprises studies focused on the growth patterns of HGFs. Drawing on insights from the general firm growth literature, there are a number of studies that have sought to determine how high growth firms grow and whether this process varies from that experienced by other lower-growth organizations. In order to analyse and comprehend the complex phenomenon of high growth, authors have worked within several perspectives: (i) the resources-based approach, (ii) the motivation perspective, (iii) the strategic adaptation perspective and (iv) the configuration perspective (Davidsson and Wiklund, 2000).

The resources-based approach to growth, so common in the HGF literature (Leitch *et al.*, 2010b), was founded on the assumption that a firm's growth is fundamentally tied to managerial resources – specifically that there will be sufficient additional resources available over time to not only maintain current operations, but to also plan and manage further growth (Penrose, 1995). This issue of resource availability is particularly relevant to small firms and so has traditionally been seen as a useful vantage point from which to study "gazelle" growth. However, this perspective does little to further understanding of growth as a process. Only the fourth "configuration perspective" deals with growth as a process, focusing on how managerial problems appear (and can be dealt with) during a firm's growth through typical stages-of-development (Davidsson and Wiklund, 2000), with internal adaptation of the business influencing growth (Dobbs and Hamilton, 2007).

Founded upon the traditional assumption that business growth is a phased exercise involving the movement through different discrete stages of a company "life cycle" (e.g. Churchill and Lewis, 1983; Scott and Bruce, 1987), this configuration approach has become increasingly embraced by entrepreneurship scholars (Levie and Lichtenstein, 2010). In their seminal work, Churchill and Lewis (1983) first identified five discrete stages in the growth of a firm: existence, survival, success, take-off and resource maturity. The six-stage model depicted by Greiner (1972) also assumes that there is a staged progression through a sequence of growth phases as firms mature. Under their conceptual framework, all firms are thought to follow a linear process of growth stages, perhaps punctuated by a predetermined series of "crises" such as leadership, autonomy and control (Greiner, 1972), thus conceptualising firm growth as a consistent and predictable process (Hanks *et al.*, 1993; Parker *et al.*, 2010). The implication of these approaches is that growth of a firm is linked to the age of a firm (Deakins and Freel, 1998). Therefore, firm growth has been rather naively assumed to follow a path dependent process akin to the growth of humans, despite warnings concerning the danger of anthropomorphising business growth: companies do not develop like human beings and to believe that they do can lead to false conclusions about growth patterns (Birch, 1987).

Needless to say, over the past two decades the life cycle view of firm growth has come under increasing criticism for being too crude and simplistic (Deakins and Freel, 1998; Levie and Lichtenstein, 2010; Hamilton, 2012; Brown and Mawson, 2013). In contrast to the neoclassical assumptions of perfect rationality underpinning this concept, firms are not rational (Baum *et al.*, 2001). Many fail and many may miss opportunities (Coad, 2009). Indeed, a growing body of empirical evidence demonstrates that firm growth is, in fact, a fundamentally "idiosyncratic and unstable process" (Vinnell and Hamilton, 1999: 5). Instead of transitioning through relatively orderly growth stages, firms have now been found to undergo longer periods of lower growth which are sometimes punctuated by "pulses" (Landström, 2005), "jumps" (O'Farrell and Hitchins, 1988) or quick bursts of very rapid growth, resulting from a combination of knowledge and outcomes of "critical events" (Deakins and Freel, 1998). Therefore, firm growth is now widely recognized as a complex, multifaceted and discontinuous phenomenon (Andersson and Tell, 2009; Coad, 2009) rather than the orderly, stepped progression of the lifecycle view.

With this view in mind, some authors have proposed new conceptualisations of growth, attempting to explain how growth occurs. Levie and Lichtenstein (2010: 336) discuss the concept of a dynamic states approach, where a dynamic state is considered to be a "network of beliefs, relationships, systems, and structures that convert opportunity tension into tangible value for an organization's customers/clients, generating new resources that maintain the dynamic state". This dispels the linear life-cycle model of firm growth and recognises that firms encounter continuous change. It also acknowledges that companies do not develop like human beings: not all young small firms necessarily grow and not all large old firms invariably decline (Levie and Lichtenstein, 2010) and firms will not all grow in the same way (Delmar *et al.*, 2003; Brush *et al.*, 2009). Whilst this dynamic state approach is a useful contribution, it fails to address what forces or key “inflection points” underpin the transition from one dynamic state to another, and thus does not provide a holistic conceptualisation of firm growth. A number of other authors have discussed these inflection points, critical junctures (Vohora *et al*., 2004), turning points (Garnsey *et al.*, 2006), organisational triggers (Walsh and Ungson, 1991) tipping points (Bessant *et al.*, 2005; Phelps *et al.*, 2007) or trigger points (Brown and Mawson, 2013) and it is generally believed that it is a firm’s response to (and actions deriving from) one of these points that determines its growth success, rather than the points themselves (Bessant *et al.*, 2005; Brown and Mawson, 2013).

Despite progress conceptualising and investigating the growth patterns of HGFs, as well as identifying forces that instigate a change in growth trajectory, there is still a need for more studies examining the firm growth process (Leitch *et al*., 2010b), and the HGF process in particular. With a period of high growth often causing organisational strain and making for difficult decisions (Hambrick and Crozier, 1985), there is a particular need to better understand what factors engender a period of rapid firm growth, in order for managers to recognise and capitalise on these triggers, thus potentially limiting any negative effects of growth. The actions taken by managers, perhaps at the time of recognising a trigger, could well affect growth in the future (Wiklund and Shepherd, 2003).

2.8 Gaps in the HGF literature

After reviewing past research, it is clear to see just how fragmented the body of high growth firm literature is. With authors using different definitions and measurements of high growth to suit their own aims and data sets, not only is there limited comparability across studies, but conceptual and theoretical development of high growth as a phenomenon remains almost non-existent.

This lack of theoretical and conceptual advancement is further compounded by the continued use of analysis of variance and other quantitative methods to determine which firm characteristics correlate to high growth. These factors are examined in isolation rather than as part of a larger theory/model of firm growth, and are largely selected at will by researchers, rather than rigorously derived from data or firm observation. Given this haphazard approach, it is hardly surprising that some factors appear to be linked with growth - it would be quite remarkable indeed if firms undergoing rapid growth were not developing their markets, improving operational systems, adapting their management structure and so on (Gibb, 2000; Freel and Robson, 2004). However, despite a number of factors seemingly correlating to growth, a great deal of variance remains unexplained (Curran and Blackburn, 2001), so authors feel obliged to revisit and retest the same factors time and again to obtain more robust results, seldom clarifying to what extent any observed relationships are explanatory or simply joint associations to a third unidentified variable (Freel and Robson, 2004).

With studies essentially isolating and examining factors that have accompanied growth (e.g. Coad *et al*., 2012), but not necessarily those that are contributing to it (Dobbs and Hamilton, 2007), it is time to improve our knowledge and understanding of the internal growth development and dynamics of HGFs, extending our focus to how and why firms achieve rapid growth (Hynes, 2005). As discussed, there are a number of major gaps in the high growth literature and areas in need of further investigation. Whilst each of these are worth exploring, there are two critical gaps which this thesis will address: (i) an investigation of the process of rapid turnover growth in HGFs and a deeper understanding of the role of customer in this process, specifically (ii) how customer perceived value creation occurs in high growth firms and how this activity relates to firm growth and the firm growth process.

The issue of growth as a process is not given a great deal of attention in the HGF literature, despite authors recognising that understanding this process is critical to increasing understanding of the phenomenon of high growth (Davidsson *et al*., 2006; McKelvie and Wiklund, 2010). It will be important for this thesis to examine how growth occurs over time, including whether a period of high growth might be "triggered", what such triggers might be and how they affect the organisation's longer term growth trajectory. Given recognition that firms grow in different ways (Chandler *et al*., 2009; Davidsson *et al*., 2009), it will be more useful if this growth process is assessed at an individual firm level, rather than attempting this using the traditional aggregated databases. Firm development will thus be explored within individual firms to understand the processes and circumstances underlying rapid turnover growth.

In line with the assumption underlying this research (see Chapter 1) that rapid turnover growth must result from a growth in sales volume or sales value, a more thorough understanding of the role of customers will be required to better understand the process of firm growth. A part of this will involve exploring what might cause customers to increase their purchase quantity or value with a firm, specifically whether customer perceived value has an influence on these purchase decisions. As noted in this chapter, there a number of studies have identified a relationship between the creation of unique value for customers and rapid firm growth in HGFs (Birley and Westhead, 1990; Kim and Mauborgne, 1997; Barringer *et al.*, 2005; Zhang *et al*., 2008). However, this variable is rarely discussed in depth in the literature, despite being considered a strong discriminator between high growth and slower growth firms (Barringer *et al.*, 2005). This is an significant gap in need of further research to better understand the process through which HGFs attempt to create value for their customers, as well as whether any such value creation is linked to a HGF's development and turnover growth. This complex issue (to be discussed further and conceptualised in Chapter 3) will be explored in the wider context of firm development and growth.

2.9 Conclusion

This chapter has provided an overview of the high growth firm phenomenon, as well as a review of the HGF literature. It is clear from this review that the issue of HGFs achieve rapid turnover growth and the role that customers play in this process is an important area for exploration. In this context, the issue of customer perceived value creation also needs to be addressed. While value creation for customers is recognised to be significant differentiator for HGFs, there has been minimal empirical investigation of such a relationship in the literature. This is perhaps due to the fact that the issue of value creation for customers is highly complex, fraught with difficulties in terms of both conceptualisation and measurement. Despite these challenges, it is certainly an area in need of further exploration. The next chapter will review the value creation literature, focusing on customer perceived value and the how this can be influenced during firm-customer interactions.

Chapter 3 Creating customer value

3.1 Introduction

As the global business environment becomes increasingly competitive, firms are under significant pressure to differentiate themselves from competitors in an attempt to maintain, let alone grow, market share. Whilst firms may have a number of competitive priorities, fundamentally they strive to see a positive financial return on any product offering sold and subsequently growth, ideally pleasing customers and earning repeat business during that process. However, given the changing nature of business itself, this seemingly simple task continues to become infinitely more challenging and complex. Historically, firms were largely able to "push" out mass produced products to a relatively captive customer base. Limited product options ensured a "sellers' market" where producers created market demand and sales were usually the direct result of a superior product (Sawhney, 2006).

However, a very different picture exists today. Customers now have a great deal of power in the marketplace and are increasingly playing an active role in "pulling" product offerings to market, products being "anything [goods or services] that can be offered to a market to satisfy a want or a need" (Kotler, 2000 p. 394). This has been particularly evident in the business-to-consumer marketplace (e.g. Dell Computers, where customers can build and design machines to meet their own individual specifications), but is also very much present in the business-to-business market as well. With customers becoming more demanding, companies have had to rethink how they develop and commercialise their offerings to provide *value* in a way that their competitors' offerings do not. A topic of discussion since the 1940s (Lindgreen and Wynstra, 2005), the issue of creating value for customers has consistently gained momentum. Value-based and value-focused strategies have now become a central theme across the wider business literature (Khalifa, 2004; O'Cass and Ngo, 2011), particularly in the strategy and marketing literature (Payne and Holt, 2001), and authors have suggested that a firm's success rests on its ability to provide maintained superior value to their customers (Rintamäki *et al*., 2007; Sirmon *et al*., 2007). As discussed, high growth firms have been recognised to be differentiated from slower-growing counterparts by their ability to create unique value for their customers (Barringer *et al*., 2005; Zhang *et al*., 2008).

However, despite the plethora of literature pertaining to value and value creation, the body of knowledge remains fragmented and disparate, in large part due to the nebulous nature of “value” and difficulties adequately defining and explaining this concept (Woodruff, 1997; Tzokas and Saren, 1999; Lepak *et al.,* 2007). Whilst a great deal of work has usefully examined how value is created, be it through “co-creation” processes (e.g. Prahalad and Ramaswamy, 2004; Payne *et al*., 2008; Ramaswamy, 2009a), “co-production” (e.g. Wikström, 1996; Etgar, 2008), “co-innovation” (e.g. Kaulio, 1998; Neale and Corkindale, 1998) or other means, these constructs have predominantly been looked at in isolation, despite the fact that many elements are fundamentally interlinked.

This chapter will begin with an overview of the value literature, focusing on customer perceived value. It will then address how firms are able to influence customer perceived value, providing a basic model for conceptualising this process, which identifies the contribution of both firm-level competencies as well as firm-customer interactions. Components of both levels will be discussed in depth, with a particular emphasis on processes and activities occurring at the interaction level.

3.2 What is value

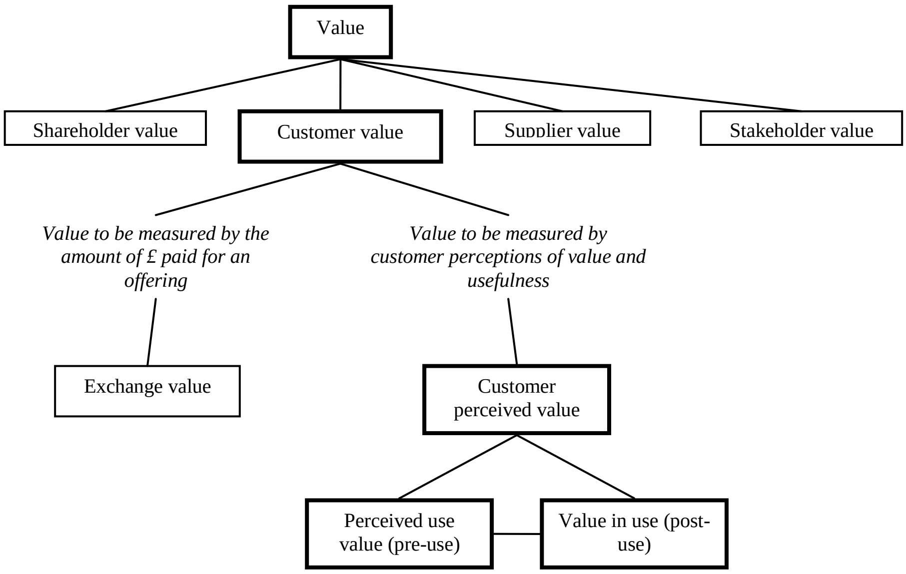
The concept of *value*, despite its frequent discussion and appearance in literature covering a diversity of academic disciplines and functional areas, arguably remains “one of the most overused and misused concepts” in the social sciences, particularly in the management literature (Khalifa, 2004: 646). This is perhaps due to the fact that a number of types of value have been identified in the literature, along with a plethora of ways in which to conceptualise and examine them. Khalifa (2004), in his useful review of the value literature identified three main categories of value: shareholder value (financial value related to share prices); stakeholder value (value created for stakeholders in the firm excluding shareholders e.g. the environment, employees and general society); and customer value, considered by some to be the source of all other forms of value (e.g. Lemon *et al*., 2001). However, it is important not to overlook a growing body of work examining value-creation from a supplier perspective (e.g. Walter *et al*., 2001). Whilst every type of value is important, and each has an important role to play in better understanding value creation as a more holistic network of actors, processes and outcomes, the focus of this paper will be on *customer value*.

As with *value* itself, *customer value* has been equally difficult for authors to adequately conceptualise and define (e.g. Piercy and Morgan, 1997; Woodruff, 1997). This has largely been due to the fact that customer value is a highly personal and dynamic concept with the potential to evolve over time (Jaworski and Kohli, 1993) and that not even firms themselves are able to articulate and define customer value (Anderson and Narus, 1998). Similarly, the academic literature remains nascent and in need of further conceptual development (Smith and Colgate, 2007). Whilst confusion about how to best define customer value is quite understandable, it is surprising and somewhat alarming how many papers discuss customer value creation in great depth, without ever explicitly clarifying or defining what is meant by customer value (e.g. Payne *et al*., 2008).

3.2.1 Conceptualising customer value

Perhaps the most useful starting point when examining customer value is to first determine how value is to be conceptualised – is it to be an objective or subjective construct? Intrinsic or extrinsic? A fixed concept capable of quantifiable measurement, or a more metaphysical and individually derived construct? Whilst value can be manifest in many forms including, but not limited to, use value, utilitarian value, exchange value and intrinsic value, or any combination thereof (Woodall, 2003), the literature tends to focus predominantly on two of these forms of customer value: *exchange value* or *perceived use value* (see Figure 3.1).

Figure 3.1 Conceptualisation of customer value



Source: Author

<u>Exchange value versus customer perceived value</u>

Traditionally favoured by economists, exchange value is considered to be an objective and measurable concept, drawing on intrinsic monetary value attached to a product. It is realised when a product/service is sold and refers to the amount of money paid by the buyer to the producer for the product/service (Bowman and Ambrosini, 2000) and is grounded firmly in the classical economic theory of utility (Tellis and Gaeth, 1990). This value can be influenced by any number of costs resulting from the exchange, such as time costs, monetary costs, learning costs, emotional costs, etc. (Zeithaml, 1988), but is fundamentally linked to the set price of a product/service.

Customer perceived value, on the other hand, is the value (monetary, intrinsic or otherwise) that customers place on a product/service based on their *perceptions* of that product/service's usefulness (Bowman and Ambrosini, 2000). When this term first appeared in the literature, customer perceived value was thought to be the ratio between perceived benefits and perceived sacrifices (Monroe, 1990; Dodds *et al*., 1991) or the trade-off between what one gives and what one gets in return (Zeithaml, 1988). Increasingly, authors have recognised that customer perceived value is much more complex than a simple trade-off: customers can form a perception of use value before purchase of a good/service (e.g. perceptions of the supplier that in turn influence perceptions of any product offering), but also create value for themselves post-purchase through use of that offering (Grönroos, 2008). Given that customer perceived value stems from the unique experiences of individuals, it is necessarily phenomenological, subjective, intrinsic and dynamic (Zeithaml, 1988; Forsström, 2005; Vargo and Lusch, 2008b).

Although exchange value and customer perceived value can and do overlap (e.g. during the purchase of a product when both exchange and perceived value are created), they are fundamentally two very different ways of conceptualising value. Exchange value begins and ends with a purchase, whereas customer perceived value forms before purchase but is reinforced (or altered) after purchase through use. Not only is customer perceived value a more holistic way of viewing value, it is also thought to fundamentally be the source of exchange value: if a consumer does not perceive value in a firm's offering, they will not pay the price demanded, thus nullifying any form of exchange value (Ravald, 2001; Grönroos, 2008). With exchange value recognised as a function of customer perceived value, the latter is considered to be the superior concept of value, particularly from a business research perspective (e.g. Wikström, 1996; Normann, 2001). Exchange value would simply provide too narrow an approach to a convoluted concept (Sánchez-Fernández and Iniesta-Bonillo, 2007).

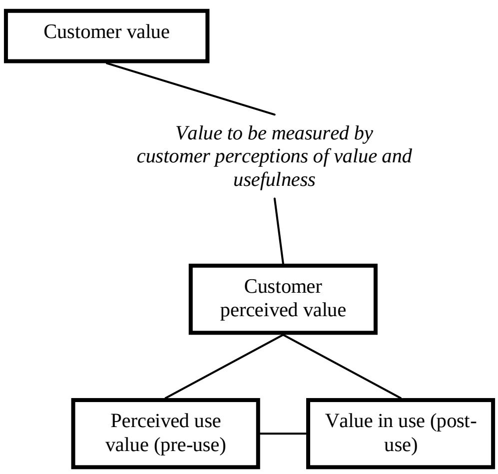
Customer perceived value

As touched on earlier, the notion of customer perceived value is more complex than it may initially appear. Within the literature, there are very divergent views over what constitutes customer perceived value and how it should best be conceptualised. Although a number of authors have attempted to establish a single model for perceived value (e.g. Holbrook, 1999; Woodall, 2003), there is still active debate over what any model of perceived value should comprise; many authors are content to simply criticise existing conceptualisations in favour of their own models.

In his review of the customer value literature, Khalifa (2004) identified three types of models commonly used to explain customer perceived value: (i) value components models (value as a construction of “want”, “worth” and “need”); (ii) benefits/costs ratio models (value as the difference between perceived benefits and perceived costs); and (iii) means-ends models (the effect, through consumption, of products/services on personal values). Similarly, in their review, Sánchez-Fernández and Iniesta-Bonillo (2007) noted that models could be grouped into (i) price-based studies (costs/benefits) which are unidimensional in nature and (ii) means-ends models and (iii) utilitarian/hedonic value models, which are more multi-dimensional constructs. While each category of models may at first appear distinct, there is often considerable overlap, with majority of these models simply encompassing “different configurations of the same phenomenon” (Khalifa, 2004: 655). The groupings identified above are simply crude constructions, created in an attempt to provide some clarity to an otherwise disparate literature. This is unsurprising given the plethora of studies examining elements of value, the majority of which have ill-defined (and often confused) conceptualisations of value.

Whilst the desire to provide clarity by categorising and refining models of value is understandable, perhaps a more useful exercise is to begin by examining and discussing some key components of customer perceived value (and the relationship between them) already identified within the literature. Such a dialogue is, sadly, currently lacking, adding to the disparate nature of the value literature. A thorough review of the customer perceived value literature yields the observation that discussions of perceived value appear to fall into two main groupings: *perceived use value* and *value in use* (see Figure 3.1). While these terms

Detail from Figure 3.1



are sometimes used interchangeably, they do denote two distinct components of customer perceived value.

Perceived use value is often used to describe the subjective value customers place on a firm's offering (Bowman and Ambrosini, 2000), often based on a mental trade-off between perceived benefits and sacrifices (Ulaga and Chacour, 2001). This value, and any resulting product/service preferences, is formed before a firm's offering has been used (Holbrook, 1999), and is a function of a product/service's design and performance, any support or service associated with the offering, the image of the company selling the offering and the quality of the staff delivering it (or any combination of the above) (Doyle, 2000). Perceived use value is an important element of customer value as it will fundamentally dictate whether or not a purchase is made.

Value in use, on the other hand, is consumption-based value creation. The term denotes customer value that is created by translating perceived use value through the use/application of a firm's product/service offering (Grönroos, 2008). Occurring post-purchase, value in use is a widely discussed concept in the value literature, as many authors recognize that customers ultimately produce value for themselves independently, through the use of a firm's product/service offering (e.g. Wikström, 1996; Storbacka and Lehtinen, 2001; Payne *et al*., 2008; Vargo and Akaka, 2009). Although the term value in use implies that value is embedded in goods and services, this is not considered to be the case. Rather, value emerges through activities stemming from ownership and use of an offering (Ravald, 2009) and is entirely user created.

Whilst perceived use value and value in use address different aspects of customer perceived value, it is important to see them as two equally important parts of the customer value creation process. Arguably one cannot exist without the other, particularly if value in use is, as Grönroos (2008) observes, directly developed from perceived use value. However, as value in use occurs solely in the customer domain firms have no part in influencing this value creation. When firms do have the opportunity to affect customer value is before purchase – they can alter a customer's *perceived use value*. Thus, given that this thesis focuses on the role firms play in customer value creation, perceived use value is of the utmost importance. Henceforth, references to "customer perceived value" can be conceptualised as a customer's *perceived use value pre-use*.

3.2.2 Defining customer perceived value

After exploring the complicated and subjective nature of customer perceived value, it is perhaps unsurprising that there is as yet no consensus on how this term should be defined or assessed (Macdonald *et al*., 2011), resulting in a plethora of definitions within the literature. As with conceptualisations of customer perceived value, every author has their own definition (see Table 3.1 for a selection of key definitions from the literature).

Table 3.1 Key definitions of customer value

Author	Definition
Zeithaml (1988:14)	Perceived value is the consumer's overall assessment of the utility of a product based on perceptions of what is received and what is given
Doyle (1989: 78)	[Value is] not what the producer puts in, but what the customer gets out
Monroe (1990: 46)	Buyers' perceptions of value represent a trade-off between the quality or benefits they perceive in the product relative to the sacrifice they perceive by paying the price
Butz and Goodstein (1996: 63)	[Customer value is] the *emotional bond* established between a customer and a producer after the customer has used a salient product or service produced by that supplier and found the product to provide an added value
Woodruff (1997: 142)	Customer value is a customer's perceived preference for evaluation of those product attributes, attribute performances, and consequences arising from use that facilitate (or block) achieving the customer's goals and purposes in use situations
Walter *et al*. (2001: 366)	[W]e understand *value* as the perceived trade-off between multiple benefits and sacrifices gained through a customer's relationship
Woodall (2003: 21)	Value for the customer is any demand-side, personal perception of advantage arising out of a customer's

	association with an organisation’s offering, and can occur as a reduction in sacrifice; presence of benefit (perceived as either attributes or outcomes); the resultant of any weighed combination of sacrifice and benefit (determined and expressed either rationally or intuitively); or an aggregation, over time, of any or all of these
Holbrook (2005: 46)	[Value is an] interactive, relativistic preference and experience.
Grönroos (2008: 303)	Value for customers means that after they have been assisted by a self-service process (cooking a meal or withdrawing cash from an ATM) or a full-service process (eating out at a restaurant or withdrawing cash over the counter in a bank) they are or feel better off than before
Macdonald *et al*. (2011: 671)	[Value is] a customer's outcome, purpose or objective that is achieved through the provider's process of using its resources for the benefit of the customer.

Whilst each definition of customer perceived value in the literature has merit, this issue of definition would certainly benefit from further discussion - it is surprising how few authors fail to explicitly acknowledge what they mean by “customer perceived value”. Those that do, often design a definition to meet the needs of their studies (or worse, that plays to their own particular interest), rather than one that helps further clarify an already elusive concept. Although there may never be one single accepted definition of customer perceived value, an iterative and collaborative discussion would be of great use to scholars examining this field.

However, despite the great variety of definitions and the work yet to be done, a number of commonalities do exist. First of all, value is widely recognised to be perceived by customers, rather than “objectively determined by a seller” (Woodruff, 1997: 141). This is very much in line with the perceived use value literature, which emphasises a consumer’s role as the creator of subjective perceived value. There is also an element of “trade-off” between what a customer receives (e.g. quality, utility, benefits) and what he/she must give us to acquire and use the product/service. Again, this issue is an important discussion point in regards to customer perceptions of use value. A number of authors note that value tends to be seen as intrinsically linked to an interaction between a consumer and a particular product/service offering - a focus of those authors examining value in use, rather than pre-use perceived value - whereby a consumer ultimately derives value from use. Finally, an increasing number of authors are recognising that perceived value is not only linked to a product/service, but to the company providing that offering as well: value creation is impacted by the interactions and relationships between the firm and its customer (e.g. Lindgreen and Wynstra, 2005; Grönroos, 2008).

With this in mind, definitions like Macdonald *et al*.'s are particularly significant additions to the literature, as they expressly acknowledge the importance of customer/supplier interactions in customer perceived value and hint at the processual nature of value creation. Thus, for the purposes of this paper, customer perceived value will be defined as *"a customer's outcome, purpose or objective that is achieved through the provider's process of using its resources for the benefit of the customer"* (Macdonald *et al*., 2011: 671).

With a conceptualisation and definition of customer perceived use value in place, this issue of how firms can create perceived value for their customers will now be examined in detail.

3.3 How firms create perceived value for customers

Despite an increasing number of authors across numerous disciplines discussing the intricacies of customer value, there is still very little known about the process of customer value creation (Vargo *et al.*, 2008). More specifically, when value creation begins, what it includes and when the process ends (Grönroos, 2011a: 282). On the surface there are seemingly many ways for firms to create value for their customers, through lower costs, better quality, greater speed or greater convenience (Wikström, 1996). However, given that each individual customer perceives and ultimately creates their own value, simply lowering costs and improving speed is certainly no guarantee of value creation – some consumers will see these as benefits, whereas for others they may play no role whatsoever in perceptions of value.

Far more important is the role a firm plays in facilitating value creation for its customers, particularly how it interprets (and responds to) individual customers' value-creation requirements. Although knowledge about value creation remains limited, there is growing consensus within the literature that perceived value cannot be created by a firm and "given" to a consumer. Rather, customer perceived value is increasingly conceptualised as an outcome from some form of *interaction* between firms and their customers.

3.3.1 Perceived value creation through interaction

Once the domain of members of the so-called Nordic School within the service and relationship marketing literature (e.g. Gummesson, 1997; Grönroos, 1982; Gummesson, 2002), the importance of interactions (and the abstracted "interaction concept") seems to be gaining recognition and attention within the broader literature. Authors are increasingly examining interactions, be they within networks and larger systems of relationships (Håkansson and Ford, 2002; Fyrberg and Jüriado, 2009) or within exchange relationships (Tzokas and Saren, 1999; Ballantyne *et al*., 2003), as well as the detailed interactions occurring between customer and supplier (Batt and Purchase, 2004), often in the form of "service encounters" (e.g. Grönroos, 2011a). Interactions, defined simply as the "mutual or reciprocal action where two or more parties have an effect upon one another" (Grönroos, 2011a), are an important element of customer perceived value creation: they allow for a dialogical process between a firm and its customers that in turn enables the creation of meaning for customers and therefore potential value (Ballantyne, 2004). With value creation ultimately the raison d'être of any collaborative customer-supplier relationship (Anderson, 1995), the "interaction concept" is a particularly powerful construct and one increasingly used by authors studying the phenomenon of value creation (e.g. Payne *et al*., 2008).

The interaction concept discussed within the Nordic School, most notably by Grönroos, provides a useful way of conceptualising value creation. Rather than perceived value being created solely by either a firm or a customer, the interaction concept views value creation as an outcome of interactions between a firm and a customer. Bearing in mind that value is ultimately determined by customers (through value in use), firms help provide interactions or "encounter processes" (Payne *et al*., 2008) to customers that allow for the creation of perceived use value. This perceived value then forms the basis for a customer's own value creation (value-in use). Each individual interaction facilitates the sharing of information, fosters joint decision making and encourages trust (Batt and Purchase 2004), all of which are important pre-conditions for value creation. It is through this iterative process of communication and interaction that perceived value is created.

Whilst this method of value creation might seem somewhat confusing, Grönroos (2011a: 290) provides a particularly good conceptualisation, noting that interactions are simply "a *platform* [sic] for favourably influencing the customers' usage processes and value creation". Each interaction between a firm and a customer provides an opportunity to influence each other, potentially resulting in synergy that creates potential value. However, such interactions can be of varying quality, and executed well or less well. Given that the quality of interactions is fundamental to successful value creation (Fyrberg and Jüriado, 2009), they should therefore be managed with great care. Thus, it is not the role of a firm to attempt to create value *for* a customer, but rather to work with a customer to create potential value by incorporating a customer's own unique value creation activities into the supplier's system (Normann and Ramirez, 1993; Wikström, 1996). A firm's role should primarily be to support a customer's value creating process with interactions and activities (Ballantyne and Varey, 2008), acknowledging that every customer will ultimately create their own value through use.

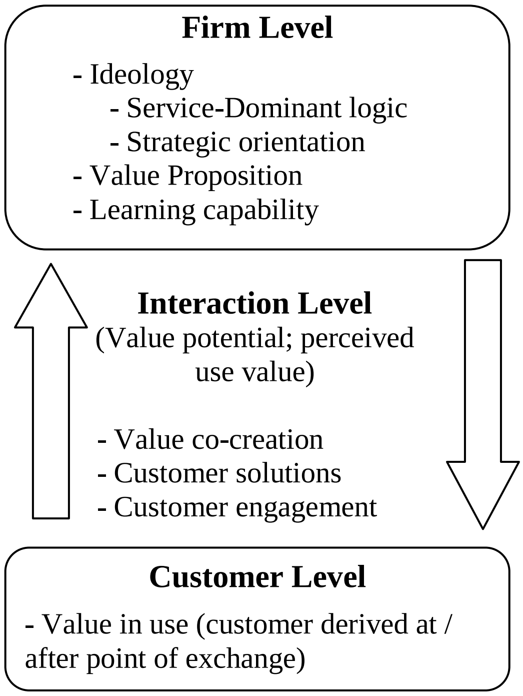
However, the means by which such potential value creation can be achieved is less than straightforward: the interactions involved are complicated, difficult to define, and potentially vary depending on the particular firm and each individual customer. Additionally, in order to provide an adequate platform from which these interactions can take place, firms must arguably demonstrate a number of competencies that ensure organisational commitment to interacting with customers. A more holistic understanding of value creation, derived from the literature, will now be discussed.

3.3.2 A holistic view of customer value creation

A thorough review of the literature yields numerous strands of research discussing customer value creation. This topic is of great interest to many researchers and is actively discussed across many functional areas including, *inter alia*, marketing, strategy, human resources and entrepreneurship. Authors have made valued contributions to knowledge by identifying elements and processes which have the potential to contribute to customer value creation, as well as insight into how value creation works both in theory and in practice. Regrettably, many elements of value creation have been examined in isolation, often within the paradigm of a particular field's academic tradition. As a result, the literature is fragmented, with value creation often broken down into particular elements or themes along functional lines rather than examined in a more integrated and inclusive manner. This makes it difficult to conceptualise customer value creation as a holistic concept.

The focus of this research, however, requires a more holistic view of customer value creation, one which acknowledges that there are many elements and processes which come together to create potential value for customers, including both firm-level competencies and firm-customer interactions. To ensure a more holistic view of the concept, the researcher drew on work from a number of research streams, including the customer value, value co-creation, Service-Dominant Logic, service science, services marketing,

Figure 3.2 Elements of customer perceived value creation



Source: Author

relationship marketing and integrated customer solutions literatures for guidance. From this review, it became clear that there are a seemingly endless number of factors, elements and processes that potentially contribute to value creation. However, given the constraints of this thesis, it has been necessary to focus on those elements related to the focus of this work: how firms can contribute to the creation of perceived value for their customers and whether this perceived value in turn has an effect on performance.

There are a number of elements positively contributing to customer perceived value as identified from the literature. These involve numerous processes and capabilities which can occur at different levels: firm level, customer level, or, most importantly, at the level of firm-customer interactions (see Figure 3.2). Whilst these elements are considered in the literature to be of particular importance in influencing customer perceived value, this depiction is far from exhaustive. Figure 3.2 presents a simplified representation of the complexity surrounding customer perceived value creation and there are likely to be other elements which are not addressed that will also have an impact on customer perceived value.

Firm level

At this level, there is no active customer value creation, as there is no interaction with customers whereby perceived value can be affected (Storbacka and Lehtinen, 2001). There is, however, the potential for *supplier value creation* (Walter *et al*., 2001), but that is not the focus of this chapter. At the firm level, organisations need to be prepared for, and committed to, helping their customers create potential value through the interaction platform. Here, firms need to have an ideology and/or strategic orientation in place that is compatible with value creation (e.g. Service-Dominant Logic) and focused on engaging with customers. They also need to offer a distinct value proposition for customers. Whilst ideology and value propositions do not necessarily directly contribute to customer perceived value, they do appear to be important firm competencies that enable a firm to successfully influence value creation (O’Cass and Ngo, 2011). Arguably only those firms with an articulated and enshrined desire to create and maintain value for customers will ultimately be capable of successfully influencing customer perceived value.

Interaction level

The interaction level is where dialogue, exchanges and encounters occur between a firm and its customers. It is the “interaction platform” discussed by Grönroos (2011a), where interactions allow for the creation of potential, or perceived use, value. It is at this level that firms are truly able to influence value creation (Storbacka and Lehtinen, 2001) through an iterative dialogical process (Ballantyne, 2004) that allows a firm to understand their customer’s entire value chain and how that will evolve in the future (Slater and Narver, 1994). Value creation processes at the interaction level are numerous. However, this chapter will focus on a number of processes identified within the literature as being directly linked to the creation of customer value. These include value co-creation, co-production and integrated customer solutions.

Customer level

After a customer has engaged with a firm at the interaction level, they are ultimately able to create their own value in use, derived at/after the point of exchange. This value in use can be influenced by any potential value created during the interaction level, however ultimately the customer determines their own value in use. Firms have little scope to influence value creation activities at this customer level. Given than this chapter focuses on how firms can help create potential value for their customers, value creation processes at this customer level are not discussed in detail.

The firm and interaction levels, where firms can help facilitate the creation of customer value, will now be discussed in depth.

3.4 Firm level competencies for value creation

Whilst it is largely accepted within the literature that firms will be able to influence value creation for their customers, surprisingly few authors explicitly discuss what capabilities a firm must have in order to help achieve this potential value creation. Many authors, by failing to take into account the influence a firm's internal environment and competencies have on value-creation ability, imply that all firms have the capabilities necessary to influence customer value creation. This seems to be a dangerous assertion – given that not all firms have the same capabilities (or record of success), why are they all assumed to have an equal likelihood of creating value?

A firm's internal environment, the physical and social factors that make up an organisation (Duncan, 1972), undoubtedly has an influence on its ability to help create potential value, particularly more intangible elements such as vision, values and norms. Although these elements are often ignored in discussions of customer value creation, a number of themes in the literature offer insight into what supplier level competencies are necessary if a firm is to be able to positively influence customer value creation. These can be broadly grouped into a firm's ideology, the value proposition it offers to customers and its ability to learn from and with customers.

3.4.1 Ideology

Corporate ideology, the beliefs and values that underpin a company's actions and which provide a frame of reference to employees (Starbuck, 1982), has been recognized as having an important impact on a firm's growth, performance and even survival (e.g. Beyer, 1981; Goll *et al*., 2001). Whilst there is no consensus in the literature concerning what type of ideology a firm should aspire to have, it is acknowledged that a more customer-centric ideology can lead to greater value creation and subsequently firm performance (e.g. Galbraith, 2002; Sawhney, 2006). This focus on customers, particularly their needs and wants, marks a significant ideological shift for firms away from the traditional focus on goods towards services and customers.

<u>**Shift from goods to service**</u>

Up until the early twentieth century, firms were focused on the production and exchange of tangible goods, providing a physical product to their customers. These products were pushed out into markets, with success usually the direct result of creating a superior product (Sawhney, 2006). To create such superior products, firms relied on concrete and measurable factors of production - the “operand resources” on which an action is performed (Constantin and Lusch, 1994), such as raw natural materials, land, labour and capital (Madhavaram and Hunt, 2008). Thus, production control and efficiency were lauded, as evidenced by the popularity of Taylorism in the early twentieth century. The corresponding marketing approach (the “4 Ps” marketing mix of product, price, place and promotion) was also necessarily focused on selling physical goods.

However, from the 1900s onwards, there has been a continual shift in the nature of what firms produce - and the resources they use to create such offerings. The more successful firms have moved steadily away from a “make-and-sell” strategy to a “sense-and-respond” strategy (Haeckel, 1999), thus relying less on the traditional fixed “factors of production” and more on “operant resources” linked to human, organisational and relational skills, knowledge and capabilities (Hunt, 2004). Penrose, in her seminal work on the growth of firms, consciously avoided referring to “factors of production”; she noted instead that firms are collections of productive *resources*, be they tangible or intangible “dynamic functions of human ingenuity and appraisal” (Penrose, 1995; Vargo and Lusch, 2004: 2). This conceptualisation of a firm as a collection of tangible and intangible resources, referred to as the “resources-based view” (RBV), continues to underpin a great deal of the business literature today. Stemming from the foundations of RBV, concepts such as the resource-advantage (R-A) theory of competition (Hunt and Morgan, 1995; Hunt and Morgan, 2004) and dynamic capabilities (Teece *et al*., 1997) are used to further examine and explain how resources (particularly operant) can result in competitive advantages for a firm.

This notion of advantage stemming a least in part from operant resources has become solidly embedded in the mainstream business psyche, as well as within the academic community and associated literature. Given the increased importance firms place on intangible resources (skills, specialized knowledge, help with processes, etc.), a number of authors called into question whether it was time to break from the traditional goods-dominant logic in favour of a new paradigm (e.g. Gummesson, 1995; Grönroos, 1997; Sheth and Parvatiyar, 2000; Normann, 2001), one focused predominantly on customers and relationships and one more inclusive of service-centred modes of exchange. As Gummesson (1995: 250) reasons, customers are not buying distinct goods or services. Rather, they are buying offerings which in turn render a form of service, be it direct (e.g. service from a doctor) or indirect (e.g. service through using a lawn mower) (Vargo and Lusch, 2011).

<u>Mind-set shift with Service-Dominant (S-D) Logic</u>

Building on the central role of service (and operant resources) within economic exchange, Vargo and Lusch, in their influential 2004 work "Evolving to a New Dominant Logic for Marketing", sought to provide "a pre-theoretic foundation for a revised and transcending logic about exchange in society", representative of what they saw emerging in scholarly thought, practice and education (Vargo and Lusch, 2011: 1305). Their focus was on framing business exchanges not through the traditional "goods-dominant logic (G-D logic)" and classifications inherited from economics (Vargo and Lusch, 2008a), but rather in the context of service exchanges and interactions, where service is defined as "the application of specialized competencies (knowledge and skills) through deeds, processes, and performances for the benefit of another entity or the entity itself" (Vargo and Lusch, 2004: 2). Fundamental to their *service-centred dominant logic*, now commonly referred to as Service-Dominant Logic (SD-L), is the belief that economic exchange is no longer about simply selling a product offering: exchange is seen to be a "process of parties doing things for and with each other, rather than trading units of output, tangible or intangible" (Vargo and Lusch, 2008b: 29).

Initially developed to address challenges in marketing, the concept of S-D logic has received a great deal of attention in the marketing literature, with many authors lauding it as a new and perhaps game-changing perspective (e.g. Abela and Murphy, 2008; Ballantyne and Varey, 2008). S-D logic has also attracted its fair share of critics (e.g. Strauss, 2005; Achrol and Kotler, 2006), some of whom fail to see S-D logic as a philosophy and ideology and seemingly reject the FP constructs for their simplicity (O'Shaughnessy and O'Shaughnessy, 2009). Regardless, S-D logic continues to gain traction and exposure in marketing (e.g. Abela and Murphy, 2008; Kowalkowski, 2011) as well as in other functional areas in the business literature including innovation (e.g. Flint, 2006; Michel et al., 2008), industrial marketing (e.g. Jacob and Ulaga, 2008), service science (e.g. Maglio and Spohrer, 2008) and strategy (e.g. Arnould, 2008), arguably due to the fact that S-D logic, as a pan-theoretic "lens through which to look at social and economic exchange phenomena" (Vargo and Lusch, 2008a: 9), is able to transcend most functional silos.

In its earliest form, S-D logic was based on eight foundational principles (FPs). These have since been adapted and modified, after rigorous discussion and debate within the academic community, into 10 FPs (see Table 3.2):

Table 3.2 Foundational Principles of Service-Dominant Logic

	Vargo and Lusch (2004)	**Vargo and Lusch (2008a)**
FP1	The application of specialized skills(s) and knowledge is the fundamental unit of exchange	Service is the fundamental basis of exchange
FP2	Indirect exchange masks the fundamental unit of exchange	Indirect exchange masks the fundamental basis of exchange
FP3	Goods are a distribution mechanism for service provision	Goods are a distribution mechanism for service provision
FP4	Knowledge is the fundamental source of competitive advantage	Operant resources [those that act on other resources] are the fundamental source of competitive advantage
FP5	All economies are services economies	All economies are service economies
FP6	The customer is always a co-producer	The customer is always a co-creator of value
FP7	The enterprise can only make value propositions	The enterprise cannot deliver value, but only offer value propositions
FP8	A service-centred view is	A service-centred view is inherently

	customer oriented and relational	customer oriented and relational
FP9		All social and economic actors are resource integrators
FP10		Value is always uniquely and phenomenologically determined by the beneficiary

These foundational principles, guided by the need to distinguish operant from operand resources, cover a number of issues and themes and have changed in line with academic debate. Regardless of how the FPs develop, at the heart of S-D logic there remain three core notions: (i) service is the fundamental basis of exchange; (ii) service is exchanged for service; and (iii) the customer is always a co-creator of value (Vargo and Lusch, 2008a). It is this last FP that is most important when discussing how a firm's ideology can influence value creation for their customers.

With goods-dominant logic traditionally linked to exchange value, S-D logic provides a different ideological focus for firms, emphasizing instead the importance of customer perceived value, as well as value in use. Rather than considering value to be an intrinsic monetary value attached to a product, service-dominant logic deems value to result from the application of operant resources, which can be transmitted through operand resources (goods) (Vargo and Lusch, 2004). However, since value is no longer distinct and embedded in a good, the locus of value creation changes from the supplier's side (what benefit a supplier can embed in a product to increase exchange value) to a collaborative process of value "co-creation" (Vargo and Lusch, 2004; Jacob and Ulaga, 2008). S-D logic views value as jointly and reciprocally created between a firm and its customer through the "integration of resources and application of competences" (Vargo *et al.*, 2008: 146), but ultimately determined by the beneficiary through value in use as "experience and perception are essential to value determination" (Vargo and Lusch, 2006: 44). Value co-creation will be discussed in greater detail later in this chapter.

As a paradigm-level view, service-dominant logic reflects a growing shift of focus from producer to consumer (Vargo and Lusch, 2004), with many of its principles influencing not only firm ideology, but also the orientation and strategy of firms.

Strategic orientation

Whilst the principles of service-dominant logic certainly provide a sound ideological framework within which those firms focused on customer value creation can operate, there are questions about how the FPs of S-D logic can best be implemented in practice, and what firm-level capabilities will be required for implementation (Karpen *et al*., 2012). Within the literature, a firm's orientation has often been thought to reflect how a company's ideological beliefs and culture are manifested and represented through behaviours and actions (Noble *et al*., 2002; Karpen *et al*., 2012) in order to ensure the firm's performance and viability (Gatignon and Xuereb, 1997; Hakala, 2011).

The discussion of strategic orientation is widespread within the business literature but, like so many multi-dimensional concepts, strategic orientation lacks a generally accepted definition and conceptualisation. This has resulted in a number of literature streams focusing on different types of orientations and their related empirical phenomena including, *inter alia*, market, technology, learning, entrepreneurial, innovation, product, customer, solutions and marketing orientations. It is not the intention of this section to provide a detailed review of the vast orientation literature, but rather to highlight those orientations often linked to customer value creation, where "customer needs are the basis for planning and designing organisational strategy" (Saura *et al*., 2005).

Established orientations

Market orientation

Not to be confused with a market<u>ing</u> orientation (although there is certainly a relationship between the two), a market orientation is considered to be an implementation of the marketing concept (Kohli and Jaworski, 1990; Matthing *et al*., 2004), comprising an understanding of customers, competition, and other environmental and market forces in order to become and remain competitive (Slater and Narver, 1995) and profitable (McNamara, 1972; Kotler, 1988). Fundamentally, a firm is focused on the “organisationwide [sic] generation, dissemination, and responsiveness to market intelligence” (Kohli and Jaworski, 1990: 3), including a balanced monitoring of customers and competitors (Day and Wensley, 1983).

Increasingly, market orientation has been seen as less of a business philosophy and more of an organisational learning capability (Matthing *et al*., 2004), which can been seen from (i) a behavioural perspective - how organisational elements promote/hinder responsiveness to market intelligence - (Kohli and Jaworski, 1990) and (ii) from a culture perspective - how an organisation’s norms and values influence market-oriented behaviour (Slater and Narver, 1995). Regardless of perspective, customer focus remains the central element of a market orientation (Kohli and Jaworski, 1990).

Customer orientation

As with a market orientation, firms with a customer orientation focus their corporate planning, strategy and activities around their customers. Within the literature, there are two perspectives on customer orientation: (i) customer orientation at the individual (staff) level, for example, how staff help customers make purchases that satisfy their particular needs and (ii) customer orientation at the market level, or how firms use market/customer intelligence to benefit their customers (Saura *et al*., 2005).

Whilst a number of studies conceptualise customer orientation as a discrete orientation (e.g. Slater and Narver, 1998; Jones *et al*., 2003), many authors consider customer orientation to be almost interchangeable with market orientation (e.g. Nwankwo, 1995; Brady and Cronin, 2001), where any reference to “market” can be seen to denote an organisation’s actual and potential customers (Saura *et al*., 2005). It has been stressed that implying management chooses between either a customer orientation or a market orientation is unrealistically simplistic (Connor, 1999). Rather, it might be better to see market orientation and customer orientation as two sides of the same coin.

Service orientation

Present at both the individual level and the organisational level, a service orientation is considered to be the "organisation-wide embracement of a basic set of relatively enduring organisational policies, practices and procedures intended to support and reward service-giving behaviours that create and deliver 'service excellence'" (Lytle *et al*., 1998: 459). These behaviours and practices include items such as customer treatment, communications, leadership and training and are often operationalised in the literature through the well-established SERV*OR scale (Lytle *et al*., 1998; Lynn *et al*., 2000)

Within the literature, an organisational service orientation has been found to enhance a firm's growth, profit, customer satisfaction and even customer loyalty (Heskett *et al*., 1997; Doyle and Wong, 1998; Homburg *et al.*, 2002 etc.) and it also directly contributes to the delivery of outstanding service quality, as well as the creation of customer value (Lytle *et al*., 1998). However, as with market orientation and customer orientation, service orientation is again difficult to look at in isolation, with many authors finding a direct link between service orientation and customer orientation (Saura *et al*., 2005), as well as market orientation (Ambler, 2005).

Whilst it may be convenient for authors to differentiate between market, customer and service orientations, in reality is appears as though none of these orientations are truly discrete. Rather, there is considerable conceptual overlap: a service orientation is necessarily customer-centric (Sheth *et al*., 2000) and influenced by the market (Day, 1999), and "a market oriented and learning organisation is compatible with, if not implied by, the service-centred model" (Vargo and Lusch, 2004:6). With increasing recognition of the inadequacy of a single orientation (e.g. Atuahene-Gima and Ko, 2001; Bhuian *et al*., 2005), a number of authors are now looking at combinations of (and interactions between) orientations (e.g. Matthing *et al*., 2004; Hakala, 2011), as well as some thought-provoking multidimensional notions of strategic orientation.

Emerging orientations

Solutions orientation

Although service orientation, amongst others, is popular across a broad spectrum of the management literature, a small number of authors postulate that this orientation is a precursor to a more refined one, focused specifically on how firms help co-create value for their customers by providing integrated "solutions", rather than simply product or service offerings (Cova and Salle, 2007). Unfortunately, there are few explicit mentions of a "solutions orientation" within the literature (Sheridan and Bullinger, 2001; Hedaa and Ritter, 2005; Cova and Salle, 2007); even fewer publications focus specifically on the conceptual and theoretical foundations of such an orientation.

Kawohl *et al*. (2009) usefully provide a conceptualisation of a solutions orientation. They define it as "the collective mind set and behaviour of companies which is expressed by the members of the organisation dedicated to providing solutions" (Kawohl *et al*., 2009: 106). This is in line with Sawhney's (2006) understanding of a solutions orientation, characterized by a focus on value leadership rather than on product leadership, where success is accomplished "by working with partners to create and deliver superior customers [sic] solutions" (Sawhney, 2006: 367). Reflecting a "true customer focus", a solutions orientation is built on three dimensions: (i) factors within the organisation (ideology, anchored within strategy and culture); (ii) factors which occur during interaction with customers (value co-creation and trust building); and (iii) factors present in a firm's output (quality and unique benefit) (Kawohl *et al*., 2009: 111).

S-D Logic orientation

Emerging in a similar way to the notion of a solutions orientation, a number of scholars working within the S-D logic domain have expressed the need for a more defined and measureable conceptualisation of S-D logic, an orientation based on organisational behaviours (Karpen *et al*., 2012) that can enable empirical investigation of the S-D logic construct (Brodie *et al*., 2011).

Following the Foundational Principles of Service-Dominant Logic, Karpen *et al*. (2012: 5) define an S-D orientation as “a portfolio of organisational capabilities that facilitate and enhance the reciprocal integration of resources through individuated, relational, ethical, developmental, empowered, and concerted interaction”. As with S-D logic itself, the S-D orientation denotes that a firm’s strategic focus will be to work closely with individual customers (Prahalad, 2004) to create meaningful experiences and thus facilitate the co-creation of lasting value (Karpen *et al*., 2012). There is no definition between market, customer or service, as the three appear to be seen as interrelated concepts, all ultimately focused on serving the customer.

As one can see, there are many strategic orientations discussed within the literature that a firm, particularly one focused on creating value for their customer, could subscribe to. If this discussion highlights anything, it should be that there is no one superior strategic orientation – established or emerging – despite what some authors might think. At the heart of each orientation discussed has been the customer: if this customer focus shapes a company’s beliefs and culture and is in turn reflected in behaviours and actions, then there should be a solid customer-centric ideology in place within firms that would allow them to adroitly contribute to potential value creation for their customers.

3.4.2 Value proposition

After looking at firm-level ideology and corresponding strategic orientations, it is clear that certain customer-focused organisational beliefs and values can enable a firm to best facilitate customer perceived value creation. Having a strong customer focus, one reinforced throughout daily tasks, processes and decision making, is undoubtedly a competency for value creation. However, whilst overarching ideology is important, a firm also needs to have a clear understanding of both the type of value they want to help create for their customers, as well as what they can contribute during that value creation process. The literature recognises that the provision of superior customer value is linked with superior firm performance (Day and Wensley, 1988), but how can firms ensure that such superior value is provided to customers? An important place to start is with their value proposition.

The value proposition concept, as with so many others, is an area of considerable interest in the literature, but one which has seen minimal conceptual development (Lepak *et al*., 2007; O'Cass and Ngo, 2011). In the past, this perhaps mirrored the general business population, where a majority firms used the term value proposition yet fewer than 10% of them were able to successfully develop and communicate their unique propositions (Frow and Payne, 2008). However, with much of the literature highlighting that firms are increasingly service-centred and customer-centric (Vargo and Lusch, 2004), and with intangible service offerings replacing more traditional physical products, it is now particularly important for firms to be able to articulate how they can help create potential value for their customers, in a way that any competitors cannot. As Webster (2002: 62) argues, the value proposition "should be the firm's single most important organizing principle".

Defining and creating a value proposition

First identified and defined by Lanning and Michaels in the late 1980s, the concept of a value proposition was seen to be a firm's promise to customers of their deliverable value offering (Ballantyne *et al*., 2011), specifically how a product's performance (and the subsequent fulfilment of a customer's need) were related to the price paid by a customer for the product (Lanning and Michaels, 1988; Payne and Frow, 2005). Very much embedded in the traditional goods-dominant logic, a firm's role was to choose and communicate the value they could deliver to customers through their product offerings (Ballantyne *et al*., 2011) – *what is our product and why should the customer buy it* (Webster, 1994).

However, as business thinking has shifted away from goods-dominant logic towards a more service-dominant logic, with customer perceived value increasingly favoured over exchange value, the concept of a value proposition has evolved in response. It has also gained an increased focus in the literature, largely due to the popularity of Service-Dominant Logic. During its own evolution, S-D logic has come to prioritise the concept of a value proposition, with FP7 explicitly identifying that "the enterprise cannot deliver value, but only offer value propositions" (Vargo and Lusch, 2008a: 7). Now aligned with the service and customer centric thinking of S-D logic, the conceptualisation of a value proposition has moved away from firms identifying how their products create value in favour of the creation of more reciprocal promises of value between firms and their customers, where both seek an equitable exchange (Ballantyne and Varey, 2006; Ballantyne *et al*., 2011). A supplier no longer holds all the power and, instead of price, the kind of customer experience offered by a firm and reflected in their reciprocal value proposition now dictates what value is created (Rintamäki *et al*., 2007).

Whilst there is recognition that a value proposition is a reciprocal promise, one with a particular strategic role in the pursuit of competitive advantage (Anderson *et al*., 2006) there remains no widely approved definition of the concept (Rintamäki *et al*., 2007). At its most simple, a value proposition is a promise about future potential value (Grönroos, 2011a), one created within the customer's perspective (Rintamäki *et al*., 2007), that identifies the unique potential value a firm can contribute to its customers (O'Cass and Ngo, 2011). It is not a brand slogan (Rintamäki *et al*., 2007), but rather a representation of a complete customer experience (Selden and MacMillan, 2006), be it within an economic, functional, emotional, or symbolic dimension (Rintamäki *et al*., 2007). Webster (1994: 25) perhaps comes closest to successfully combining these elements, describing a value proposition as:

> [T]he verbal statement that matches up the firm's distinctive competencies with the needs and preferences of a carefully defined set of potential customers. It's a communication device that links the people in an organization with its customers, concentrating employee efforts and customer expectations on things that the company does best in a system for delivering superior value. The value proposition creates a shared understanding needed to form a long-term relationship that meets the goals of both the company and its customers.

Despite definitional issues, there is on-going conceptual development on the creation of a value proposition, with consensus amongst authors about the importance of articulating a promise of reciprocal and mutual value. Whilst some authors consider the value proposition to be a composite (and falsifiable) construct, incorporating different types of exchange and perceived value (e.g. performance, pricing, relationship building and co-creation value) (O'Cass and Ngo, 2011), others focus on elements that influence customer perceived value, notably the opportunity to "co-create" potential value with customers (Frow and Payne, 2011) which enhances relationships with customers and in turn allows for longer term benefits for both parties (Ballantyne, 2003). However, this approach results in greater challenges in terms of investigating or measuring the impact (if any) of such a proposition.

Fundamentally, the creation of a value proposition needs to be an iterative process (Frow and Payne, 2011), incorporating (i) the identification of customers and stakeholders; (ii) the identification of core dimensions of customer value; and (iii) interaction, dialogue and knowledge sharing with customers (Rintamäki *et al*., 2007; Frow and Payne, 2011; O'Cass and Ngo, 2011) to transition a proposition into potential customer perceived value.

Influence of value propositions on potential customer perceived value

Whilst it is seemingly impossible to empirically link a firm's value proposition directly to any value derived by their customers, there is growing recognition that a value proposition does help a firm in its quest to offer superior value (O'Cass and Ngo, 2011), thus increasing the possibility of the firm influencing potential perceived value for customers. This is largely attributed to the fact that, in order to create a value proposition in the first place, a firm is forced to focus clearly on what their offering is truly worth to their customers (not necessarily monetarily), and what makes that offering superior or inferior to those offered by competitors (Anderson *et al*., 2006). Such factors might include price, speed, flexibility, follow-on service etc. This allows the firm to best understand what customers consider to be relevant and important (Rintamäki *et al.*, 2007), so that a superior value offering can be created (O'Cass and Ngo, 2011).

Fundamentally, a value proposition allows a business to engage with customers, building relationships and learning from encounters with their customers (Meyer and

Schwager, 2007; O'Cass and Ngo, 2011). It has been suggested that this knowledge sharing and dialogue is not only essential if a firm is to successfully craft a value proposition (Ballantyne and Varey, 2006), but also if a firm is to retain customers with long-term offerings of value (O'Cass and Ngo, 2011).

3.4.3 Learning capability

An important and substantial area, understood from a number of perspectives, organisational learning is widely recognised as being an important contributor to a firm's development; a process through which organisations "understand and manage their experiences" (Argyris and Schon, 1996: 16) to best transform and re-invent the organisation (Pedler *et al.*, 1991). A firm's learning has been identified as having a significant impact on competitive advantage in the marketplace (Harrison and Leitch, 2005) as well as on firm growth (Deakins and Freel, 1998), particularly within HGFs (Goedhuys and Sleuwaegen, 2010). This issue of learning is particularly important when discussing how firms can help influence value creation for their customers. Lundvall (1993: 55) observes that the exchange of information between firms and their customers, and the subsequent process of organisational learning, "enhances the innovative capability of the producers and the competence of the user", thus helping to facilitate the creation of potential customer value.

Given the vast amount of information available on organisational learning, the subject deserves an entire literature review of its own. Unfortunately, since this thesis does not focus specifically on learning, such a depth examination is not possible[10]. However, this issue of organisational learning is not something that can be omitted in a discussion on customer value creation, particularly when looking at firm-level competencies that enable the creation of customer perceived value. So much of the literature focused on value creation notes the importance of organisational learning, especially during supplier-customer interactions. Therefore, whilst brief, this section will address some of the key issues related to organisational learning in the particular context of customer value creation.

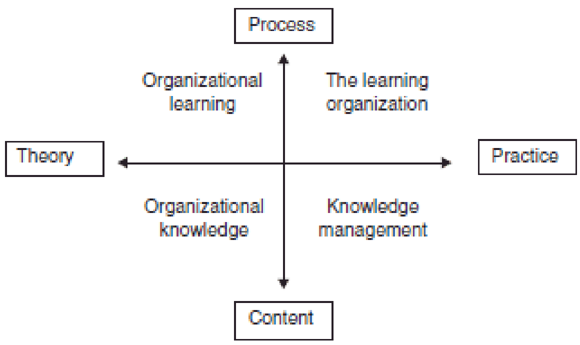
[10] For a critical review of the organisational learning literature see Wang and Ahmed (2003).

What is organisational learning

The concept of *learning*, an intrinsic part of most daily interactions and experiences, is generally understood within the context of everyday life (Cope and Watts, 2000). However, the term can take on additional context-specific meaning when applied specifically to firms, resulting in much discussion in the literature as to what constitutes *organisational learning*. Within the literature, scholars have addressed learning from a number of vantages (the individual, team and firm/organisation levels).

Whilst learning is considered to be ultimately an individual level activity (with learning resulting from experiences and reflection) (Leitch *et al*., 1996), the sum of individual learning within a company allows for a larger process of organisational learning (Kim, 1993; Argyris and Schon, 1996). This can be quite ad hoc in smaller firms, whilst an orchestrated and more complex process is usually required in larger organisations (Deakins and Freel, 1998). Within the organisational learning literature, five streams appear to be particularly predominant: organisational learning viewed at the level of an individual; learning as a process or system; the impact of culture or metaphor on learning; knowledge management as a mechanism to facilitate organisational learning; and organisational learning as the driver of continuous improvement (Wang and Ahmed, 2003). Easterby-Smith and Lyles (2003), recognise some similar perspectives in the literature, usefully categorising themes based on two dichotomies – theory vs. practice and content vs. process (see Figure 3.2).

Figure 3.2 Organisational learning themes



Source: Easterby-Smith and Lyles (2003)

Organisational learning as a process-based theoretical concept remains the focus of this discussion, as this body of literature best addresses how firms can build on customer insight in order to provide the products and services their customers want and need, in a way that creates potential perceived customer value and facilitates growth. After all, information is not what leads to competitive advantage (Dixon, 1994), but rather is the knowledge, generated through the learning process, that is a major strategic resource for firms (Starkey, 1996). However, it is essential to recognise the critical role that individuals play in facilitating organisational learning and ultimately creating "learning organisations" (Kim, 1993; Leitch *et al*., 1996; Harrison and Leitch, 2005).

When thinking about organisational learning, it is important to note that learning does not automatically follow from an exchange of information. Rather, in order for learning to truly take place, there needs to be reflection on any exchanged information, thus allowing for the development of new insights as well as behavioural changes in the organisation (Huber, 1991; Wikström, 1996). This can occur through two types of organisational learning behaviours: adaptive learning and generative learning (Senge, 1990). A pragmatic and reactive approach to learning, adaptive learning occurs when a firm must adjust to changes in its present market and usually does not require the realignment of core capabilities with the market, thus potentially constraining firm development in the future (Matthing *et al*., 2004). Generative learning, on the other hand, requires an organisation to challenge its fundamental assumptions about the business, including its mission, customers, competitors and strategy (Slater and Narver, 1995). This "higher level learning" (Cope and Watts, 2000), is of particular importance for those firms who seek to influence customer perceived value, as it is only through critical reflection that a firm can reframe its understanding of its own capabilities (Marsick and Watkins, 1990) and how that translates into value creation and competitive advantage. Drawing on the importance of generative learning, Jerez-Gomez *et al*. (2005: 716) provide a useful conceptualization of organisational learning, defining it as the "capability of an organization to process knowledge – in other words, to create, acquire, transfer, and integrate knowledge, and to modify its behaviour to reflect the new cognitive situation, with a view to improving its performance".

Given the complexity of the processes involved in organisational learning, particularly generative learning, they are difficult concepts to evaluate or measure in practice. Crossan *et al*. (1995) note that evaluating organisational learning is possible and recommend examining routines (e.g. regular meetings to share insights and feedback), diagnostic systems (e.g. customer satisfaction surveys) and rules and procedures (e.g. records management or complaints procedures) for evidence that information is collected, processed and used by the organisation to change and/or improve its operations. Looking specifically at generative learning, the outcome of this learning process should manifest itself in revisions to a firm and how it functions, stemming from "lessons learned". Discontinuous events are noted to "trigger" periods of generative learning (Cope, 2003), which reflects notions within the HGF and wider growth literature about the role of critical events in firm development and growth. This is an issue to be explored in the context of the process of HGF growth.

How organisational learning supports value creation

As discussed, organisational learning can provide a firm with opportunities to strengthen its performance and growth through strategic renewal, creation of new opportunities and building firm capabilities (Lane and Lubatkin, 1998; Lichtenstein and Lumpkin, 2008), particularly in conditions of change or uncertainty (Moingeon and Edmundson, 1996). This is more important than ever, as firms increasingly face pressures from globalisation, hyper competition and an explosion of information and choice available to customers (Prange, 1999). Ultimately, to stand out from the crowd, firms need to be able to offer some sort of value to their customers that their competitors do not, and this is arguably facilitated through a firm's ability to learn from (and with) their customers. Since managers' conceptions of what their customers want often differ markedly from their customers' actual desires (Parasuraman *et al*., 1985; Sharma and Lambert, 1994), the ability for a firm to learn from their customers, thus delivering the offering (and value) customers seek, can act as a competitive advantage (Woodruff, 1997).

It is important to note that learning is not an activity carried out in isolation. It is instead a means of processing information to build new knowledge in the firm (Huber, 1991) and thus is part and parcel of the other firm level capabilities for value creation previously discussed. Learning and knowledge sharing is a critical part of Service-Dominant logic (Vargo and Lusch, 2004; Lusch *et al.*, 2006), an important element of any strategic orientation, particularly those with a customer and market focus (Morgan and Strong, 1998), as well as a fundamental part of the creation of a value proposition (Ballantyne and Varey, 2006). However, any organisational learning requires that a firm both desires to absorb and translate new information and has the ability to actively interact and collaborate with customers (Lusch *et al.*, 2006). This need for dialogue is imperative: communication builds trust and learning (Ballantyne and Varey, 2006), which in turn facilitates the behavioural change that positively influences performance (Hurley and Hunt, 1998). Exchanges and encounters, occurring at the interaction level, are at the heart of potential customer perceived value creation and will now be addressed in detail.

3.5 Perceived value creation at the interaction level

Interaction is at the heart of any discussion on value and value creation, particularly when addressing how firms can influence the development of perceived use value for their customers. Although value creation can take place within networks, between different actors and at various levels of aggregation, interaction is always the integral factor: value creation is collaborative by nature (Vargo and Lusch, 2008a) and created by dialogue (Ballantyne, 2004) and experiences (Prahalad, 2004). For firms seeking to influence their customers' value creation, interaction is particularly critical, as it is through communication, exchanges and encounters that firms are able to truly influence value creation for their customers (Storbacka and Lehtinen, 2001; Ballantyne, 2004).

The importance of collaboration between firms and customers is increasingly acknowledged (Blazevic and Lievens, 2008), particularly the need to understand customer requirements (Prahalad and Ramaswamy, 2004) so as to provide the most holistic customer experience possible. Not long ago, companies developed value propositions to differentiate themselves (and their offerings) from competitors (Krishnamurthy *et al*., 2003), without always listening to the "voice of the customer" (Cooper, 1999). Now, with many customers wanting deeper and more empowered exchanges (Ernst *et al*., 2011; Hoyer *et al*., 2010), firms are recognising that value propositions and other communications are in fact powerful ways of engaging with customers, to facilitate interaction and consequently value creation (Grönroos, 2008; Payne *et al*., 2008). This recognition of interaction as a key value-generating process marks an important ideological shift for companies away from the traditional mind set of "*what can we do for you?*" to one asking customers "*what can you do <u>with us</u>?*" (Wind and Rangaswamy, 2000).

Once a customer is engaged, interactions between a firm and its customer can begin. These interactions, be they communication, usage or service oriented (Payne *et al*., 2008) provide an interface through which firms can actively contribute to their customers' value generating processes (Normann and Ramirez, 1993; Prahalad and Ramaswamy, 2004; Grönroos, 2008; Ramaswamy, 2009b; Sashi, 2012). They also have a cumulative impact on customer perceived value, as a firm-customer relationship is built and strengthened over time (Ravald and Grönroos, 1996; Grönroos, 1997). Whilst some interactions, so-called "critical encounters" (Gremler, 2004), may add more to a particular customer's value creation than others (Payne *et al*., 2008), all interactions are important as they contribute to the creation of the general customer experience from which all value ultimately stems (Prahalad and Ramaswamy, 2004). As Wikström (1996: 9) astutely notes:

> It is no longer a question of creating value for the customer: rather, it is about creating value with the customer and incorporating the customer's value-creation into the system. What the company thus provides is a complement to the knowledge, resources and equipment possessed by the customers themselves. From this co-ordination in time and place there emerges a new value which is jointly produced.

This issue of jointly produced – or *co-created* – value is now a significant theme across much of the management literature, attracting a great deal of discussion and debate. With customers now seen as a new source of competence (Prahalad and Ramaswamy, 2000; 2004) for businesses, value co-creation activity with customers is increasingly recognised as being an important competitive strategy and contributor to firm performance (Lindgreen and Wynstra, 2005), as well as the ultimate goal of business (Grönroos, 2011b).

3.5.1 What is co-creation of value

In their seminal HBR paper on value, Normann and Ramirez helped to initiate a fundamental reconceptualisation of value and value creation, noting that "successful companies do not just *add* value, they *reinvent* it" (Normann and Ramirez, 1993: 65). Breaking away from the goods-dominant logic belief of value as something that firms create and deliver to their clients, they proposed that value stemmed from a "value-creating system" in which "different economic actors – suppliers, business partners, allies, customers – work together to *co-produce* value" (Normann and Ramirez, 1993: 66). This idea of value as a co-created outcome of firm-customer interactions gained even wider recognition and interest in the academic and practitioner communities following the publication of Prahalad and Ramaswamy's (2000) work on "Co-opting Customer Competence.

Building on the ideas espoused by Normann and Ramirez, Prahalad and Ramaswamy further developed the concept of customers as "co-creators" of personal experience, playing an active role in the creation of value and thus becoming a source of competence for companies (Prahalad and Ramaswamy, 2000: 80). For both sets of authors, however, co-creation of value was fundamentally seen to be the new form of value creation, where value is an outcome of collaborative activities between firms and their customers, using knowledge gained from interaction to better meet customer requirements, develop better offerings and ultimately create value for both the firm and its customers (Normann and Ramirez, 1993; Prahalad and Ramaswamy, 2000; Prahalad and Ramaswamy, 2004).

Value co-creation as a higher order concept has been further developed within the Service-Dominant logic literature, where the concept of co-creation is a component part of the foundational principles of S-D logic. With S-D logic recognising that "value is always uniquely and phenomenologically determined by the beneficiary" (FP10), firms cannot ever directly deliver value, but only offer value propositions to customers (FP7) (Vargo and Lusch 2008a: 7). These value propositions – or value promises (Ballantyne *et al*., 2011) – facilitate interactions between firms and their customers. During such interactions the traditional roles of "producer" and "consumer" can become blurred (Vargo *et al*., 2008). Customers can be consumers, quality controllers and even co-marketers (Storbacka and Lehtinen, 2001), but they are no longer simple recipients of value: customers are collaborative partners in the value creation process (Lusch *et al*., 2007) and are therefore always co-creators of value (FP6) (Vargo and Lusch 2008a: 7). In turn, the firm therefore becomes a direct part of all customer value creation (Lusch *et al*., 2008; Vargo and Lusch, 2008a; Vargo *et al*., 2008; Grönroos, 2011a), although the customer is the final arbiter of value through value-in-use (Ballantyne *et al*., 2011).

Within the broader literature, the concept of value co-creation is gaining momentum, particularly given the increasing importance placed on customer collaboration in business (Blazevic and Lievens, 2008) and the recognition that co-creation activities can positively benefit firm performance (Payne *et al*., 2008). Co-creation is posited to occur when customers "[participate] through spontaneous, discretionary behaviours that uniquely customise the customer-to-brand experience" (van Doorn *et al*., 2010). However, with no concrete accepted definition of co-creation, the concept is still very much the subject of interpretation and debate, as are many of its finer points. One area that needs clarification is the differentiation between value *co-creation* and *co-production*.

Co-creation vs. co-production

Within the co-creation literature, two terms are commonly used when discussing the construct: co-creation and co-production. Normann and Ramirez (1993) first discussed what they termed "co-production", so successive authors have continued in that vein (e.g. Wikström, 1996; Ertimur and Venkatesh, 2010). It has been during the development of S-D logic that there has been a conscious move away from "co-production" in favour of the term "co-creation", as "co-production" is strongly reminiscent of the goods-dominant logic (favouring production) rather than the collaborative and interactive nature of value creation espoused by S-D logic (Payne *et al*., 2008; Vargo and Lusch, 2008a).

However, co-production does remain a part of the co-creation construct. The two are closely related and nested concepts. Co-creation is considered to be the higher order concept of "collaborative, customer-specific value creation", whereas co-production – the subordinate concept – refers more specifically to "the joint activities of the firm and the customer in the creation of firm output" or the firm's "core offering" (Vargo, 2008: 211) that ultimately result in co-created value (potential value, as well as customer-determined value in use). Whilst further work is needed to better understand the relationship between co-creation and co-production (Etgar, 2008), it is accepted that value creation can occur without co-production taking place, but co-production cannot occur without also resulting in value co-creation (Ertimur and Venkatesh, 2010). Co-production remains an area of great interest, particularly for authors investigating value co-creation in product-centric industries (e.g. Blazevic and Lievens, 2008), and is an important (albeit not essential) part of the value co-creation process.

About co-production

Whilst Normann and Ramirez (1993) first referred to co-production as the conceptual process whereby "suppliers, partners, allies, and customers co-produce value", current understanding of co-production is more concrete and focused. The term co-production is now largely used to refer to the customer's specific involvement in the production process of a firm's core offering (Lusch and Vargo, 2006), be it a physical product, or an intangible service offering. This involvement is seen to comprise both mental and physical participation (Fisk et al., 1993), which is facilitated through firm-customer interaction (Wikström, 1996) from the very earliest stages of a project of process (Neale and Corkindale, 1998).

Through the process of co-production, customers are able to contribute to the development and delivery of a firm's offerings, in turn deriving intrinsic value from contributions to and participation in this process (Ertimur and Venkatesh, 2010), as well as use value from the final offering produced. Given that co-production is jointly driven by firms and their customers, it is unsurprising that the process is highly dynamic (Etgar, 2008), interactive (Wikström, 1996), and conducive to innovation (Blazevic and Lievens, 2008), with a strong focus on customisation of the firm's offering to meet customers' specific needs. The co-production process, whilst likely to vary with the desires of individual customers, is generally thought to cover five distinct stages: (i) development of antecedent conditions (e.g. economic, cultural and technological preconditions); (ii) development of motivations which prompt customers to engage in co-production (e.g. economic, psychological and social drivers); (iii) calculation of the co-production cost-benefits, (iv) activation when customers become engaged in the actual performance of the co-producing activities (and ultimately "consume" the offering); and finally (v) generation of outputs and evaluation of the results of the process (what value was created and how did the customer benefit) (Etgar, 2008: 99). Each of these stages of co-production is replete with its own challenges, but stage (ii) is particularly problematic for firms wishing to engage in co-production, given that not all customers are equally likely to participate in co-production.

As with value co-creation in general, some customers are more likely to engage in co-production than others, with some opting for no involvement at all and others for extensive involvement in co-production activities (Vargo and Lusch, 2008a). For example, some customers might choose to be "information providers", contributing observations, knowledge and insights, whereas others might opt to be more physically involved in the co-production process as a "co-developer" (Fang, 2008). There are a number of factors that can influence a customer's likelihood to engage in co-production including potential psychological, social and technological gains (Hoyer *et al*., 2010), other perceived opportunities (Ertimur and Venkatesh, 2010), as well the degree to which a customer's own specific resources (operand or operant) are required during the co-production process (Arnould *et al*., 2006). Certain consumer segments have been identified as being particularly likely to engage in co-production, in particular innovators and "lead users". These lead users, identified in von Hippel's (1986) seminal work on product development using customer insight, are those consumers who experience a gap in market offering and thus have a particular market need, who are well positioned to actively solve their own needs.

Ultimately, firms need to recognise that not all customers will be equally interested in being part of the co-production process: customers will self-select whether or not to get involved (Hoyer *et al*., 2010). Firms should therefore make customers aware of what level of commitment and action would be required of them (Wikström, 1996) and then allow customers to determine their level of involvement in any co-creative activities (Prahalad and Ramaswamy, 2000; Ramaswamy, 2009b) - firms need to recognise that time is not free for their customers (Gummesson, 2008: 16). Customer buy-in to the co-production process is absolutely essential if any customer perceived value is to be created from participation (Wikström, 1996; Bendapudi and Leone, 2003). Even though co-production is not essential for value co-creation, it does potentially provide a customer with another level of experience and interaction with the firm (and possibly a superior product offering), which should ultimately generate even more value from the entire co-creation process (Normann and Ramirez, 1993; Wikström, 1996; Payne and Frow, 2005).

3.5.2 How to co-create value

Despite being widely discussed in the literature at a conceptual level, little attention has been paid to the mechanics of how co-creation works in practice. Whilst authors are quick to note that value co-creation has implications for management, knowledge creation and innovation processes (e.g. Lepak *et al*., 2007; Hoyer *et al*., 2010), there is still limited understanding of how organisations drive and manage co-creation, particularly what frameworks might help organisations best manage this complex and challenging process (Payne *et al*., 2008). With co-creation highly context specific (Vargo *et al*., 2008) and relational between a firm and each unique customer (Gummesson, 2008), it is debatable whether any one "value co-creation framework" will suit all businesses. However, key elements and principles of co-creation are likely to apply to a majority of firms. With this in mind, a number of authors have sought to look specifically at the processes involved in co-creation, which, while still limited, allows for a somewhat more grounded conceptualisation.

Value co-creation process

During their initial discussion of the value co-creation concept, Prahalad and Ramaswamy (2004) identified what they felt to be the core "building blocks" of value co-creation in organisations. Their "DART" model identified four distinct components: dialogue (between firms and their customers); access (customer access to experience at different points of interaction); risk assessment (customers and suppliers aware of, and willing to mitigate, any risks occurring during co-creation); and transparency (information open and available to all parties involved in co-creation activities) (Prahalad and Ramaswamy, 2004: 23). Whilst simplistic, these building blocks are undoubtedly important to value creation, regardless of a firm's particular circumstances. However, there is no indication as the sequencing of events or the relationship between certain elements: it is implied that they all occur on an on-going basis and that all elements are of equal importance. With this in mind, a small number of authors have attempted to clarify how value co-creation occurs, taking either a "process" or "network" view of co-creation activities.

From a process perspective, Payne *et al*. (2008: 85) posit that value co-creation occurs as a result of a number of interconnected processes: customer value creating processes (resources and practices which customers use to manage their activities); supplier value creating processes (resources and practices which the supplier uses to manage its business and its relationships with customers); and encounter processes (the processes and practices of interaction and exchange that take place within customer and supplier relationships). Encounter processes bring suppliers and customers together, forming the crux of the co-creation process and allowing for co-creation activities to occur. As such, relational capabilities (and competencies) are of particular importance to this model, as relationships are essential for any co-creation to occur (Lindgreen and Wynstra, 2005; Ngugi *et al*., 2010).

Taking a "network" view of value co-creation, Cova and Salle (2008) expand the conceptualisation of co-creation occurring only between firms and their customers, identifying that co-creation also occurs within a wider networked context. They view co-creation as occurring in two stages: in stage one, co-creation occurs mainly between the firm and customer, but in stage two, value co-creation is experienced by other actors in both the firm's and customer's wider networks (Cova and Salle, 2008: 274). This networked view of value co-creation has been noted before, with authors recognising the importance of larger networks and actors (e.g. collaborating suppliers/competitors; individual employees) in co-creation activities (e.g. Kim and Mauborgne, 1999; Prahalad and Krishnan, 2008), within the larger "co-creative ecosystem" (Ramaswamy, 2009a: 37).

However, despite these improved conceptualisations, there is still much work to be done to explore how value co-creation occurs in reality. Fundamentally, the value co-creation process is about working closely with customers to "integrate and bundle a mix of tailored products, services, systems and commercial terms in such a way that the whole exceeds the sum of its parts" (Cornet *et al*., 2000: 6). With the value co-creation process focused on accessing, combining and deploying coordinated firm and customer resources (Moran and Ghoshal, 1999) so that both parties can "win more" (Ramaswamy, 2009b), firms need to think about how the development and commercialisation of their offerings can contribute to the co-creation of perceived value for their customers. A firm's offerings can, after all, become engagement platforms from which value co-creation takes place: why build a product and hope customers will come, when you can build (co-create/co-produce) a product *with* customers and find that they are already there (Ramaswamy, 2009b).

<u>Solutions provision</u>

Developing in parallel with much of the thought on value co-creation (as well as S-D logic), there has been a significant shift in the kinds of product and service offerings firms are selling to their customers and, more importantly, how they are developing and implementing these offerings: many firms have moved away from the traditional “push” mentality of product and service development in favour of more customer-led “solutions provision” (Shepherd and Ahmed, 2000; Davies *et al*., 2006; Sawhney, 2006; Cova and Salle, 2007). Fundamentally, it is by offering solutions, that firms can actively help co-create value for their customers. This requires firms to shift their ideological and operational focus from simply meeting their customers’ basic operational needs (e.g. by providing a set product or service and reaping exchange value), to actively helping customers develop their businesses by providing solutions and strategies uniquely tailored to the customers’ specific needs, thus influencing their value creation process (Cova and Salle, 2008).

With many customers deriving more value from their interactions with suppliers than from the product they actually buy (Vandenbosch and Dawar, 2002; Higgins and Scholer, 2009), this move towards providing solutions not only allows for greater co-creation of potential customer perceived value (Nordin and Kowalkowski, 2010), but also heralds the “emergence of new service-based and customer-centric business models” (Davies *et al*. 2007: 270) which prioritise value-creation for enhanced competiveness and profitability (Nordin and Kowalkowski, 2010). Now discussed throughout the academic literature, trade publications and the popular press, the concept of customer “solutions” has its foundation in the field of industrial marketing, with much of the earliest conceptual work focused specifically on business-to-business (B2B) companies. Stemming from the marketing literature in the early 2000s, it is little wonder that the concept of “solutions” (also commonly referred to as integrated solutions, customer solutions, total solutions and business solutions) closely relates to the principles of service science, S-D logic and value co-creation (Tuli *et al*., 2007; Cova and Salle, 2008; Grönroos, 2011a). So what exactly are solutions and how do they contribute to customer perceived value creation?

Definitions and characteristics of solutions

Looking specifically at key works in the literature, numerous authors have put forward definitions of what constitutes a “solution”. Interestingly, they all touch on similar elements: (i) relationships between firms and their customers; (ii) integration of products and services; and (iii) customer value (see Table 3.3 for a selection of solutions definitions from the literature). Whilst there are many different types of solutions, inevitably varying by industry, as well as unique firm and customer requirements, it can be said that the predominant view of a solution in the literature is “a customized and integrated combination of goods and services for meeting a customer’s business needs” (Tuli *et al*., 2007: 1).

Table 3.3 Selected solutions definitions

Author	Definition
Cornet *et al*. (2000: 1)	[A] solution is a supplier’s customized response to a customer’s pressing business need.
Miller *et al*. (2002: 3)	[Solutions are] integrated combinations of products and/or services that are usually tailored to create outcomes desired by specific clients or types of clients.
Johansson *et al*. (2003: 118)	A solution is a combination of products and services that creates value beyond the sum of its parts…. it is the level of customization and integration that sets solutions above products or services or bundles of products and services.
Sawhney (2006: 369)	[A solution is] an integrated combination of products and services customized for a set of customers that allows customers to achieve better outcomes than the sum of the individual components of the solution.
Sawhney *et al*. (2006: 78)	A solution is a customized, integrated combination of products, services and information that solves a customer’s problem.
Davies *et al*. (2006: 39)	[Solutions entail] providing innovative combinations of technology, products and services as high-value unified responses to business customers’ needs.
Cova and Salle (2007: 142)	[A solution is] the combination of elements of the offer, which will contribute to producing value for the customer.
Sharma *et al*. (2008: 301)	Solutions are customized and integrated offerings of products and services that are designed to solve a particular customer need/want or problem.

It is important to note, however, that the majority definitions for solutions are constructed from a firm’s point of view – they do not necessarily reflect how customers themselves conceptualise solutions. Recent research has shown that customers tend to think of solutions in terms of relational processes and interactions between the firm and themselves (Tuli *et al*., 2007), whereas the majority of definitions in the literature take a more “product”-centric view, emphasizing integration of products and services (Sawhney *et al.*, 2006; Nordin and Kowalkowski, 2010). Given that customers are ultimately the reason for, and end users of, solutions, as well as ultimate determiners of value through value-in-use, it is extremely important that this element of relational process is not overlooked. Therefore, this discussion of customer solutions will use Tuli *et al.*'s (2007: 5) definition:

> A solution is a set of customer-supplier relational processes comprising (1) customer requirements definition, (2) customization and integration of goods and/or services and (3) their deployment, and (4) postdeployment customer support, all of which are aimed at meeting customers' business needs.

Aside from definitional issues, there is also significant debate and confusion in the solutions literature regarding what comprises a holistic customer *solution*, as opposed to simply a *bundle* of products and services. As evidenced in the literature above, the integration of products and services is considered to be a key component of a solution. However, it is essential to differentiate between more traditional product bundling and newer comprehensive solutions (Davies, 2004): a product bundle is composed of standardized components at set prices, with customers expected to purchase the full line of products, irrespective of their individual needs and wants (Porter, 1985), whereas solutions comprise customized components which are combined and priced according to a customer's specific requirements (Hax and Wilde, 1999) to provide the most potential value to those customers. The composition of a solution offering will vary with the value proposition offered by a specific firm (Bonnemeier *et al.*, 2010). Under the auspices of discussing solutions, some authors end up deliberating no more than product bundling (e.g. Galbraith, 2002; Matthyssens, and Vandenbempt, 2008), a very different concept from solutions altogether. Above all, a solution must be an inclusive offering that meets and attempts to rectify a firm's *specific business needs* (Doster and Roegner, 2000).

Given the complexity, and sheer variety, of solutions, several authors have tried to build understanding of this phenomenon by attempting to isolate key characteristics that can be attributed to solutions. This appears to have been a particular challenge as solutions, by their very nature, are uniquely designed and/or tailored to suit the specific needs and value-creation processes of each recipient and thus may not all share common elements. Dunn *et al*. (1991: 155) usefully provide a set of four broad classifications in which to group solutions, from simplistic to complex: point product; point solution; business solution; and enterprise solution. Each type of solution targets a different end user (e.g. technical users or corporate management), and thus comprises a variety of component parts. As a firm moves down the continuum from offering point products towards offering enterprise solutions, they will undertake a move from single transaction to program purchases and will encounter growing complexity whilst increasingly having to create, rather than respond to, demand. Adopting a more simplistic categorisation, Galbraith (2002: 197) posits that there are essentially two types of solutions, horizontal and vertical. Horizontal solutions are generic and quite applicable across numerous customers (e.g. product bundles with limited customisation), whereas vertical solutions are more customer-centric and tailored to individual clients.

In terms of the specific features of solutions, Nordin and Kowalkowski (2010), in their seminal (and much needed) review of the solutions literature, have isolated a number of important characteristics. These include the degree of customization, degree of integration, solution range, bundling and proactive/reactive nature of the solution. Whilst each of these elements is important, the overwhelming consensus in the literature is that *customization* and *integration* are the key elements in the creation of an effective solution (Miller *et al*., 2002; Johansson *et al*., 2003; Krishnamurthy *et al*., 2003; Sawhney, 2006).

Customization

Throughout the solutions literature, customization is noted to be an integral part of any solution. After all, without a high level of customization, a solution would arguably cease to exist – it would simply become a generic product or service. Unsurprisingly, research has shown that customers themselves also consider customization to be an integral part of a solution and a major contributor to value creation (Tuli *et al*., 2007).

In essence, customization is considered to involve designing, modifying, and/or selecting products to fit into a customer's business environment (Tuli *et al*., 2007). This can occur in different ways, at one or many points during a customer's product or service lifecycle. Customization often occurs during design, assembly, delivery, operation, or pricing (Cornet *et al*., 2000), but is in no way limited to just these stages. It is also important to remember that the degree of customization will vary from solution to solution and can range from segment-specific to customer-specific customization (Krishnamurthy *et al*., 2003). This will depend upon a number of conditions, including the capabilities of the firm and the desires of the customer. As customers are rarely, if ever, identical in their needs and wants, it is particularly challenging (and arguably impossible) to create a "one size fits all" solution for customers (Sawhney, 2006: 370), so a degree of customization will always be required.

However, there are certain cautions to keep in mind. First of all, any solution will need to work with the existing systems a client has in place. Thus, customization is essential to a point (e.g. building on to existing infrastructure/protocol), but potentially damaging past that point (e.g. tailoring to the point that the solution and existing infrastructure become mutually exclusive). The customized solution must also be flexible and adaptive, potentially requiring additional customization as time moves on. Any solution that is too rigid and inflexible is unlikely to mesh well with existing systems and, most importantly, to meet a client's changing needs. After all, as Davies *et al*. (2006: 40) observe, customers "are buying guaranteed solutions for trouble free operations". It is therefore essential that any developed solution maintain a high degree of customization, whilst encompassing, as far as possible, all client specifications, both explicit and implicit (Matthyssens and Vandenbempt, 1998).

Integration

In addition to customization, integration is also considered to be a key characteristic of any solution. As Sawhney (2006: 366) expertly observes, "products are merely means to an end. To help customers achieve their ultimate goals and outcomes, products and services need to be integrated into customer solutions that solve the complete customer problem", thus allowing for the creation of additional customer perceived value.

The literature considers integration to entail "designing, modifying, or selecting goods and services that work well with one another" (Tuli *et al.*, 2007:7); this process should always result in a useable and useful outcome (Miller *et al.*, 2002) that provides additional benefit to the customer. Integration itself can encompass both internally and externally developed components (e.g. hardware, software, products, or other services), provided that they are combined into a functional system as a final output (Davies, 2004) that provides value beyond the sum of its parts (Krishnamurthy *et al.*, 2003). However, firms are increasingly faced with the added responsibility of also co-ordinating many external (but linked) services. Davies (2004: 753) notes, "for many firms, the biggest challenge will be developing the capabilities to integrate different pieces of a system provided increasingly by an external network of specialized component suppliers." As many firms continue to move up their value chain, thus producing more value-added products, integration necessarily becomes more complex (Galbraith, 2002: 198).

Despite this complexity, integration within a solution can provide numerous benefits to clients. Integration (of products and services, or through the value chain) is often able to help customers reduce costs, reduce risk and complexity in daily operations, as well as freeing up time for employees to focus their attention on other parts of the business (Miller *et al.*, 2002), thus having a direct impact on customer perceived value and ultimately value in use. It is important to remember, however, that in order to achieve these benefits, a solutions package should be truly integrated, not simply disparate pieces packaged and sold together. While many components will need to co-ordinate and function together, in an ideal situation solutions components are specifically designed with this functionality in mind.

Unfortunately, many firms have only a limited understanding out how the integration of products and services should, and could, be carried out, as well as the challenges posed by integration (Oliva and Kallenberg, 2003). To help clients overcome this knowledge gap, solutions providers need to be able to demonstrate all the available options, as well as the potential benefits of each. Above all, any integration needs to "deliver better outcomes than the sum of the individual components" (Nordin and Kowalkowski, 2010: 454).

Solutions process

Although the literature actively debates the key characteristics of a solution, there is minimal discussion about what solutions actually look like or, more importantly, how one might go about creating a solution. Kapletia and Probert (2010) note that there are two streams in the literature covering the solutions process: (i) migration from product to service and (ii) the management and integration of services. However, neither of these streams truly addresses the basic nature of solutions. It is essential to remember that a solution is much more than simply adding a service component to a new or existing product – a solution is a holistic package, designed to solve a client's unique problem and thus help create perceived value for that customer.

Ultimately, the solutions literature, like so much of the literature discussed in this chapter, is more conceptual than instructional (Nordin and Kowalkowski, 2010). This is somewhat understandable, given that solutions are not by nature "black and white", but rather infinite shades of grey. However, this complexity means that any clarifications or guidance would make a tremendous difference to researchers in this field and, more importantly, to business leaders and solutions providers. Usefully, Miller *et al*. (2002) provide some basic guidance on how to manage the transition to solutions provision. They note that it is essential to start small then reflect on any patterns and outcomes, after which the firm should be able to set strategic priorities based on their earlier experiences. The final key point is to encourage active learning within the organisation (Tuli *et al*., 2007) by giving a voice to clients and other participants in the solutions process through a two-way communication process (Kumar *et al*., 2010).

Fortunately, several authors have sought to isolate the core steps a firm must undertake in order to build a solution. Brady *et al*. (2005) first proposed that the solutions process encompasses four stages: (i) strategic engagement (pre-bid activities); (ii) value proposition (activities during the bid/offer); (iii) systems integration (executing the solution); and (iv) operational services (post-project activities). This linear view of solutions is further reinforced by Davies *et al*. (2007), who add that phase (i) is also likely to include aspects of "solutions selling" (e.g. identifying client needs, offering suggested solutions and coordinating the integration of necessary components into a solution).

Relatively recently, Tuli *et al*. (2007) have taken a more iterative and non-linear view of solutions building. While there may still be an element of linearity (implementing a process with steps and expected outcomes), building an effective solution necessarily requires frequent interactions with customers and, where necessary, component providers. These interactions throughout the process in turn have the potential to change the direction of a solution at any time, thus making the solutions process iterative and emergent, rather than completely linear and prescriptive. In line with the work of other authors, Tuli *et al*. (2007) present a four-stage model for solutions development: (i) requirements definition; (ii) customization and integration; (iii) deployment; and (iv) post-deployment support. They do heavily stress that this is a set of *relational processes* between the supplier and customer, where interactions and dialogue are key.

Requirements definition

This first element of the solutions process is a critical one – an analysis of a customer's problem that ends with the identification of products and services needed to solve that problem (Sawhney, 2006). If a client's needs and requirements are not correctly identified at the beginning of the process, it is unlikely an effective solution will be delivered. Unfortunately, this step is often one of the most challenging, as customers may not be fully cognizant of their business needs and often they are unable to adequately articulate them (Matthyssens and Vandenbempt, 1998; Tuli *et al*., 2007; Nordin and Kowalkowski, 2010). In such situations, responsibility falls on the solutions provider to help identify any issues or problems faced by the client. Research has demonstrated that customers feel it is important for providers to probe multiple stakeholders in client firms to identify any recognized and unrecognized needs (both current and future), as well as to understand the customer's broader business needs in order to begin developing the most effective and valuable solution possible (Doster and Roegner, 2000; Tuli *et al*., 2007). This is the opportunity for a customer to determine their level of involvement in the co-creation/co-production process.

Customization and integration

As discussed in detail earlier, these are arguably the two most important characteristics of a solution. There is a real difference between solutions based around products and solutions truly based around customers or end users (Kapletia and Probert, 2010) – the latter take full advantage of customization and integration and are tailored offerings to meet customers' specific needs and fit around their value creation processes.

Deployment

Deployment refers to the delivery and installation of the solution into a customer's environment (Tuli *et al*., 2007). During this process, it is likely that anticipated and unforeseen issues will arise, thus resulting in further modifications of the solution. This is where the iterative aspect of solutions development is likely to be at its most visible.

Post-deployment support

Post-deployment support is the final component of the solutions process. Whilst some firms may think of this as the last step before project sign-off, post-deployment support is about much more than simply providing routine maintenance, spare parts and operating support. During the post-deployment phase, firms should also be prepared to deploy any new solutions evolving in response to the changing requirements of a customer (Tuli *et al*., 2007). This is also the time for firms to cultivate their relationships with customers, in the hopes of establishing longer-term business partnerships (Doster and Roegner, 2000) for lasting value.

During this solutions process, it is essential for firms and their customers to maintain open communications and interactions. Suppliers and customers can both view solutions in a different light, with practitioners often suffering "from misalignment of strategy and expectations, particularly where there is a shift away from tightly bounded offerings and strict specifications towards more open, network oriented and relational forms of exchange" (Kapletia and Probert, 2010: 584). To overcome this, solutions providers must be in agreement with their customers on both the expected outcomes and the process in which to achieve them, engaging in business process re-engineering when required. Such a process is a form of systems analysis (Payne and Frow, 2005). Both sides need to be realistic in their expectations (Doster and Roegner, 2000).

In any case, a solution is expected to provide a positive outcome of sorts. Given that a solution is, in simplistic terms, designed to answer a customer's unique business problem, its ideal outcome should be solving said problem. However, as discussed, some problems are articulated better than others and will thus have clearer solutions. There is also always the possibility that there are multiple solutions to any given problem (Nordin and Kowalkowski, 2010). Within the literature, there seems to be a sense of agreement on the outcome of solutions. Most authors agree that the two most important outcomes are the satisfaction of customer needs, either latent or expressed (Miller *et al*., 2002; Tuli *et al*., 2007) and the creation of value for customers (Matthyssens, and Vandenbempt, 1998; Johansson *et al*., 2003; Matthyssens, and Vandenbempt, 2008; Nordin and Kowalkowski, 2010), whether it be customer perceived value or, ultimately, value determined though use.

3.5.3 Need for customer engagement

As one can see, value creation at the interaction level, be it through co-creation/co-production activities or providing holistic customer solutions, is fundamentally reliant on interactions between firms and their customers. It is through these interactions that firms and their customers participate in the shared dialogue and experiences which not only build and strengthen their relationship and potential reciprocal value creation (Grönroos and Ravald, 2009), but which can also influence and contribute to the customer's own unique value creation activities (Sashi, 2012). With it widely recognised that a firm's present and future success is directly linked to its ability to "retain, sustain and nurture its customer base" (van Doorn *et al.*, 2010: 253), the need for firms to deeply engage with customers through interactions to influence the creation of perceived value is imperative for sustained financial performance (Voyles, 2007).

Whilst the importance of interacting with customers is undisputed, traditionally firms have focused more on "transactional behaviour" (Verhoef *et al*., 2010), such as acquiring and retaining customers (Kumar, 2008), measuring customer satisfaction (Lytle *et al*., 1998) and service quality (Zeithaml, 1988; Zeithaml *et al*., 1996) and encouraging customer participation (Bendapudi and Leone, 2003), rather than on specifically facilitating interactions for customer value creation. Now, with firms increasingly cognisant of the need for "two-way relationships with customers that foster interactions" (Kumar *et al*., 2010: 297), many have begun to engage with customers on a deeper level, acknowledging that value creation is not necessarily just an outcome - the process and strength of engagement in the pursuit of value is equally important (Higgins and Scholer, 2009; Sashi, 2012). Linked to the interaction concept, *customer engagement* is emerging as a new perspective (Verhoef *et al*., 2010) in the customer management field, as well as a conceptual domain in its own right (e.g. Brodie *et al*., 2011).

Although *customer engagement* (CE) is a common focus and key performance indicator (KPI) for many businesses, particularly those engaged in marketing research (van Doorn *et al*., 2010), as a larger concept it has, until recently, received little attention, particularly from the academic community (van Doorn *et al*., 2010; Kumar *et al*., 2010). The Economist Intelligence Unit is largely to thank for initially bringing the concept of (and issues pertaining to) customer engagement to the attention of a wider audience, noting that:

> [C]ompanies are now realising that engagement is also a more strategic way of looking at customer and stakeholder relationships. In this emerging approach, engagement refers to the creation of a deeper, more meaningful connection between the company and the customer, and one that endures over time. Engagement is also seen as a way to create customer interaction and participation (Voyles, 2007).

With businesses increasingly focused on creating value for customers, the recognition that CE might provide the strategic approach necessary to foster the interaction and participation necessary for customer value creation has led to a growing interest in customer engagement (Libai, 2011), as both a construct and an operationalisable framework, particularly within the marketing literature (Brodie *et al*., 2011). There is considerable value in this concept, particularly as it is further developed and refined by the academic community, as has occurred with S-D Logic. However, despite the recognition that engaged customers participate in the co-creation of experience and value (Prahalad and Ramaswamy, 2004; Brakus *et al*., 2009), very little is known about how CE influences value creation (Bolton, 2011), let alone how CE should best occur in practice. With few references to "customer engagement" in the literature before 2005 (Brodie *et al*., 2011), and only a handful of authors attempting to define and conceptualise the concept, CE is still very much in the development phase (Kumar *et al*., 2010), despite a rich (and growing) body of emerging literature (Libai, 2011).

Customer engagement as a conceptual domain

To differentiate customer engagement form similar concepts such as participation and involvement in the literature (Brodie *et al*., 2011), a number of authors have attempted to define and conceptualise CE. Some view customer engagement as a psychological state (Hollebeek, 2011) or "a behavioural manifestation toward the brand or firm that goes beyond transactions" (Verhoef *et al*., 2010: 248), and others as a psychological process which in turn affects customer loyalty (Bowden, 2009). With its conceptual roots in psychology and organisational behaviour (Brodie et al., 2011; Hollebeek, 2011), this psychological (and behavioural) element of CE is an important differentiator (van Doorn, 2011), as “customer engagement behaviours go beyond transactions” and result from motivational drivers (van Doorn *et al*., 2010: 254) that encourage engaged customers to take action (van Doorn, 2011). Subsequent engagement is further influenced by commitment and trust between firm and customer (Gregoire *et al*., 2009; Sashi, 2012).

These behaviours, if customer engagement is successfully executed, can take many forms and can ultimately provide value to the customer (van Doorn *et al*., 2010) and to the firm as well. Kumar *et al*. (2010: 299) posit that a firm itself can reap “total customer engagement value”, which is seen as the combined result of a number of customer behaviours: (i) customer purchasing behaviour; (ii) customer referral behaviour; (iii) customer influencer behaviour; and (iv) customer knowledge behaviour. Whilst useful from the perspective of a firm’s value creation, this framework fails to address how customers derive value through engagement behaviours. For discussions focused on how firms can help influence their customer’s value creation in the hopes of ensuring their own value creation and success, this presents too narrow a view of the total value of customer engagement.

Building on all this previous work, Brodie *et al*. (2011) have attempted to provide a more thorough – and much needed – conceptualisation of CE as a holistic construct (Bolton, 2011). At the heart of their conceptualisation is the *interaction* between a firm and their customers to co-create value, so they have drawn heavily on Service-Dominant Logic (Vargo and Lusch, 2004) as their inspiration and theoretical lens (Brodie *et al*., 2011; van Doorn *et al*., 2010), as well as on the interaction concept (e.g. Grönroos, 2011a) and relationship marketing (e.g. Gummesson, 1995). As Vargo and Lusch did with S-D logic, Brodie et al. have developed a set of Foundational Principles for customer engagement as a conceptual domain (see Table 3.4).

Table 3.4 Foundational Principles of customer engagement

	Brodie *et al*. (2011: 258)
FP1	CE reflects a *psychological state*, which occurs by virtue of *interactive experiences* with a *focal agent/object* within specific service relationships
FP2	CE states occur within a *dynamic*, *iterative* process of service relationships that *cocreates value*
FP3	CE plays a *central role* within a *nomological network* of service relationships
FP4	CE is a *multidimensional concept* subject to a context- and/or stakeholder-specific expressing of relevant cognitive, emotional, and behavioural dimensions
FP5	CE occurs within a specific set of situation conditions generating differing CE *levels*

These principles ground CE as a psychological state, focused on the creation of interactive and co-created experiences that ultimately create value for the customer. If customers are truly engaged and experiencing value creation, they should be able to "go a step further than customers who are "just" loyal to a company and repeatedly purchase products or services" (van Doorn, 2011: 280) and thus contribute to the firm's performance and success (Kumar *et al*., 2010).

This conceptualisation of CE and its foundational principles has been strongly supported (e.g. Bolton, 2011; Libai, 2011; van Doorn, 2011), however there is still further development needed. The FPs will need to be refined and clarified, taking into consideration the nature and dynamics of the relationships between them (Bolton, 2011) – for example, do the dynamic and interactive processes of FP2 alter the psychological state of FP1, and what is the implication of the situation conditions of FP5? Importantly, there is a need to better understand how customer engagement can best be measured and to develop such a scale or metric to allow CE to be a measurable construct (Brodie *et al*., 2011). From a management perspective, it is also important to understand how CE influences customer purchasing decisions and consumption behaviour, and what specific types of interactions can best lead to positive customer engagement states and experiences (Bolton, 2011). These might be elements like customer feedback and complaint management (Kumar *et al*., 2010), emphasised in customer satisfaction metrics and Quality Management Systems like ISO (Vavra, 2002), or more general messaging and communication with customers

(Higgins and Scholer, 2009). As with other areas addressing how customer value creation can be fostered and influence, there are a number of practicalities to bear in mind.

Practicalities for value co-creation

Value co-creation is conceptually straightforward and inherently appealing in its rationality. In practice, however, influencing a customer's value creation process is far from simple. With so many factors and processes potentially contributing to co-creation, combined with the unique needs (and personality) of every individual customer, how can firms ever hope to successfully influence potential value creation for all their customers?

First off, as discussed, not every customer will want the same level of interaction or participation in co-creation processes and activities – some might want to simply purchase an offering, preferring to derive value only through use, whilst others might welcome potential value creation at an earlier stage. Those that do wish for greater involvement will self-select; it is with this group of "engaged customers" that the practicalities of value co-creation come into play. Firms must be cognisant of the need to facilitate value creation, be it through co-production activities, interactional and relational customer engagement, or the development and implementation of customised "solutions" offerings, that is ultimately both profitable and deliverable. With this in mind, firms need to think about how co-creation activities can best be co-ordinated and made cost-effective, lest firms face organisational constraints that prevent them from fully engaging in co-creation (Hoyer *et al*., 2010).

Co-ordination of co-creation activities

In terms of co-ordination of co-creation activities, firms first need to determine the level of interaction necessary for (and desired by) particular clients. This knowledge will then dictate when firm-customer interactions will occur (e.g. specified interactions at specified times, or spontaneous interactions at will) and how they will occur (e.g. face to face, telephone, email, through technological platforms such as a company website or customer space, or through social media). There is no one right kind of interaction, nor means of interacting – these will be entirely dependent on the individual needs of customers. There are, however, certain types of interactions that should derive value for all audiences, and one of these is customer feedback. Feedback is an effective contributor to value creation, both in helping firms improve their own offering and service (Fornell and Westbrook, 1984; Morgan *et al*., 2005), as well as in giving customers the opportunity voice their satisfaction or dissatisfaction and discuss their experiences. Having appropriate feedback mechanisms in place can contribute to value co-creation, so many firms have developed technological platforms that allow customers to voice any concerns (van Doorn *et al*., 2010). Other than handling feedback, these can also act as generic platforms to facilitate sharing the "voice of the customer" (Cooper, 1999), which then allows firms to engage in a deeper co-creation dialogue (Jaworski and Kohli, 2006).

For customers to actively engage in a co-creation process, there needs to be a certain level of trust between organisations (and individuals within those organisations), so all interactions should designed and co-ordinated to build trust between a firm and each of its customers. "Trust" can be conceptualised as having confidence in a partner's reliability and integrity (Morgan and Hunt, 1994), particularly that what a partner says can be relied on (Rotter, 1967) in terms of any expected outcomes (Anderson and Narus, 1990). To do so, firms will need to make sure that any personal or sensitive commercial customer information (e.g. purchase history, business requirements) is kept confidential, as there may be concerns about secrecy (Hoyer *et al*., 2010). This is particularly important if co-creation activities involve the use of a customer's unique resources or IP, or if co-creation is occurring through co-production or solutions provision. During these types of activities, it is inevitable that a degree of sharing will occur between a firm and its customers, but this should occur in a secure and considerate manner. At times, if they are unable to deliver co-creation alone, it might be necessary for a firm to bring in external assistance to support certain co-creation activities. This is often the case when firms co-develop solutions with customers; firms are increasingly relying on strategic partners when developing and delivering these highly customised solutions (Miller *et al*., 2002; Windahl and Lakemond, 2006). Bringing a third party into the co-creation process can be very challenging: not only is more co-ordination of interactions and service required, but the costs of co-creation activities can also increase.

Costs of co-creation

Cost is perhaps one of the most important considerations for a firm engaging in co-creation activities. Ultimately, no matter how much they want to help create value for their customers, a firm must think about its profitability: co-creation is not a particularly low-budget undertaking, given the potential need for customization to meet every individual client's unique needs.

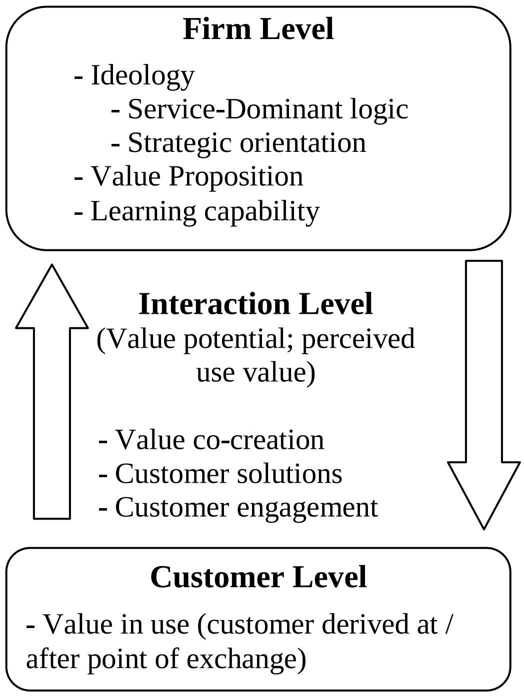
This is a particular issue for co-produced offerings or solutions. As Sawhney (2006: 373) notes, it is "difficult to create economies of scale in developing solutions. Therefore, a key consideration in the design of solutions is to provide the level of customization valued by the customers without significantly compromising operating margins". Customers might have wants and novel ideas, but these may simply be too costly or infeasible to actually deliver (Hoyer *et al*., 2010). Firms need be realistic in terms of what level of customisation and integration they are able to provide to customers, based on the solution's revenue potential, risks involved and breadth of future applications (Doster and Roegner, 2000). On way of keeping costs (be they for materials, labour, or even time) under control is through "economies of repetition" (Anderson and Narus, 1995; Sawhney, 2006) by replicating certain elements rather than starting afresh (e.g. using a base-model software platform for customer interaction and minimally tailoring it for each customer instead of developing new models for each customer). This idea also applies to more intangible competencies developed during co-creation activities. Any knowledge and experience gained can be codified, shared and reused in the future (Davies *et al*., 2006; Davies *et al*., 2007), thereby reducing the time (and associated cost) of engaging in co-creative activities.

Despite these practicalities, it is clear that a firm can, through interactions, influence their customers' creation of perceived value. Collaborative by nature (Vargo and Lusch, 2008a) and created by dialogue (Ballantyne, 2004) and experiences (Prahalad, 2004), value creation can indeed be facilitated through interaction-based co-creative activities such as co-production, solutions provision and customer engagement. With customers the "new source of competence" for organisations (Prahalad and Ramaswamy, 2000: 80; 2004), value co-creation is an increasingly important competitive strategy for firms and major contributor to performance (Lindgreen and Wynstra, 2005).

3.6 Conclusion

This chapter has reviewed the broader literature on value, specifically customer perceived value. Drawing on work from a number of research streams, including the customer value, value co-creation, Service-Dominant Logic, service science, services marketing, relationship marketing and integrated customer solutions literatures, this chapter has also developed and discussed a more holistic conceptualisation of firm-level and interaction level elements which have the potential to positively influence customer perceived value (see Figure 3.2, reproduced below). This is an important development, given that the value literature tends to focus on specific elements contributing to perceived value, rather than exploring this phenomenon from a holistic perspective.

Figure 3.2 Elements of customer perceived value creation



Source: Author

At the firm level, a number of competencies arguably enable a firm to help positively influence customer perceived value, including having a strongly customer focused ideology and orientation, having a clear value proposition (speed, flexibility, price etc.) and having the ability to learn from – and with – customer, particularly undergoing generative learning to reconfigure the organisation accordingly.

At the interaction level, where customer perceived value is influenced by exchanges between firms and their customers, interactions such as co-creation and/or co-production activities, provision of customised and integrated solutions, as well a depth customer engagement all potentially positively affect perceived value creation.

Such firm-level competencies and interaction-level activities are arguably of significant importance for firms, particularly in terms of development and growth. Given recognition within the literature that a firm's success rests on its ability to provide maintained superior value to their customers (Rintamäki *et al*., 2007; Sirmon *et al*., 2007; O'Cass and Ngo, 2011), there is potentially a relationship between positive customer perceived value creation and financial performance. The HGF literature indicates that this may be the case, as HGFs have been recognised to be differentiated from their slower-growing counterparts by their ability to create unique value for their customers (Barringer *et al*., 2005; Zhang *et al*., 2008).

The following chapter will assess in further detail the important overlap between the value literature and the HGF literature. It will also discuss and propose a conceptual framework for this thesis, built upon reviews of the HGF literature discussed in Chapter 2 and the value literature discussed in this chapter.

Chapter 4 Initial conceptual development

4.1 Introduction

Having reviewed both the HGF literature (Chapter 2) and the value literature (Chapter 3), there appears to be significant conceptual overlap between these two bodies, particularly in terms of the many firm-level competencies and customer-firm "interactions" conceptualised and discussed in the preceding chapter. However, any relationship between HGFs and the elements of customer perceived value creation requires further conceptual development, as these two areas are seldom explored in relation to each other. This brief chapter will conceptually explore the relationship between high growth firms and customer perceived value, resulting in the development of the conceptual framework and research questions for this thesis.

4.2 Value creation and high growth firms

As discussed in Chapter 3, it is widely acknowledged within the value literature that creating value for customers yields competitive advantage and superior financial performance for companies (Day and Wensley, 1988; Rintamäki *et al*., 2007; Sirmon *et al*., 2007; O'Cass and Ngo, 2011). With this link between value creation and financial performance in mind, one must ask whether the process of value creation helps to explain why some firms perform significantly better than others. Does value creation enable some companies to see turnover growth, particularly above average rates growth? Does it, in some way, contribute to companies becoming *high growth firms*?

The HGF literature indicates that this may be the case. Identified in Chapter 2, customer value creation is thought be an important contributor to rapid growth and a discriminator between high growth firms and slower growth firms (e.g. Birley and Westhead, 1990; Smallbone *et al.*, 1995; Kim and Mauborgne, 1997; Barringer *et al.*, 2005; Zhang *et al*., 2008; Puhakka & Sipola, 2011; Lindič *et al*., 2012). However, exploring the methodological and empirical underpinnings of these assertions highlights that the relationship between customer perceived value and HGF growth is largely unsubstantiated in the literature. Despite many authors noting the importance of value creation within HGFs, to date only three studies have empirically explored and identified a link between HGFs and the creation of unique value for customers (see Table 4.1), drawing on Kim and Mauborgne's (1997) conceptualisation of HGFs as focused on delivering superior value to customers through a strategic logic of "value innovation". This is a significant gap within the literature, particularly given the steadily growing number of authors citing value creation as a distinctive characteristic of HGFs.

Table 4.1 HGF studies addressing customer value

Smallbone *et al.* (1995)	Methodology	Qualitative (Content analysis of interviews; desk research)
	Focus	Firm competencies (firm ideology)
	Findings	HGFs are moving up the "value chain", evolving from providing a core activity to providing higher value products and doing more for their customers. They have an explicit strategy of adding value to any product being offered to the market.
Barringer *et al*. (2005)	Methodology	Quantitative (Content analysis of narrative case studies)
	Focus	Business practices (adding unique value)
	Findings	HGFs are more likely than slower growing firms to create unique value for customers, by helping customers to maximize utility, reduce costs and increase organizational effectiveness (through products or processes). HGFs also are more likely to have a sense of their customers' needs and desires.
Zhang *et al*. (2008)	Methodology	Quantitative (Content analysis of questionnaire data)
	Focus	Firm competencies (creating unique value)
	Findings	HGFs are differentiated from slower-growing firms by their ability to create unique value for customers.

Whilst these three studies provide interesting insights into HGFs, unfortunately none specifically explores the issue of value creation in detail. Any observation that value creation might be important is simply left as an observation, rather than explored and unpicked to truly understand its importance (or not). Methodological reasoning, clarity and transparency are completely lacking. This is perhaps due to the sources of data used, as two of these three studies have relied on analysing “second hand” data collected by other organisations for other purposes, rather than using data collected specifically for exploring value creation. More importantly, no authors have attempted follow up on Smallbone *et al.* (1995) and Barringer *et al*.’s (2005) observations to empirically explore this issue of customer value, specifically what kind of unique value HGFs offer to, and create with, their customers, how such unique value for customers is created and whether or not customer perceived value actually acts as an enabler of growth (and is truly a distinguishing feather between HGFs and non-HGFs). This is an important (and potentially fruitful) area for further research.

Despite a visible lack of studies specifically investigating the relationship between value creation and HGFs, or the role of high growth firms as creators of unique customer value, authors have identified a variety of HGF growth characteristics that are also arguably key elements in the creation of customer value. In fact, there is considerable conceptual overlap across the HGF literature and the value literature, including but not limited to:

4.2.1 Firm level

High growth firms are considered to have a unique organisational environment, often exhibiting a dynamic and customer-focused ideology and orientation (O’Regan *et al*., 2006; Parker *et al*., 2010), as well as a high degree of operational flexibility (Hinton and Hamilton, 2009; Hansen and Hamilton, 2011). This flexibility allows firms to respond to new opportunities (O’Regan *et al*., 2006; Hinton and Hamilton, 2009), whilst developing appropriate propositions and marketing for customers (Parker *et al*., 2010). HGFs are also recognised to emphasise internal firm development and organisational learning (Achtenhagen *et al*., 2010), which can impact organisational ideology as well as organisational processes. These competencies are also arguably important supplier-level preconditions for value creation.

4.2.2 Interaction level

Their focus on organisational learning and development also allows HGFs to have a thorough understanding of their customers' needs and desires, developed through close customer contact and interaction (Siegel *et al*., 1993). Many HGFs regularly talk to, or survey, their customers to gain a better understanding of their needs (Barringer *et al*., 2005) and focus on building longer-term relationships with their customers, thus generating recurring revenue rather than one-off transactions (Brush *et al*., 2009; Mason and Brown, 2010). With HGFs hiring (and investing in) the very best people, they often have staff of the highest quality (Hinton and Hamilton, 2009; Kirkwood, 2009; Mason and Brown, 2010; Hansen and Hamilton, 2011) and are therefore able to develop new, innovative and highly differentiated offerings (Hinton and Hamilton, 2009), including "whole service" (Smallbone *et al*., 1995) solutions (Davies, 2004), with which to entice and satisfy customers. These firms are sales oriented (O'Regan *et al*., 2006), but are considered to be focused on customer service (Kirkwood, 2009), developing new products for existing customers (Smallbone *et al*., 1995) and working in alliances with partners (Doorley and Donovan, 1999) to deliver superior offerings to customers. Strong relationships with their customers are believed to help HGFs exceed growth expectations (Brush *et al*., 2009).

There is, however, a need to investigate these characteristics is further detail, as well as to explore the issue of customer perceived value in depth. Whilst the current body of literature on HGFs hints at the presence of value creation, as well as its component activities and processes, the literature offers no understanding of if (or how) customer value creation might contribute to growth. This remains a significant knowledge gap. There is an urgent need to rigorously and empirically explore value creation in the unique context of high growth firms and that will be the focus of this thesis.

4.3 Conceptual framework and research questions

This research is predicated on two fundamental assumptions about the nature of rapid firm growth:

1. If rapid growth occurs, the firm has experienced an increase in its *turnover* and is therefore experiencing growth in *sales volume and/or value*;
2. In order to have seen a significant increase in sales growth (either in quantity or in terms of value), a HGF must hold some sort of competitive advantage in their marketplace.

With these assumptions in mind, the overarching goal of this thesis is twofold; to explore (a) *what causes HGFs to grow faster than other firms* and, as part of this growth process, (b) *whether the creation of customer perceived value is an enabler of this rapid growth*.

Based on insights gleaned from reviewing the HGF and value literature, a number of further research questions have emerged:

<u>(a) What causes HGFs to grow faster than other firms?</u>

Who and what are HGFs seeing greatest sales growth from?

Whilst it has been observed that HGFs prefer to service a small number of customers (Feindt *et al*., 2002; Brush *et al*., 2009; Hinton and Hamilton, 2009), are these new customers or existing customers? What type of customers are HGFs seeing their greatest sales growth from? And what are they selling to their customers? Do they tend to focus on physical products, intangible services or a combination of both? Is there a particular type of product offering that is responsible for significant sales growth? Do HGFs differ here from other slower-growing firms?

What does a HGF's growth process look like?

How do high growth firms grow? Do they follow a traditional "lifecycle" model of growth (Churchill and Lewis, 1983; Scott and Bruce, 1987) as explored in Chapter 2, or is rapid growth as idiosyncratic and random as increasingly believed (Vinnell and

Hamilton, 1999; Landström, 2005; Garnsey *et al.*, 2006)? Are there any events which might instigate growth such as the "tipping points" (Bessant *et al.*, 2005; Phelps *et al.*, 2007) or turning points (Garnsey *et al.*, 2006) discussed in Chapter 2 and, if so, do these differ between high growth firms and non-high growth firms? What is the role of customers in this growth process?

With an absence of studies addressing how HGFs grow over time, including typologies of growth and an understanding of what forces propel a firm to become "high growth", it is essential that this growth process be thoroughly explored, before investigating any potential enablers of growth. Without an understanding of what growth looks like over time, including when, how and why growth trajectories change, it is arguably impossible to discuss why rapid growth occurs, let alone whether or not certain elements have the capacity to influence such rapid growth. For the purposes of this research, a basic understanding of the HGF growth process will be required before it is possible to address this thesis' second objective – to explore the effect of customer value creation on growth.

<u>(b) Is the creation of customer perceived value an enabler for rapid firm growth?</u>

Are HGFs positively influencing perceived value creation through interactions with customers?

Is there evidence to substantiate the claim that HGFs are customer focused and create unique value for their customers (Birley and Westhead, 1990; Smallbone *et al.*, 1995; Kim and Mauborgne, 1997; Barringer *et al.*, 2005; Zhang *et al.*, 2008) in a way that differentiates them from other firms?

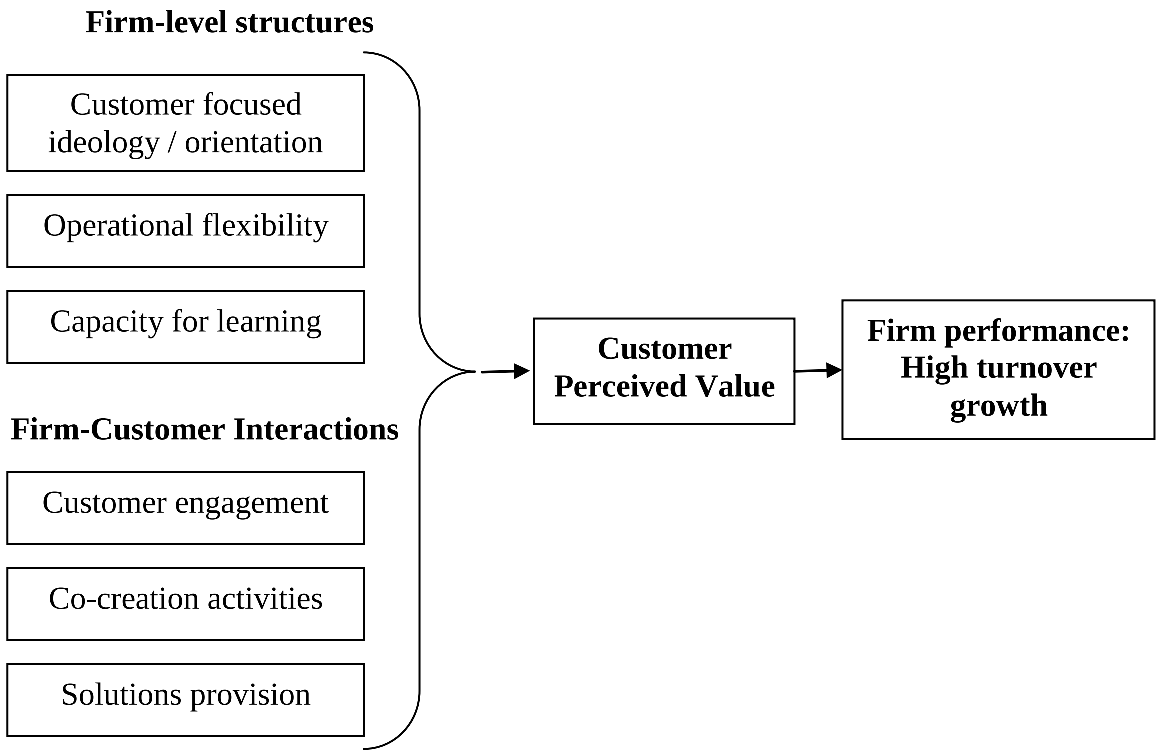
If so, how does this process occur and does it influence rapid growth?

How do HGFs actually influence customer perceived value creation? Is this achieved by focusing on product development and innovation (Porter, 1985; Smallbone *et al.*, 1995), helping customers to accomplish a task or solve a problem in a new or more affordable way (Barringer *et al.*, 2005), or through another form of interaction such as co-creation? If value creation is positively influenced, what effect does it have on firm growth? Can value creation be seen to cause growth, or does it in fact result from a time of growth? Does it appear to be an enabler of growth and competitive advantage, or simply a competency?

These questions will help to inform data collection and analysis; they also form the foundation for the conceptual framework of this thesis (see Figure 4.1). This framework is not designed to be tested, but rather to be a conceptual foundation upon which to explore customer perceived value and firm growth. It is possible that other elements not included in the framework could also impact the creation of customer perceived value, in addition to the firm and interaction level competencies and processes noted below.

As this thesis explores whether customer perceived value positively influences rapid firm growth, it is essential to remember that customer perceptions of value do exist in isolation. Rather, such perceived value is arguably influenced by a number of other factors, including a firm's inherent competencies (or structures), as well as other forces comprising firm-customer interactions.

Figure 4.1 Conceptual framework



Source: Author

At the firm level, there are a number of “structures” that influence a firm and its capabilities. In terms of customer perceived value, there are certain competencies that are believed to enable a firm to provide greater value for their customers, thus contributing to increased firm performance. These include having a customer-centric ideology and orientation (Sawhney, 2006; Mason and Brown, 2010; Parker *et al*., 2010), exhibiting a higher degree of operational flexibility (Hansen and Hamilton, 2011) and being able to learn from (and with) customers (Woodruff, 1997). Without these structures in place, firms are arguably less capable of providing the breadth and depth of interactions necessary to influence customer value. Whilst these structures are often associated with HGFs, their link with customer perceived value creation (and ultimately firm performance) has yet to be rigorously explored.

Supposition 1: HGFs are likely to exhibit a strongly customer focused ideology / orientation, to be flexible and adaptable in their operations and to be actively learning from their customers. These structures are likely to positively affect customer perceived value.

As customer perceived value is considered to ultimately be influenced during exchanges between a firm and its customers (Fyrberg and Jüriado, 2009; Grönroos, 2011a), there are also firm/customer interactions and activities that potentially positively affect customer perceived value and firm growth. Depth customer engagement is noted to have an impact on customer value creation (Voyles, 2007; Brodie *et al*., 2011) and is also observed within HGFs (Siegel *et al*., 1993; Barringer *et al*., 2005), particularly in regards to building longer-term relationships with customers (Brush *et al*., 2009).

Supposition 2: HGFs are more likely to be strongly customer-focused and engaging deeply with their customers, particularly existing customers.

The issue of co-creation - and its associated activities – can also potentially affect customer perceived value. HGFs are recognised to develop new and innovative products for their customers (Smallbone *et al*., 1995) including “solutions” (Davies,

2004) and working with partners (Doorley and Donovan, 1999) to best deliver these offerings.

Supposition 3a: HGFs are likely to work closely with their customers, taking an active role in co-creating high-value offerings.

Supposition 3b: HGFs are more likely to be providers of customized and integrated "solutions", rather than focusing solely on set products or services.

4.4 Conclusion

This short chapter has explored the connection between high growth firms and customer perceived value. It has addressed the considerable conceptual overlap between the value literature and the high growth literature, noting that many of the core elements of value creation are regularly attributed to HGFs. However, despite a number of authors acknowledging that HGFs are differentiated by their provision of unique value to customers, this chapter has been shown that such a link is tenuous and in need of considerable empirical investigation and conceptual development. Building on this observation, a number of research questions derived from the HGF and value literature were articulated, with a conceptual framework proposed for this thesis. The next chapter will discuss in detail the research design for this thesis, covering philosophy, research methodology and strategy, as well as methods used.

Chapter 5 Methodology

5.1 Introduction

As touched on in Chapter 2, the vast majority of the empirical work addressing high growth firms and the high growth phenomenon is quantitative and strongly focused on the analysis of variance of aggregated databases (Garnsey *et al*., 2006). This perhaps stems from the fact that many early HGF researchers were Economists, operating from a Positivist position (Pittaway, 2005). As subsequent research has largely been built on the observations of these pioneers, the HGF literature has been heavily influenced by (and more often than not grounded in) the Positivist paradigm, with reliance on a nomothetic approach to knowledge, hypothetico-deductive methodologies and quantitative methods (see Appendix 1).

Many HGF authors have sought to establish correlations between growth and certain firm or environmental factors, but the explanatory power of these studies tends to be limited: it is common for studies to report conflicting results, as often up to 80% of sample variance can be left unexplained (Curran and Blackburn, 2001). With this in mind, one must question how any variables are chosen in the first place. Authors infrequently articulate their rationale for examining specific factors, so it is not untoward to question whether variables are chosen based on their likelihood to limit unexplained variance (Delmar, 1997) rather than on observations/indications that they might influence growth. Additionally, one must also be wary about the nature of any correlations between variables and HGF growth. Given that high growth firms are identified based on growth over a specific (often 3-year) time period, an over-reliance on cross-sectional studies tends to result in data being collected that covers only these three particularly successful years (e.g. Achtenhagen *et al*. 2010). Arguably any correlations that are significant during this time period might cease to be significant if examined during a time of less rapid growth – they might explain how a HGF appears *during* a time of rapid growth, rather than what *affects* that rapid growth.

With so many authors examining (and re-examining) a plethora of correlations, the HGF literature remains fragmented, with limited conceptual development of the phenomenon (Dobbs and Hamilton, 2007), particularly about the causes, effects and process of rapid growth (Wiklund and Shepherd, 2003; McKelvie and Wiklund, 2010). To remedy this, there have been calls by authors to reach a sort of philosophical and methodological "convergence" (see Leitch *et al.*, 2010a) for future business growth and entrepreneurship research. Davidsson (2004) believes this convergence needs to come from the adoption of a single paradigm committed to hypothetico-deductive testing of large-scale scale aggregate databases using quantitative methods. Others disagree, noting that there are already so few "'innovative' research designs or empirical studies that go beyond 'standard' approaches" (Achtenhagen *et al*., 2010: 297) and that methodological pluralism is what is needed to develop a more holistic (and richer) understanding of growth, particularly as it is socially constructed, multi-faceted and complex (Leitch *et al*., 2010a; 2010b). This means that authors investigating HGFs should not be afraid to adopt different ontological and epistemological perspectives to growth, for example process theory (Moroz and Hindle, 2012), and they should be encouraged to draw on a range of methodologies and methods (e.g. Easterby-Smith *et al*., 2008; Leitch *et al*. 2010b), perhaps combining both qualitative and quantitative data analysis (Achtenhagen *et al*., 2010: 297).

With such growing recognition that new philosophical and methodological approaches are needed to further the development the HGF research, there is a need for future studies to consider new approaches and to select methodologies and methods that best suit the study of HGFs and allow for "unpicking" the complexities of rapid growth. This thesis will do just that, moving away from traditional positivistic quantitative approaches in favour of a "Critical Realist" position conceptualising the HGF phenomenon as the outward manifestation of a larger and more complex growth process. Building on the conceptual framework and research questions discussed in Chapter 4, this chapter will address the philosophical position and methodological approach of this thesis and will discuss in depth the methods used during the three phases of data collection.

5.2 Research philosophy

Research is a complicated process, involving not only numerous intricate procedures, but also a complex relationship between the researcher and their subject. To say that a researcher's view of the world impacts their research design, processes and outcomes is an understatement; they are fundamentally and inextricably linked. Kuhn (1996) acknowledged this linkage when he first referred to "paradigms". He discussed the concept of a paradigm as a research tradition determined by a set of shared beliefs within a particular research community. The accepted paradigm or "worldview" has a significant impact on research conducted within that community. For example, within the HGF field, where Positivism is the dominant and accepted paradigm, research designs and methods have had to conform to Positivism's associated ontological and epistemological foundations.

There are a vast number of established paradigms – even within the particular field of management research – each of which has their own unique combination of ontological and epistemological beliefs. Whilst four paradigms are dominant (Positivism, also referred to as Functionalism and sometimes Empiricism; Critical realism, also referred to as Postpositivism; Social constructionism, also referred to as Social constructivism, Interpretivism or Structuralism; and Action research, also referred to as Participatory research – not to be confused with action research as a methodology) (Easterby-Smith *et al*., 2002; Guba and Lincoln, 1994), there are many more to subscribe to (e.g. Pragmatism, hermeneutic phenomenology, critical theory etc.). Given this variety, it is possible for a researcher to identify with a particular paradigm, based on (a) an understanding of different paradigms' unique philosophical underpinnings and (b) an analysis of how these different ontologies and epistemologies reflect the researcher's own personal views of how the world works. Whilst it may appear to be easier for a researcher to adopt the "accepted paradigm" of their chosen field, ultimately one must remain true to their own beliefs, determining their own paradigm within which to work.

5.2.1 Ontology

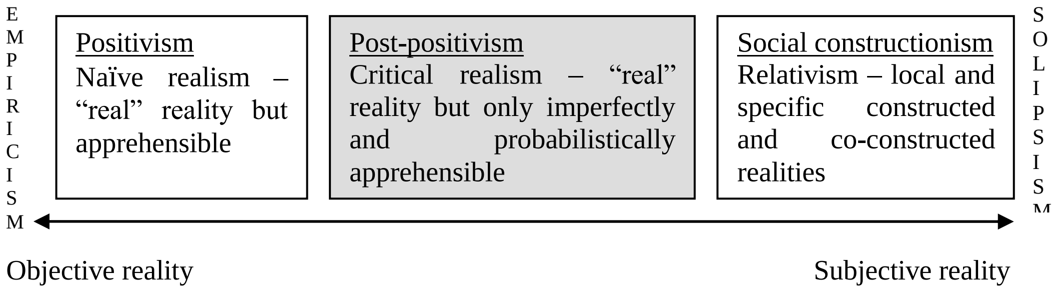
The foundation of any philosophical position, "ontology" refers to how one views the nature of reality (Easterby-Smith *et al*., 2002) – or the world in which one lives – and what can be known about it (Lincoln and Guba, 1985). Or, as Moore (1989: 874) succinctly notes, "a theory of what there is." Ontology also affects what one believes can be learned and known about the world (see *epistemology* in section 5.2.2) as well as how one can investigate it (methodology and methods – see section 5.3 for those employed in this research). Whilst ontological discussions cover a number of issues, one fundamental question asks "*what exists"*? Is there the existence of an external "reality" that is of an "objective" nature and independent from individual consciousness, or is "reality" socially constructed and "subjective" – the product of individual consciousness – and dependent on the perceptions of individuals (Burrell and Morgan, 1979: 1)? This issue of an objective versus a subjective reality is an important differentiator between ontological perspectives, as each perspective has epistemological and methodological implications.

Objectivism versus Subjectivism

On a continuum (see Figure 5.1), ontological positions range from being completely objective (a concrete physical world exists regardless of how an individual perceives it) to being completely subjective ("reality" only exists as a construction of an individual), with Solipsism[11] representing a particularly extreme form of subjectivism (Burrell and Morgan, 1979).

[11] As the Solipsist ontology favours nominalism, this paradigm is based on the denial of the existence of abstract objects and the belief that there is no existence beyond the sensations which one perceives within one's own mind and body (Burrell and Morgan, 1979: 239). Existence is viewed as an entirely personal and therefore subjective affair.

Figure 5.1 Continuum of ontological positions



Adapted from Guba and Lincoln (2005)

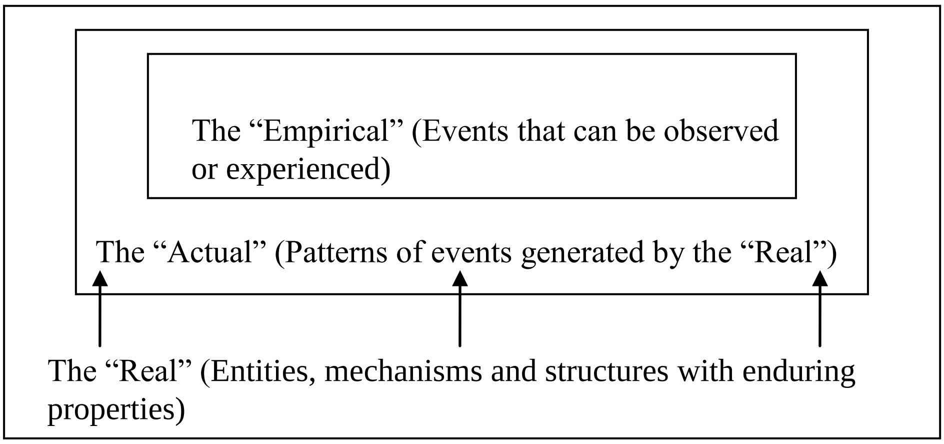
Positivism falls to the left of the continuum, espousing (naïve) *realism*, where a concrete and objective reality is “out there” (Denzin and Lincoln, 2000) and can be studied and explained through traditional scientific approaches to data collection and explanation of phenomena (Bryman and Bell, 2007:18). On the subjective end of the continuum, a Social constructionist ontology rejects the notion of *realism* in favour of *relativism*, where multiple realities exist, specifically constructed (and altered) by individuals (Laverty, 2003). Realities are not considered more or less true, but rather more or less informed (Denzin and Lincoln, 2000), thus realities must be investigated individually and in their own unique contexts.

Whilst Positivism and Social constructionism have very different views of reality, there is fortunately a middle ground. The position of “Critical realism” (henceforth CR) compromises between the two extreme positions of objective vs. subjective realities (Easterby-Smith *et al.*, 2002). CR is considered by some to be a form of “post-positivism” (e.g. Mingers, 2004; Guba and Lincoln, 2005), whilst others see it as a separate and distinctive position and an alternative to post-positivism (e.g. Patomäki and Wight, 2000; Alvesson and Sköldberg, 2009). Rather than focusing on empirical events themselves to explain phenomenon (as in the Positivist tradition), CR, a position initially identified by realist philosophers in the US in the 1920s (Cruikshank, 2003) and increasingly associated with British philosopher Roy Bhaskar (Danermark *et al.*, 2002), seeks to investigate the underlying structures and mechanisms that produce empirical events (Danermark *et* al., 2002; Reed, 2005).

CR insists on the existence of objective or "real" natural and social realities, which are complex open systems (Danermark *et al.*, 2002; Sayer, 1992), where something (an *entity*) is considered to be "real" if it has "causal efficacy" and affects behaviour or otherwise "makes a difference" (Fleetwood, 2005: 199). However, CR also acknowledges that the perception of these realities and entities can differ between individuals (Danermark *et al.*, 2002), as (a) some things are difficult if not impossible to perceive and (b) there is no theory-neutral observation – individuals *conceptually mediate* realities and their entities (Fleetwood, 2005: 199) as a result of their previous knowledge and experience.

Thus, CR espouses a "stratified ontology", in which "deeper structures or mechanisms shape events and regularities at the surface level" (Reed, 2005: 1630). This ontology consists of three nested domains of reality (see Figure 5.2): the "Real", the "Actual" and the "Empirical".

Figure 5.2 CR domains of reality



Adapted from Mingers (2004: 94)

The "Real" domain contains the "whole of reality" (Mingers, 2004), including entities and mechanisms that will (or will not) influence events. Such "real" entities exist whether or not they are identified by individuals (Fleetwood, 2005) and can be grouped into four different "modes of reality": materially real entities (e.g. oceans, mountains) that exist regardless of individual perceptions; ideally real entities (e.g. language, beliefs, ideas, theories) that are conceptual rather than physical, but “conceptually mediated” by individuals; artefactually real entities (e.g. computers) that are physically real, but conceptually mediated; and socially real entities (e.g. practices, states of affairs or other social structures) that depend on human activity to exist (Fleetwood, 2005: 199-201). Entities can both straddle modes and, as they change, shift to different modes.

The “Actual” domain comprises events that do (or do not) occur, as well as the “Empirical” which are those events that can be observed or experienced (Leca and Naccache, 2006; Mingers, 2004). Not all events will be observable, and those that are will be perceived differently from individual to individual depending on their unique own social conditions or intellectual mechanisms (Guba and Lincoln, 2005).

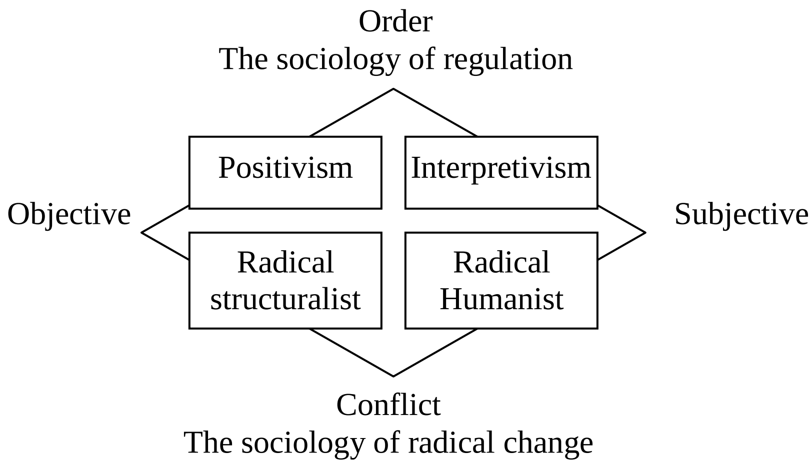
Given this stratified ontology, for Critical Realists the focus of study and explanation are on the *generative mechanisms* (Bhaskar, 1978) or the mechanisms and structures in the “Real” that “exist and act independently of the patterns of events they generate” (Reed, 2005: 1625). The term “structure” is used to refer to how a particular object (e.g. a company) is composed (Blundel, 2007), where objects (by virtue of their structure) have certain *causal powers* or the “potentials, capacities, or abilities to act in certain ways and/or facilitate various activities and developments” (Lawson, 1997: 21). The way in which such *causal powers* are exercised is termed a *mechanism*, or *generative mechanism,* if it results in an observable “empirical” event (Blundel, 2007). This interaction between mechanisms and structures – regardless of outcomes – needs to be viewed as a “continuous, cyclical, flow over time”, where things do not simply begin and end (Fleetwood, 2005: 203). Thus, research needs to consider both actors’ actions, as well as the deeper structures that generate events in a particular context – the two are “ontologically different but related levels of reality” (Leca and Naccache, 2006: 629).

In the context of this study, the “empirical” is the phenomenon of HGFs (we can see these firms have grown rapidly) and the “actual” is their rapid turnover growth, which results from the generative mechanisms in the “real”. The generative mechanisms this work explores are the firm-level competencies and interaction-level activities previously discussed in section 4.3.

Order versus conflict

As ontology addresses how one views the world in which one lives, an important element of any ontological position necessarily includes particular beliefs about the *theory of society*. Building on Dahrendorf's (1959) work on social theory which differentiated sociological approaches based on their underlying focus (social equilibrium vs. Social change), Burrell and Morgan (1979) examined sociological paradigms based on not only the subjective-objective ontological dimension, but also on a regulation-radical change dimension which addresses philosophical assumptions about the theory of society (see Figure 5.3). This second dimension contrasts order (the "sociology of regulation") with conflict (the "sociology of radical change") and identifies whether a paradigm's ontology views society as an orderly and stable construction, or whether it sees society as constantly in a state of change and flux. Whilst an overly simplistic classification (Davies, 1998) that omits a number of philosophical debates and positions, it is still useful conceptualisation of key paradigms (Pittaway, 2005).

Figure 5.3 Dimensions of ontological positions



Adapted from Burrell and Morgan (1979)

Focusing on the "sociology of regulation", Positivist and Interpretivist/Social constructionist ontology views society as a stable, integrated and co-ordinated structure, built on consensus amongst the members of society (Burrell and Morgan, 1979: 12). Unity and cohesion within society are emphasised. In contrast, two additional paradigms are seen to operate with a very divergent view of society: the sociology of radical change.

The "sociology of radical change" holds that society is always subject to processes of change where social change and conflict are ubiquitous (Dahrendorf, 1959). The two paradigms with this ontological view are therefore less focused on society as a cohesive whole – these positions instead seek "explanations for the radical change, deep-seated structural conflict, modes of domination and structural contradiction" (Burrell and Morgan, 1979: 17) which are believed to permeate society. Radical humanism (a paradigm focused on change from a subjectivist standpoint) emphasises overthrowing existing social arrangements and class structures, as seen in the early writings on Marx and in that of French existentialists such as Sartre (Burrell and Morgan, 1979).

In a similar yet different vein, the Radical structuralist paradigm looks at radical change from an objectivist standpoint, where fundamental conflicts in societal structures "generate radical change through political and economic crises" (Burrell and Morgan, 1979: 34). This is the paradigm of contemporary Marx, Lenin and Engels, as well of Austrian economist Joseph Schumpeter, with his notion of "creative destruction" as a source of constant market evolution and change (Schumpeter, 1987). This Radical structuralist paradigm is also where Critical Realism is seen to reside, with its objective view of reality and focus on how different structures and entities influence events in a specific context. Whilst the Radical structuralist paradigm (and Critical Realist position in particular) shares an objective view of reality with Positivism, its focus on structural change means it has a very different set of epistemological beliefs.

This Critical realist ontological position mirrors the researcher's own beliefs about the nature of reality, particularly in the context of HGF growth. The researcher personally believes that there is an external physical and social world that exists independently of all human cognition, but that individuals within this external world may perceive and understand "reality" (including its component entities and structures) in unique ways. These differing perceptions of reality stem from the fact that observed/experienced events often influence what one deems to be "real" and what one considers to be "true". Given that over a lifetime an individual will observe a completely unique collection of events[12], every individual will perceive reality in their own way, with understanding even changing "from place to place and from time to time" (Collins, 1983: 88). Despite the ability for individuals to uniquely perceive what is "real", there remains an external enduring reality which is not created, altered, or destroyed by any particular individual, which is constantly changing and evolving due to underlying forces that are largely unobservable in daily life.

5.2.2 Epistemology

The term "epistemology" refers to one's assumptions "about the grounds of knowledge – about how one might begin to understand the world and communicate this as knowledge to fellow human beings" (Burrell and Morgan, 1998: 1). From a research perspective, epistemological considerations are of great importance, as perspectives on the nature of knowledge - as well as how knowledge accumulation occurs - have a profound and direct impact on a study's research design and the methods employed.

Nature of knowledge

Given its objective ontology, where an independent reality exists, Positivism believes that reality can be known and that universal laws or "truths" can be identified through experiments that test predetermined hypotheses (Easterby-Smith *et al.*, 2002). Within these experiments, the researcher is expected to be neutral and

[12] It is highly improbable that any two people will have had *exactly* the same observations and

dispassionate (Schurr, 2007) and remain independent from the "object" under investigation (a dualist position), lest the object influence the investigators and thus threaten the experiment's validity (Guba and Lincoln, 1994). If hypotheses are valid and verified through observation, they are then considered to be "facts" (Burrell and Morgan, 1998; Oquist, 1978) which explain reality and, if replicable, are considered to be "true" (Guba and Lincoln, 1994).

In contrast, Social constructionism, given its denial of an independent reality, views truth as a relative concept, with notions of truth differing from individual to individual. As such, facts in the Positivistic sense do not exist. Rather, "facts" are the outcome of transactions and discourse – they are "individual and collective reconstructions" (Guba and Lincoln, 1994) where language, context and meaning are vitally important. Operating from this epistemological position, researchers are necessarily involved participants in the research process, engaging in the conversation and sense-making process, rather than being dispassionate observers (Denzin and Lincoln, 2000; Easterby-Smith *et al*., 2002).

Again, in its view about the nature of knowledge, Critical realism sits between Positivism and Social Constructionism. Whilst sharing Positivism's belief in an external reality, the CR epistemological position also takes on board the Social constructionist argument that different individuals will have their own unique "truths". With this in mind, CR understands that "that which is taken to be knowledge is a reflection of the prevailing discourse or language game" (Cruikshank, 2003: 1) – knowledge is heavily influenced by language and communication (Danermark *et al.*, 2002; *Sayer*, 1992) and is not ahistorical (Mingers, 2004). Given that reality cannot be directly accessed (Easterby-Smith *et al*., 2002; Cruikshank, 2003), it is therefore impossible to access universal manifest "truths". Thus, knowledge of the world is "fallible and theory laden" (Sayer 1992: 5). With this in mind, the focus should not be on seeking definitive truths and absolute knowledge, but rather seeking to improve interpretations of reality, where "knowledge" comes with each better interpretation (Cruikshank, 2003: 1) and the

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experiences during their lives.

current discourse of "facts" and "truth" stems from consensus between the different viewpoints of different observers (Easterby-Smith *et al*., 2002). Suppositions informing research, provided they are triangulated, methodologically trustworthy and appear probable, are likely facts (Guba and Lincoln, 1994) – until proven otherwise.

Accumulation of knowledge

In terms of the accumulation of knowledge, whilst CR rejects the notion that it is possible to determine ultimate truths, it does view knowledge creation as a cumulative process, much as Positivism does. Unlike the Social constructionist belief that knowledge cannot be accumulated because it evolves during conversation as individuals attempt to "make sense of what is going on around them" (Easterby-Smith *et al*., 2002) through discourse, CR believes in knowledge accretion, where new insights add to the "edifice of knowledge" (Guba and Lincoln, 2005). However, such insights are not adopted without question. Operating in the critical tradition, CR emphasises knowledge production and accumulation as a dynamic process (López, 2003), where any findings need to be determined as probable before being considered as facts and added to the knowledge base. Findings must "fit" with the pre-existing knowledge and understanding within the critical community (e.g. academics, editors etc.) (Guba and Lincoln, 1994) and are always subject to "revision and reformulation" (Reed, 2005: 1630).

Whilst sceptics might see Critical realism as merely a "useful compromise" between Positivist and Social constructionist beliefs (Easterby-Smith *et al*., 2002), CR has its own unique strengths and weaknesses as a research paradigm and a distinctive philosophy of science (Stones, 1996). To consider it simply a convenient position does CR a disservice. Critical realism offers its own unique ontology-epistemology mix (Reed, 2005), determining its own assumptions about the nature of reality and how that reality can be determined (Easton, 2002). The fact that CR is gaining in popularity (Reed, 2005) is perhaps less an issue of convenience and more a reflection of changing research interests – researchers operating from the CR position are addressing research questions and objectives "that require some reliance on rich reconstructions of reality plus interpretive emphasis that places understanding into a specific context" (Schurr, 2007: 166). However, given that CR does have a unique position, there are necessarily implications for research design and methods used (Archer, 1995), particularly in social science research (Easton, 2002).

5.2.3 Philosophical implications for this thesis

As this researcher identifies with the Critical realist philosophical position, this thesis has been grounded in the ontological and epistemological assumptions of CR. Not only does this position match the researcher's personal beliefs, it was also considered to be a particularly useful position to work from within the context of this research. With CR's focus on the generative mechanisms underlying observable empirical phenomena - and given this study's focus on the *process* of how HGFs achieve rapid growth (rather than the rapid growth itself) - the philosophical and methodological principles of the CR position were felt to be particularly suitable for the phenomenon to be explored. Whilst other positions (e.g. Interpretivism) can explore process, CR - with its stratified ontology and focus on generative mechanisms - arguably facilitates a deeper level of understanding of process, one focused more on patterns and processes and less on how individuals understand and interpret them. The Interpretivist concept of reality as an individually constructed concept is at odds with a belief in "empirically real" phenomenon such as HGFs, which arguably exist regardless of perceptions[13]. Within the wider entrepreneurship literature, a CR position has been found to be particularly helpful for studies examining the processes or epiphenomena underlying events (Leca and Naccache, 2006; Bøllingtoft, 2007; Blundel, 2007).

As noted in Chapter 2, the majority of HGF research to date has looked for correlations between owner/manager competencies and growth in essentially a "vacuum". Authors seldom recognise that rapid growth is simply part of a firm's larger developmental journey, where it is influenced not only by a firm's

13 Arguably three years of documented turnover changes of 20%+ per annum is "really" real and not socially constructed.

management but also its history, the environment (social, economic and political) in which it operates, as well as the people within it (including their own capacity for innovation, learning and development). CR arguably provides a more holistic philosophical underpinning for the study of firm growth.

Given that CR has a stratified ontology (Reed, 2005) with no single universal truth (Danermark *et al.*, 2002), from a research perspective the focus shifts from identifying correlations between variables to exploring the causal processes that influence events. This issue of different causal forces at work arguably reflects the complicated nature of rapid firm growth. Whilst growth is undoubtedly influenced by hidden mechanisms and structures (e.g. the capitalist system, government regulation, wider business environment etc.) it is also undeniably something that is influenced by individuals within an organisation as well, be they firm owners, managers and employees. Exploring these different "generative mechanisms" could well uncover insights into the HGF phenomenon that have been overlooked by the more Positivistic methodological approaches dominating the HGF literature. CR rejects the notion that "correlations between variables are to be taken as causal relations" (Cruikshank, 2003: 2), as such correlations are seen to be indicative of a "cause and effect" relationship between discrete events (Easton, 2002), rather than an exploration and explanation of the underlying structures and mechanisms at work (Sayer, 1992). Thus, research should focus on constructing a narrative about causal forces (both actors' actions and deeper generative mechanisms), rather than trying to discover the "truth" (Cruikshank, 2003: 1). This research project will do that, focusing on the generative mechanisms (e.g. firm-level competencies and firm-customer interactions) that act on firms to produce growth.

5.3 Research design

In line with the author's Critical Realist philosophical position, this thesis' methodology has been designed around CR considerations for data collection and evaluation techniques. As CR acknowledges that reality is real "but only imperfectly and probabilistically apprehensible" (Guba and Lincoln, 2005), it is difficult to identify the mechanisms and structures that underlie observable empirical events. In order to explore these causal powers and forces, CR relies on a *strategy of retroduction* (Leca and Naccache, 2006; Reed, 2005; Sayer, 1992) that is theory derived (López, 2003) (see Table 5.1).

Table 5.1 Retroductive mode of inference

Fundamental structure / thought operations	From a description and analysis of concrete phenomena to reconstruct the basic conditions for these phenomena to be what they are. By way of thought operations and counterfactual thinking to argue towards transfactual conditions.
Formal logic	No
Strict logic inference	No
The central issue	What qualities must exist for something to be possible?
Strength	Provides knowledge of transfactual conditions, structures and mechanisms that cannot be directly observed in the domain of the empirical.
Limitations	There are no fixed criteria from which it would be possible to assess in a definite way the validity of a retroductive conclusion.
Important quality on the part of the researcher	Ability to abstract

Adapted from Danermark *et al.* (2002)

This form of "backward reasoning" begins by asking "what, if it existed, would account for this phenomenon?" (Reed, 2005). It is a process of looking from a phenomenon of interest (e.g. HGFs), moving to explore what might lie behind that phenomenon (perhaps drawing on analogy or metaphor), before developing a conceptualisation or model of structures of conditions that are completely different from the phenomenon of interest but that are (at least partly) responsible for the phenomenon under study (Patomäki and Wight, 2000, pp. 224). This process reflects in many ways the "zoom in zoom out" concept found in the marketing literature (e.g. Leroy *et al*., 2013): after "zooming out" to see the big picture of a phenomenon it is them essential to "zoom in" to understand the underlying issues, themes or causes. At such a detailed level there is a lack of clarity, so it is then necessary to "zoom" back out to make sense of the minutiae in the context of the larger phenomenon. This form of inference, whilst a cornerstone of CR research, is arguably of equal use to those researchers from different positions, particularly those that seek to understand the forces underlying a particular phenomenon. The retroduction process usually covers the following activities (Danermark *et al.*, 2002: 109-110; Leca and Naccache, 2006: 635):

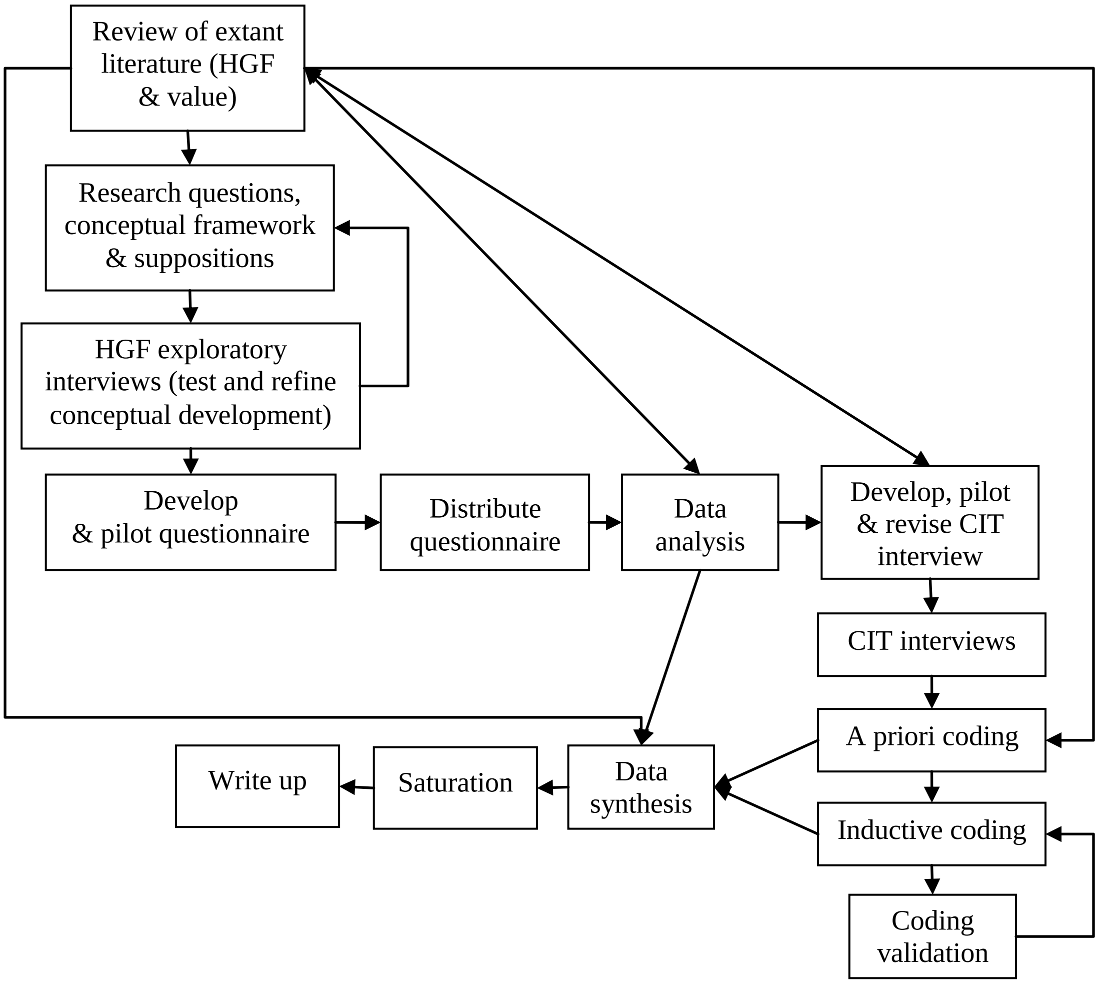
1. Description - observing a phenomenon (e.g. high growth) to identify and describe any causal powers that potentially influence the phenomenon (e.g. interactions with customers)
2. Analytical resolution - building a theoretical model (abstracted from observation and description) that posits how causal powers (and their associated events) affect the phenomenon in question (e.g. customer co-creation as a positive influence on growth)
3. Data collection - gathering data
4. Retroductive analysis - analysing data, considering the structures and mechanisms in place
5. Concretisation – explaining the mechanisms that result in concrete events and process

It is important to note that this process is neither linear nor prescriptive (Blundel, 2007). The ultimate goal of research should be to explore and explain the complex interactions and causal forces behind a phenomenon, rather than trying to predict, describe or deconstruct said phenomenon (Reed, 2005), where the researcher continues to ask “why” and to collect data until there appears to be an explanation of sorts (Easton, 2000).

5.3.1 Research process

This thesis followed a research process in line with the CR process detailed above. A simplified representation is provided in Figure 5.4.

Figure 5.4 Research process



The process began with a review of the HGF literature. Identifying the potential importance of unique customer value, a review of the value literature was then conducted [*1. Description*]. As discussed in Chapter 4, from this literature base the link between value creation and rapid growth was explored, research questions were identified and a conceptual framework was developed. Exploratory interviews with a sample of HGFs were conducted to explore and refine research questions and conceptual framework (see section 5.4) [*2. Analytical resolution*]. Given that this thesis focused on building theory rather than testing it (Eisenhardt and Graebner 2007), the use of "mixed" methods for data collection was considered appropriate (Molina-Azorin *et al*., 2012), particularly as this author subscribes to the belief that research methods are techniques for data collection and those that best fit the research exercise should be employed (Bryman and Bell, 2007) rather than restricting data collection based on an epistemological/ontological line (Leitch *et al*., 2010a). The CR position also encourages a mixture of data collection methods to identify and triangulate generative mechanisms and to facilitate retroduction (e.g. Brannen, 1992; Downward and Mearman, 2007), allowing researchers to explore the "big picture" and the "minutiae". Thus, two phases of data collection followed (both addressing the same research questions and suppositions) which included a large scale quantitative questionnaire covering equal samples of HGFs and non-HGFs (see section 5.5) and depth qualitative interviews with equal samples of HGFs and non-HGFs utilising the Critical Incident Technique (see section 5.6) [*3. Data collection*]. Each of these phases will be discussed in depth later in this chapter. Before, during and after the data collection the author went back to the literature as part of an iterative process of sense making by zooming in and out of the phenomenon of HGFs being explored, particularly ding the data analysis [*4. Retroductive analysis*]. *Concretisation*, the final stage of the CR process was achieved upon completion of this thesis.

5.3.2 Research considerations

When designing and undertaking this research, there were a number of issues that needed to be taken into account. These included determining the unit of analysis for this research and appropriate participants, how access would be negotiated, as well as how any research findings and outputs would be assessed for quality.

Unit of analysis

As this research focuses on customer value creation activity in high growth firms (and whether such activity enables rapid growth), the ultimate unit of analysis is HGFs as a "group". However, to explore customer value creation in HGFs as a whole, it is essential to examine firm-level competencies and structures that might facilitate value-creating interactions, as well as any "value-creating" interactions and associated activities in specific firms. These firm-specific observations will then be collated and analysed to determine whether any commonalities exist at the HGF "group" level (or between HGFs and non-HGFs). Whilst "HGFs" are often viewed as a cohesive group, research has identified that HGFs are very diverse: there is no common age, size or even sector (Mason and Brown, 2010). This heterogeneity will need to be borne in mind for any group level of analysis, as observations may need to be examined against different demographic factors.

In terms of firms to be studied, this research will focus on Scottish companies for data collection and analysis, drawing on comparative samples of high growth firms and non-high growth firms. These Scottish firms are the most accessible for the researcher, not only in terms of physical location, but also in terms of established company contacts to go through to mitigate access issues. Focusing on Scottish firms should not have an impact on the quality of this research, particularly the analytic generalisability of findings. As this research investigates common business issues and processes including interactions with customers, any themes and issues identified by businesses are likely to be universal and not specific to Scottish firms. Every business, no matter where it is located, needs to think about its products, markets and its customers.

Participant selection and access

Given the comparative nature of this research, it was essential to identify equal samples of high growth and non-high growth firms. At any one time, there is an average population of approximately 275 high growth firms in Scotland[14]. Given this very limited number, the entire identified population of HGFs during 2006-2009[15] (254 companies) was chosen as the HGF sample. In line with other recent work on HGFs (e.g. Mason and Brown, 2009; Coad *et al.*, 2012; Du *et al.*, 2013), firms were identified using the commercial database Financial Analysis Made Easy (FAME) which is populated with financial information submitted to Companies House[16]. This purposive sampling was necessary for this particular research, as a strong sample of HGFs (meeting all the required OECD criteria) was vital for any rich and illuminating data to be collected (Patton, 2002; Eisenhardt and Graebner 2007).

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14 Author’s calculations from the commercial database Financial Analysis Made Easy (FAME). Average HGF population calculated from 2003-2011.

15 HGFs were selected using the OECD turnover definition discussed in section 2.6.2

16 FAME also holds company contact information including telephone numbers and postal addresses.

For the comparative sample of non-high growth firms, a two staged sampling approach was used, combining purposive and probability sampling. Given that HGFs must have more than 10 employees, the population of non-high growth firms in Scotland with more than 10 employees (approx. 20,000[17]) was identified. Of these 20,000, those firms that had seen modest turnover growth (1-10% over 2006-2009) were identified as the target population of non-HGFs (approx. 15,000). This initial purposive sampling was required in order to identify a population of firms that would best contrast with the HGF population. If firms with less than 10 employees, or those experiencing terminal decline, were selected, any comparisons with top performing HGFs would be arguably invalid - it would be a case of comparing apples with oranges (Shepherd and Wiklund, 2009). Following the identification of the target non-HGF population, a simple random sample of 250 was identified by assigning each firm a unique number and selecting random numbers using an online random number generator.[18]

With comparable samples of HGFs and non-HGFs, it was then necessary to identify appropriate participants from each firm. Given that data collection was focused on firm-level competencies, interactions and processes, this research necessarily relied on the comments and observations of key knowledgeable informants within the sample firms (Seidler, 1974; Golden, 1992). Whilst each individual participant's observations of their firm's performance is influenced by their own context and experiences in the firm, focussing discussion on concrete firm-level events and processes - be they individual or collective actions and activities (Pettigrew, 1997) - can keep the discussion focused on issues at the firm level.

In order to best uncover and explore the firm-level competencies, interactions and processes that influence customer perceived value, it was essential to identify the individuals in sample firms who were best placed to participate in this research (Seidler, 1974). These individuals needed to have an appropriate knowledge of both

[17] Author's calculations from Scottish Government data.
[18] http://stattrek.com/statistics/random-number-generator.aspx

high-level strategic planning in the company (e.g. strategic plans for growth), as well experience of daily interactions and activities with clients. Any participant in this research needed be equally well-informed in both areas, lest the discussion be too "high-level" or too "low-level". In a small company the MD was often the best potential informant, as they tend to be very aware of what is going on in all parts of the business. For larger firms, however, the target participant was seldom the CEO or MD (such individuals tended to be quite removed from everyday interactions with customers, suppliers, etc.) or even a sales representative (whilst they know all about their customers, they were less likely to have knowledge of what is going on at a strategic level). In such larger firms, the ideal participant for this research fell somewhere in between – ideally business development managers, customer experience managers etc. who bridge the gap between top management and front-line staff. All informants needed to have been in their post from at least 2006 onwards.

To determine the appropriate participant in each sample firm required significant research. As this Doctoral project was funded by Scottish Enterprise, the researcher was very fortunate to be able to draw on SE's close links with a large number of Scottish companies. For those sample firms (HGF and non-HGF) who had a close relationship with Scottish Enterprise (just under one half of the total sample), SE Account Managers[19] were used to identify the most appropriate contact, bearing in mind the requirements just discussed. The Account Managers were also able to facilitate "buy-in" from informants and their firms, thus making the task of negotiating access far less difficult than it would have been otherwise.

For those firms with no relationship with SE, a more thorough process of informant selection was required. In January 2011, Scottish Enterprise commissioned Meridian, a UK market research company, to undertake an informant selection and "warm up" exercise. This exercise involved calling firms on the sample list (both HGF and non-HGF) without existing relationships with SE, (approximately 300

[19] Scottish Enterprise operates an Account Management system for approximately 2,000 Scottish businesses, where each of these firms has a dedicated Account Manager. Account Managers have close relationships with a number of key contacts within each of the firms in their portfolio.

companies) to (a) explain the nature of the research project and its importance, (b) determine the most appropriate contact person, based on the criteria discussed and pre-qualify suitable candidates and (c) to get “buy in” from that contact to participate in the research project. There was a very positive response to this exercise, with the vast majority of pre-qualified informants agreeing in principle to participate, thus further mitigating access issues.

Politics of research

Given that research is an inherently political activity (Easterby-Smith *et al.*, 2003), it was important for the researcher to carefully consider how to balance the academic requirements of this thesis with the desires of other stakeholders, whilst maintaining sufficient reliability and trustworthiness of the data collected. As noted earlier, this Doctoral work was funded by Scottish Enterprise, who requested that the researcher explore the phenomenon of high growth firms. Fortunately, the researcher was given complete control over the development of the research topic and how this was operationalised during the research process. There was no political pressure to focus on any particular issues, or to use particular definitions or measures (e.g. the OECD turnover definition) and such choices were a result of the careful reflection of the researcher as to what would best suit this particular research project. SE provided financial support to the project and valuable contacts with companies, for which the researcher is grateful.

However, given that SE was a stakeholder in the research (and that the research project was accordingly co-branded between the University of Strathclyde and Scottish Enterprise), it was important to be cognisant of potential implications arising from this partnership and to actively manage potential conflicts. Throughout this research process the researcher identified herself as a “Doctoral researcher” from the University of Strathclyde, working on a collaborative piece of research between the University and Scottish Enterprise. The researcher worked hard to distance herself from SE, particularly when corresponding with potential respondents, so as not to be considered a part of the SE funding system, which might have distorted the research if participants felt she had any power in that sphere or control over funding.

Throughout the course of this research it was emphasised to participants that all data collected was confidential and for academic purposes and would be aggregated and anonymised accordingly. At no point during this research were any companies identified and singled out and no raw data has been shared. SE has been provided only with a summary report of this thesis. It was incredibly important to the researcher that participant confidentiality and anonymity were prioritised, in order to maximise the potential for open and honest discussions resulting in reliable trustworthy accounts.

The issue of politics within research is murky and has no clear answers or solutions. It is ultimately up to the individual researcher to be aware of this complexity and to actively work to ensure that political or ethical issues are prevented or mitigated as much as possible (Easterby-Smith *et al*., 2003).

Assessing quality of research

Finally, it was important to consider how data and findings from this research would be assessed for quality, as quality is evaluated in different ways depending on the paradigm in which research is conducted (Smith, 1990). From a Critical Realist perspective, there are no fixed criteria used to assess whether conclusions from a retroductive analysis are valid (Danermark *et al*., 2002) and no "best practice" methods or tools. However, a number of authors have suggested means of assessing the quality of work conducted from a CR position, particularly when qualitative data is used. Healy and Perry (2000), for example, suggest that any discussion of quality should focus on *methodological quality*, looking at *methodological trustworthiness* and *analytic generalisation* as measures of reliability and generalisability.

In terms of methodological trustworthiness, the researcher should seek to ensure that the study can be "audited" critically by other experts, which requires the researcher to provide detailed descriptions of the research procedure (Bøllingtoft, 2007). Whilst replication of a CR study, given open system conditions, is unlikely to completely verify any findings (Bøllingtoft, 2007), research designs should be transparent and reliable enough that replication would be possible. Constructs should be based at least in part on existing theory, and triangulated to ensure validity (Bøllingtoft, 2007; Healy & Perry, 2000) and replication, if applicable. Transparency of collected data is also important. Therefore, where possible, direct quotations from qualitative data should be used in the write up (Healy & Perry, 2000), rather than only aggregated observations.

Research undertaken with a CR bent should also demonstrate analytic generalisation, a measure of external validity, and should focus on questions that ask "how" and "why" events occur (Bøllingtoft, 2007), with an end goal of building theory, rather than testing existing theory (Healy & Perry, 2000). This can be accomplished by designing data collection methods (e.g. questionnaires, interviews) after identifying current research issues and theories (Healy & Perry, 2000), and triangulating findings (Easterby-Smith *et al*., 2002). This ensures that any data collected will either confirm or disconfirm theory (Bøllingtoft, 2007) and thus be generalisable outside the scope of the particular study.

This thesis has been developed in line with the above suggestions for ensuring quality in CR research, which mirrors recommendations for methodological trustworthiness and integrity in entrepreneurship research more generally (Leitch *et al*., 2010a). Research questions and suppositions have been theory-led, as have the choice and development of data collection tools. Triangulation has been a priority throughout the research process and had been used at every stage of data collection and analysis. The author hopes that the quality of this thesis will in turn be assessed in line with CR principles of quality research.

5.4 Exploratory interviews to refine conceptual development

5.4.1 Rationale

Discussed in Chapter 4, an in-depth review of the high growth literature and value creation literature informed the development of the research questions and conceptual framework for this thesis. As this conceptual framework explores whether customer perceived value (facilitated through firm level capabilities and interactions with customers) yields rapid growth, the key focus for empirical exploration was on capabilities and interaction.

However, with both sets of literature quite fragmented, and often lacking studies with strong empirical (particularly qualitative) underpinnings, there was little consensus as to which forces actually affect firm growth and performance (Curran & Blackburn, 2001) and whether customer perceived value is one of them (Barringer *et al*., 2005). With such uncertainty and dissension prevalent, it was particularly essential to ensure the trustworthiness of the research questions and conceptual framework which emerged from the literature, both to determine their fit within the high growth firm population and, if necessary, to refine them in a way that reflected empirical observation of HGFs. This is in line with calls from authors to address growth as a process, where exploration of the different processes and capabilities influencing growth (and how those processes and capabilities fit together) should be favoured over more deterministic testing of static variables (Davidsson *et al*., 2006; McKelvie and Wiklund, 2010). This process of marrying theory and empirical observation to further the development of a conceptual model [*analytical resolution*] is also a critical part of research conducted from the CR position (Sayer, 1992).

Given the need to explore (and potentially refine) research questions and conceptualisations, semi-structured interviews were identified as the most appropriate tool at this stage. The strength of the semi-structured interview lies in its flexibility - participants have significant leeway in how they can respond to questions, whilst set questions and topics ensure that key issues are covered for all participants (Bryman and Bell, 2007; Graebner 2009).

5.4.2 Participants

Drawing on the sample of 254 HGFs identified from FAME, a simple random sample of 40 companies was selected. Of these 40, 15 companies were Account Managed by Scottish Enterprise and were targeted for participation in the exploratory interviews, given mitigated problems for access. Five of these companies agreed to be interviewed - these were conducted during June-July 2010. All interviews were semi-structured, 1 hour in length and conducted face-to-face on-site. Themes and issues for discussion during the interviews were drawn from the HGF and value literature and covered a range of topics (see Appendix 2 for the interview guide).

5.4.3 Observations

As these exploratory interviews were focused on high growth firms, they were unable (and not designed) to attempt to answer this thesis' first research question: *what causes HGFs to grow faster than other firms*? However, a number of common observations emerged from the interviews, validating both the proposed second research question (*is the creation of customer perceived value an enabler for rapid firm growth?*) and the conceptual framework (Danermark *et al*., 2002).

Interview participants noted that customers are all-important to their businesses, with many attributing their financial success and growth to developing and maintaining close relationships with their customers. A number of participants discussed their firms' desire to "go above and beyond expectations" in order to satisfy client needs, demonstrating the importance of firm level structures to facilitate value creation.

The issue of interaction, particularly to create positive customer experiences, was also widely emphasised. Participants talked about the need to have an excellent (and continually evolving) understanding of their customers, offering "answers" or "solutions" to their problems, and being willing to work with competitors when necessary to deliver offerings that could not be delivered solely in-house.

From these interviews, it was clear that this thesis' proposed research questions and conceptual framework addressed very real and important issues for high growth firms, particularly the issue of customer value (perceived as well as value-in-use) and its link to firm performance. These interviews also enabled analytical resolution, allowing the research to move on to the next stage in the CR research process: *data collection*.

5.5 Phase 1: Quantitative questionnaire

5.5.1 Rationale

The second phase of data collection for this thesis comprised a large-scale quantitative self-completion questionnaire. Unlike other management and entrepreneurship studies which have a qualitative element feed into quantitative data collection (e.g. O'Guinn and Faber, 1989; Gioia and Thomas, 1996), for the purposes of this study it was planned from the outset for an aggregate quantitative assessment of high growth firms to feed into a depth qualitative assessment, in order to obtain as much richness of data as possible (Barr, 2004). This was due, in large part, to minimal understanding of how HGFs as a group differ from other firms, particularly in terms of where their growth stems from and what firm-level actions and processes to facilitate customer value. Relatively few studies have directly compared high growth firms with more moderate-performers (e.g. Smallbone *et al*., 1995; Barringer *et al*., 2006; Zhang *et al*., 2008), particularly without focusing on a particular sector or industry (e.g. manufacturing). These comparative studies have also tended to focus on a number of broader themes including, *inter alia*, firm strategy, management of products and markets (Smallbone *et al*., 1995) and business practices (Barringer *et al*., 2005), with limited items examined. This provides only a superficial look at how the two groups differ in terms of a small number of items and there is seldom a theoretical focus to bring these items together to provide any meaningful and illuminating insight (Gibb, 2000).

For the purposes of this research, the existing knowledge and evidence base was not considered robust enough to underpin any depth qualitative research. It was therefore necessary to compile more detailed aggregate "overview" of how HGFs operate compared to other firms in terms of their products, customers, areas of growth, and capabilities for value creation, before delving into the minutiae of HGF growth and attempting to confirm whether certain factors are linked with firm growth.

As Slater and Atuahene-Gima (2004) observe, when addressing complex strategic issues such as growth, survey research is often the most appropriate approach, and this phase was developed in accordance with their suggestions for improving the robustness of survey research. However, unlike other quantitative HGF studies (e.g. Littunen and Niittykangas, 2010), this phase did not seek to test specific hypothesis (Sawyer and Peter, 1983). Rather, it drew on the research questions and suppositions noted in Chapter 4 (see section 6.2.2) and aimed to collect data necessary to inform Phase 2 of this project. The ultimate goal was to identify areas of significant difference (if any) between HGF and non-HGFs cohorts, to be qualitatively examined further through interviews (see Phase 2).

5.5.2 Questionnaire design

The questionnaire design occurred from November 2010 - January 2011 and was largely informed by the literature and conceptual model, with specific constructs and areas of focus confirmed as relevant by the exploratory interviews. It was designed to shed light on the relationship between HGFs and their customers, as well as to determine whether HGFs are more likely than non-HGFs to undertake activities which positively affect customer perceived value and firm performance. This required two components to the questionnaire design: collection of firm categorical data as well as construct measurement. The final questionnaire can be found in Appendix 3.

Constructs and measurement

Given the lack of understanding about the very fundamentals of where sales and sales growth come from in high growth firms, it was necessary to include a number of categorical questions to fill this knowledge gap. These included questions about sector, geographic location (*physical location* and *customer location*), primary type of customer (*new, repeat, both*), primary type of offering (*product, service, combination*), level of offering flexibility and proportion of revenue derived from new offerings. In addition, a number of demographic questions were included (*company age, size*).

To best explore the conceptual framework of this thesis, a number of constructs were also addressed, both firm-level structures as well as constructs measuring how firms interact with their customers. In line with recommendations for improving the quality and descriptive power of survey research, the questionnaire was developed using accepted measures with proven psychometric properties (Slater and Atuahene-Gima, 2004) to mitigate measurement risk and to promote measurement validity and reliability (Churchill, 1979; Bryman and Bell, 2007). However, given that the elements comprising this thesis' conceptual framework have not been operationalised in the HGF literature, it was necessary to draw on measurement scales from other sources. A number of measurement scale handbooks were consulted[20], to identify scales that best addressed the concepts under study. The measurement scales identified and selected included:

Environmental dynamism

These two scales were adapted from Anand and Ward (2004). Environmental dynamism, whilst not directly addressed in the conceptual framework, potentially has a significant influence on the firm-level structures that facilitate value creation, as well as customer-firm interactions. It is acknowledged that firms experiencing higher levels of environmental dynamism (be it *unpredictability* or *volatility*) often have a greater need to develop more dynamically than they would otherwise in a stable environment (Bourgeois and Eisenhardt, 1988), particularly in terms of their product offering, strategy and their dynamic capabilities (Wu, 2010). Environmental dynamism is therefore closely linked with operational flexibility (Anand and Ward, 2004). As the external environment changes, or becomes increasingly complex, firms are forced to seek new ways of conducting business to create wealth and thus remain competitive (Stopford, 2001). The more dynamic or turbulent the environment, the more innovative, proactive and externally-oriented a firm will need to become (Naman & Slevin, 1993; Dess *et al.*, 1997; Crant, 2000), at times leading to stronger growth intentions (Wiklund & Shepherd, 2003). HGFs are recognised to be

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[20] These included Bruner *et al.*'s (2005) "Marketing Scales Handbook", Bearden and Netemeyer's (1999) "Handbook of Marketing Scales" (2[nd] ed.) and Roth *et al.*'s (2008) "Handbook of Metrics for Research in Operations Management".

particularly dynamic and flexible firms (Hinton and Hamilton, 2009), so it was important to get a baseline indication as to whether this dynamism might be a result of their external environments. It was also important to contrast the HGF baseline with that for the non-HGF control group.

Unpredictability

This scale was originally developed using a 7 point Likert scale, where 1 = highly unpredictable and 7 = highly predictable. Answers to all items were reverse coded so that higher scores indicated greater unpredictability. For this scale, one item [Business unit labour relations] was removed after pre-testing. It was noted that this could potentially have a significant adverse effect on the ultimate reliability (α) of the scale and that it would also make for limited comparability with previous uses of the scale (Malhotra *et al.*, 2012).

- Business upswings and downswings
- Rate of product innovations in your industry
- Rate of innovation in business process in your industry (e.g. adoption of new technologies, business planning tools etc.)
- [Business unit labour relations] *Note: This item was removed from the survey, as pre-testing identified that it was considered to be irrelevant for many of the firms that would be completing the survey.*

Volatility

This scale was originally developed using a 7 point Likert scale, where 1 = very slow and 7 = very rapid.

- Rate at which your products/services become outdated
- Rate of innovation in new products/services
- Rate of innovation of new operating processes
- Changing tastes and preferences of your customers

Internal organisational environment

This scale was adapted from Escrig-Tena and Bour-Llusar (2005). A firm’s internal environment - the physical and social factors that make up an organisation (Duncan, 1972) - arguably has a powerful influence on its ability to help create potential value.

A number of firm-level competencies are important if a firm is to be able to positively influence customer value creation, including a customer-focused ideology, a defined value proposition and an understanding of customer needs and how these can best be met. High growth firms are considered to have a unique organisational environment, often exhibiting a dynamic and customer-focused ideology (Hinton and Hamilton, 2009), with a strong focus on end-users and end-user engagement (Mason and Brown, 2010). As this scale measures an organisation's willingness and ability to process and internalise customer information for strategic performance (Escrig-Tena and Bour-Llusar, 2005), one would expect to see quite high levels of agreement by high growth firms.

Enacting Organizational Environment

This scale was originally developed using a 5 point Likert Scale. For this study it was adapted to 7 points for consistency with other items and to promote greater clarity in responses, thus mitigating information loss which can potentially result from having more limited scaling points (Martin, 1978). On the modified 7 point Likert scale 1 = strongly disagree and 7 = strongly agree. Research has shown that there does not appear to be a significant difference in the reliability of a scale when it is re-scaled from 5 to 7 points (e.g. Dawes, 2008), however the issue of limited comparability with previous uses of the scale is still potentially an issue (Malhotra *et al.*, 2012).

- Everyone in my organisation has a clear idea about what our position in the market should be
- Everyone in my organisation has a clear idea about what is expected of them, making their contribution to the company as beneficial as possible
- Everyone in my organisation knows and shares the firm's mission and goals
- We know the type of products and services that our clients require
- We know the type of resources, competencies, abilities and technologies our company requires to best serve our customers

Competitive priorities

This scale was adapted from Chen and Paulraj (2004). A firm's competitive priorities have a direct influence on its ability to influence value creation. Competitive priorities, closely related to different generic strategies in the strategy literature (e.g. Porter, 1985), are acknowledged to include, *inter alia*, flexibility, quality, delivery, innovativeness, speed, reliability and low cost (Chen and Paulraj, 2004). However, arguably cost is becoming less of a competitive priority, particularly for those firms that choose a differentiation strategy based on reciprocal promises of value with their customers, where both parties seek an equitable exchange (Ballantyne and Varey, 2006; Ballantyne *et al*., 2011). Firms are increasingly shifting their focus from simply meeting the basic operational needs of their customers (e.g. by providing a cheaper offering and reaping exchange value), in favour of providing "solutions" offerings that meet customers' specific needs, thus influencing their value creation process (Cova and Salle, 2008). This scale measures how oriented a firm is to competitive priorities that are less focused on cost than on quality and performance for customer satisfaction (Chen and Paulraj, 2004) and one would expect to see quite high levels of agreement by high growth firms.

This scale was originally developed using a 7 point Likert scale, where 1 = strongly disagree and 7 = strongly agree.

- My company's strategy is based on quality performance rather than price.
- My company's strategy cannot be described as offering products/services with the lowest price.
- My company places greater emphasis on innovation than price.
- My company's strategy places importance on offering products/services with high performance.
- My company is focused on identifying and then meeting the business needs of our customers, irrespective of cost.

Speed and flexibility

This scale was adapted from Escrig-Tena and Bour-Llusar (2005). It is recognised that organisational speed and flexibility are powerful competitive abilities, allowing firms to best respond to changing market and customer needs (Escrig-Tena and Bour-Llusar, 2005). Many firms have moved away from the traditional "push" mentality of product and service development in favour of more customer-led “solutions provision” (Shepherd and Ahmed, 2000; Davies *et al*., 2006; Sawhney, 2006; Cova and Salle, 2007), which requires greater demands of the organisation. HGFs are thought to have a high degree of operational flexibility (Hinton and Hamilton, 2009), which allows them to respond quickly to changing customer needs as well as new opportunities (Hinton and Hamilton, 2009). One would expect to see quite high levels of agreement by high growth firms.

This scale was originally developed using a 5 point Likert Scale. For this study it was adapted to 7 points for consistency with other items and to promote greater clarity in responses, thus mitigating information loss which can potentially result from having more limited scaling points (Martin, 1978). On the modified 7 point Likert scale 1 = strongly disagree and 7 = strongly agree. Research has shown that there does not appear to be a significant difference in the reliability of a scale when it is re-scaled from 5 to 7 points (e.g. Dawes, 2008), however the issue of limited comparability with previous uses of the scale is still potentially an issue (Malhotra *et al.*, 2012).

- My firm is capable of keeping a step ahead of competitors when developing a new product or incorporating a new service.
- We are capable of making fast changes in design and/or quickly introducing new products or services.
- The way my firm operates is characterized by the ability to provide the customer with a service more quickly than our competitors.

Customer focus

This scale was adapted from Chen and Paulraj (2004). Customer focus is absolutely critical for business performance, where organisations can outperform competitors by exceeding customer expectation (Chen and Paulraj, 2004). However, exceeding customer expectations requires a strong customer focus throughout the firm (Sawhney, 2006; Parker *et al*. 2010), at both ideological and interaction levels. Customer needs are ever-changing, so firms need to establish and maintain close contact and interaction with customers to understand their changing needs and desires (Siegel *et al.*, 1993), encourage continual two-way interactions and information flow (Kumar *et al.*, 2010) and incorporate any customer insight into strategic planning and other business processes (Chen and Paulraj, 2004) to underpin the organisation's ideological focus on customers. One would expect to see quite high levels of agreement by high growth firms.

This scale was originally developed using a 7 point Likert scale, where 1 = strongly disagree and 7 = strongly agree. For this scale, one item [We interact with customers to set reliability, responsiveness, and other standards] was removed after pre-testing. It was noted that this could potentially have a significant adverse effect on the ultimate reliability (α) of the scale and that it would also make for limited comparability with previous uses of the scale (Malhotra *et al.*, 2012).

- Customer focus is reflected in our business planning.
- We anticipate and respond to customers' evolving needs and wants.
- We emphasize the investigation and resolution of formal and informal customer complaints.
- We follow-up with customers for quality/service feedback.
- We produce products/services that satisfy and/or exceed customer expectations.
- [We interact with customers to set reliability, responsiveness, and other standards.] *Note: This item was removed from the survey, as pre-testing identified that it was more relevant to manufacturing firms and may not be relevant to the majority of firms completing the questionnaire.*

Customer Integration

This scale was adapted from Koufteros *et al*. (2005). In addition to having a strong customer focus, firms must also be able to integrate customer insight and requirements, tailoring processes and outputs to suit customer preferences (Koufteros *et al*., 2005). With firm-customer relationships built and strengthened over time (Ravald and Grönroos, 1996; Grönroos, 1997) through continual engagement (Brodie *et al*., 2011), it becomes possible to involve customers in "co-creation" or "co-production" by giving them an opportunity to feed into product/service design (Prahalad and Ramaswamy, 2000; Vargo, 2008). This process is highly dynamic (Etgar, 2008), interactive (Wikström, 1996), and conducive to innovation (Blazevic and Lievens, 2008), with a strong focus on customisation of the firm's offering to meet customers' specific needs. This scale measures the extent to which customers and customer insight are integrated into a firm, ensuring that the "voice of the customer" permeates all aspects of the organisation (Koufteros *et al.*, 2005). One would expect to see quite high levels of agreement by high growth firms.

This scale was originally developed using a 5 point Likert Scale. For this study it was adapted to 7 points for consistency with other items and to promote greater clarity in responses, thus mitigating information loss which can potentially result from having more limited scaling points (Martin, 1978). On the modified 7 point Likert scale 1 = strongly disagree and 7 = strongly agree. Research has shown that there does not appear to be a significant difference in the reliability of a scale when it is re-scaled from 5 to 7 points (e.g. Dawes, 2008), however the issue of limited comparability with previous uses of the scale is still potentially an issue (Malhotra *et al.*, 2012).

- In developing a product/service offering, we listen to our customers' needs.
- We meet with our customers to discuss new product/service development issues and requirements.
- We study how our customers use our products/services.
- We involve our customers in product/service design.

Pre-testing

Despite the questionnaire relying heavily on accepted measures, pre-testing was undertaken in December 2010 to ensure that all the questions and prompts were clear and easy to understand; that the measurement scales appeared to be valid and reliable in this context (Churchill, 1979); and that the format was clear, uncramped and attractive (Bryman and Bell, 2007). The questionnaires were tested in two formats, traditional paper-based survey and online survey[21], with initial testing undertaken by

[21] The online survey was created in, and hosted by, SurveyMonkey. The text, layout, colours and branding mirrored that of the paper-based questionnaire as closely as possible.

8 members of Scottish Enterprise's Customer Panel[22], 4 from high growth firms and 4 from non-high growth firms. Firms that participated in pre-testing were excluded from the questionnaire sample. Further testing (predominantly for clarity and flow) was undertaken by 3 members of SE's Customer Research team.

The pre-testing exercise identified that the questions and scales selected appeared to effectively capture the required data, although minor modifications were suggested by respondents such as changes to wording and question order. In two cases, an individual scale item was proposed for removal, as testers felt it was applicable only to particular types of firms. These items were removed, however it was noted that this could potentially have a significant adverse effect on the ultimate reliability (α) of the scale and that it would also make for limited comparability with previous uses of the scale (Malhotra *et al.*, 2012). Testers also found both the paper and online versions acceptable, noting that both options should be offered to participants.

Target population and sample

As discussed earlier in this chapter, sampling for this research project required identification of the HGF population of 254 firms, as well as a comparative sample of 250 non-high growth firms, which was representative of the larger Scottish business base (Slater and Atuahene-Gima, 2004). With a number of these HGFs already approached for both the exploratory interviews as well as the questionnaire pilot-testing, the final number of HGFs available for the questionnaire sample was approximately 230. The identified comparative random sample of 250 non-HGFs remained intact. Whilst these samples appear small, both are representative of their larger populations (particularly the HGF population in Scotland, which is already exceptionally limited) and therefore should be viewed as equally capable of generating significant and reliable results as larger samples (Sawyer and Peter, 1983).

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[22] Scottish Enterprise operates a "Customer Panel". This is populated with representatives from the firms that SE Account Manages, who opt into participating in ad hoc SE research throughout the calendar year.

All companies in the sample received an initial telephone call, to discuss the research project, its aims and data collection; identify the most appropriate person in their organisation; and to get organisational "buy in" for participation in the research (Easterby-Smith *et al.*, 2002). Firms were not identified as being high growth or non-high growth. During this time, personal email addresses, phone numbers and postal addresses were also obtained. Whilst some authors argue that the use of multiple informants can help to mitigate bias and provide richer information (Schwenk, 1985; Graebner, 2009), others note that such an approach can actually introduce bias, given that different informants have different positions, experiences etc. (Gatignon *et al*., 2002). Thus, this research opted to rely on a key knowledgeable informant from each company. With self-completion questionnaires typically seeing lower response rates than interview-based questionnaires (Bryman and Bell, 2007), this emphasis on identifying the most suitable participants (Sawyer and Peter, 1983) and securing their involvement was deemed crucial to the success of the questionnaire, in order to have a valid response rate (Mangione, 1995).

Delivery

As noted, both paper-based and online versions of the questionnaire were pilot tested. Informants, during their "warm up call" were given the opportunity to choose which of the two forms they preferred, with the vast majority opting to complete the online survey. Approximately 10 companies requested the paper-based version. For each version, anonymity and confidentiality of responses was assured (Golden, 1992; Zhang *et al*., 2008).

Questionnaires were distributed in mid-February 2011. For those opting in to the online questionnaire, a personalised email was sent to each identified informant, thanking them for their assistance and reaffirming the goals of the research project (Slater and Atuahene-Gima, 2004). A link embedded within this email provided access to the questionnaire. A thank you email was then sent after each completed (and usable) questionnaire was received. Two separate reminder emails were sent out to non-respondents during the questionnaire period, one in mid-March and one in mid-April. For those who preferred a postal questionnaire, a personalised letter

(Slater and Atuahene-Gima, 2004) and a pre-paid reply envelope were also included along with the questionnaire to encourage completion (Bryman and Bell, 2007). The cut-off date for responses was 1 May 2011.

5.5.3 Method of analysis

As discussed, the purpose of this questionnaire was to identify relationships between firms and elements pertaining to customer value creation, noting any significant differences that may occur between HGFs and non-HGFs. Analysis took place from May - July 2011. The questionnaire was designed so that collected data could be analysed with statistical software (SPSS). The analysis of the data was partly planned, for example undertaking Chi-Square Tests to explore the relationship between categorical variables, and partly emergent (Graebner, 2009), allowing for a number of other analysis techniques (e.g. cluster analysis) to be used as appropriate.

Although proven scales and measures were chosen for key constructs, validity and reliability were emphasised during analysis: all scales were retested for validity (using Cronbach's alpha) after data collection was complete and desk-based research was used to triangulate some of the demographic data collected (current turnover, number of employees), to ensure informant reliability (Bøllingtoft, 2007; Healy & Perry, 2000).

5.6 Phase 2: Depth qualitative interviews (Critical Incident Technique)

5.6.1 Rationale

Building on data collected from Phase 1's questionnaire, the second phase of data collection for this thesis involved depth interviews, following Flanagan's (1954) Critical Incident Technique (CIT).

Developed by Flanagan during his time in the Aviation Psychology Programme in the United States Army Air Forces during World War II (Flanagan, 1954), the CIT has seen increasing recognition as a technique for gathering rich data about processual and relational issues (Weber, 1985; Bitner *et al.*, 1990). Despite having been developed within the context of the Positivistic thinking and approach to research dominant at the time (Chell, 1998), the CIT has been developed over time and is now considered to be an excellent tool for exploratory and investigative qualitative research (Chell, 2004). Given that researchers in fields such as entrepreneurship are often tackling research problems that are multifaceted and complex (Leitch *et al*., 2010a), such as this thesis' focus on rapid firm growth, the CIT is increasingly being recognised as an important tool for qualitative data capture and analysis. It is being applied to research problems across a range of academic disciplines (see Gilbert and Morris, 1995), with a small but growing following in entrepreneurship (Curran *et al.* 1993; Chell, 1998; Cope & Watts, 2000; Cope, 2005; Leitch *et al*., 2010a) and marketing research (Bitner *et al*., 1990; Gabbott & Hogg, 1996).

Given this thesis' focus on the process of rapid growth, and how activities to positively influence customer perceived value affect this process, the CIT was deemed to be the technique most suitable for collecting the qualitative data necessary to evaluate the research questions in Chapter 4 and to probe observations from the Phase 1 questionnaire.

5.6.2 About CIT

As mentioned, the CIT was developed in the mid-twentieth century as a set of procedures for collecting observations of human behaviour during certain "critical incidents" (Flanagan, 1954), drawing on the principles of industrial organisational psychology (Butterfield *et al.*, 2005). Flanagan (1954: 327) originally conceptualised an incident as "any observable human activity that is sufficiently complete in itself to permit inferences and predictions to be made about the person performing the act", where an incident is *critical* if "the purpose or intent of the act seems fairly clear to the observer and its consequences are sufficiently definite to leave little doubt concerning its effects". As his definitions make clear, Flanagan was focused specifically on recording and analysing an individual's behaviours in the context of an incident, rather than necessarily exploring the event itself.

However, over time the CIT has evolved from evaluating individual behaviour in the context of a single events into a procedure for investigating a number of significant occurrences (events, incidents, processes or issues), the way such occurrences are managed, and their outcomes and perceived effects as well (Chell, 2004). Authors have used this technique to investigate complex issues such as the relationship between gender issues and firm performance (Chell and Baines, 1998), experiential learning during critical business events (Cope and Watts, 2000) and the effect of other customers on service experience (Grove and Fisk, 1997). There are also a growing number of non-behavioural studies exploring incidents in the context of "triggering" changes in firm development, such as those affecting firm development in the café industry (Chell and Pittaway, 1998) incidents affecting the performance of high-tech start-ups (Foo and Tan, 2001) and incidents resulting in a firm's international expansion (O'Gorman and Evers, 2011). In using the CIT process, the exploration of detailed records of events was possible, leading to the capture of rich data which facilitates a significant "depth and thoroughness in understanding" (Leitch *et al.*, 2010a: 77) of the subject under study. This development has been possible, given the inherent flexibility of the CIT process (Flanagan, 1954), which itself facilitates deeper exploration - and in turn understanding - or theories and constructs than other many other methods (Schurr, 2007), particularly those which remove the relationship between context and outcomes from the discussion (Chell, 2004).

In some respects, there are similarities between the CIT and Personal Construct Theory (PCT), as the PCT also has its foundations in investigating events and the personal understanding of such events (Kelly, 1955). PCT focuses on the personal constructs and views of what is important to individual respondents, in the context of particular situations or events (Martin and Staines, 1994; Badzinski and Anderson, 2012), with repertory grids often used for data collection (Hisrich and Jankowicz, 1990). This data collection technique has been successfully used within Entrepreneurship, particularly when exploring more intangible concepts (e.g. Díaz de León and Guild, 2003). However, the CIT (particularly in its current evolution in the entrepreneurship literature) allows for events to be examined independently of personal perceptions as originally proposed by Flanagan (1954), whereas these perceptions are fundamental to the PCT. For studies like this thesis which seek to explore incidents and their effect on process - without placing significant emphasis on individually mediated perceptions and meanings of those events – the CIT and its principles are more closely aligned to the research and its objectives than the PCT.

CIT process

Despite being a recognized methodology, the application of the CIT varies considerably across studies (Harrison and Mason, 2004)[23], demonstrating its inherent flexibility. As Flanagan (1954: 335) first noted, the CIT "does not consist of a single rigid set of rules governing such data collection. Rather it should be thought of as a flexible set of principles which must be modified and adapted to meet the specific situation at hand." Thus, there is no one universal Critical Incident Technique (Harrison and Mason, 2004), but a set of flexible guidelines to be applied in a way that best addresses the research topic (Burns *et al*., 2000). That being said, CIT studies do tend to follow a five step process as per that initially proposed by Flanagan (1954):

[23] There is variation in sample size (small vs. large), qualitative vs. quantitative focus, tools used (survey, interview) etc.

(1) *Determine the general aims of the activity being studied.* This involves the development of key assumptions underlying the research, a statement of objectives for the research and hypotheses/questions/propositions to be explored (Flanagan, 1954). These should address what will define a "critical incident" in the context of the study (Harrison and Mason, 2004).

(2) *Develop plans and set specifications for the data collection process*. This includes who should lead the discussion and make the observations (Butterfield *et al*., 2005).

(3) *Collect the data.* This can be accomplished in a number of ways (interviews, focus groups, questionnaires etc.), but observers must make sure that full and precise details are collected for all events/issues discussed (Flanagan, 1954).

(4) *Analyse the data.* This is often considered to be the most challenging step for researchers (Butterfield *et al*., 2005), as incidents and related issues are often difficult to classify. Analysis should be as objective as possible (although it is necessarily a somewhat subjective task) (Flanagan, 1954), with classification systems formed from either theoretical models or inductive interpretation (Stauss, 1993).

(5) *Interpret and report on findings.* It is important for any limitations of the study to be noted (Flanagan, 1954).

Whilst the research process begins with clear aims and assumptions, it is important to note that data collection and analysis is flexible and can be both planned and emergent: this allows for themes, classifications and patterns to emerge during the process, resulting in more holistic evaluative schema than may have been present at the beginning of the research exercise (Ruben, 1993). This makes the CIT particularly useful for foundational or exploratory research (Grove and Fisk, 1997), like this thesis, where theory building is a desired output (Butterfield *et al*., 2005). Hypotheses are not considered to be necessary, as emerging data and patterns should facilitate the generation of concepts and theories (Gremler, 2004).

5.6.3 CIT research design

The CIT research design occurred from July - September 2011; the process was informed by the literature and conceptual model, as well as results and queries arising from the questionnaire. In line with others (e.g. Grove and Fisk, 1997), and as recommended by Flanagan (1954), depth interviews were determined to be the most appropriate method for data collection for this research. A discussion guide for the interviews was developed in July/August and pre-tested for clarity of questions in September 2011[24]. Interviews took place between October 2011 and February 2012.

Interview design

As per the CIT process, the interview design began by determining the general aims of the study, which was twofold: (a) to determine what causes rapid firm growth (who/what does sales growth come from and what does a HGF's growth process look like) and (b) to explore the firm-level structures and customer-interactions that HGFs have in place and whether these positively affect customer perceived value and firm performance. Whilst these may seem like two distinct questions, they are in fact very much interlinked.

High growth firms, as per the OECD, must have experienced rapid turnover growth over a distinct period of three years. In the case of this thesis, the chosen period was 2006-2009. With definitive start and end dates for a growth period (and Companies House information available for a number of firms to triangulate their performance before, during and after this period) it becomes possible (and arguably very important) to understand why a period of rapid growth began and what may have initiated it/contributed to it. There will undoubtedly have been some sort of event (no matter how large or small) that altered the firm's performance status-quo and made way for a change in growth trajectory. Otherwise, how would such a significant change in performance have occurred? If such events or "triggers" exist, what do

[24] The interview guide was pre-tested to ensure flow and logic, as well as clear language for all questions, prompts and instructions. Two members of the Scottish Enterprise Customer Research team (with no advance knowledge of the interview guide and its content) participated in mock interviews, answering questions on behalf of SE. The interview guide tested well, with only minor changes made to language and flow as a result.

they entail and are they reflective of notions in the literature (e.g. Garnsey *et al*., 2006).

A major shortcoming in the HGF literature is that authors examine firm characteristics and competencies during - or immediately after - a time of growth and try to correlate these to rapid firm growth (e.g. Coad *et al*., 2012). These studies fail to acknowledge that growth is a temporary phenomenon, a result of change and the source of even more change: any positive correlations show only a relationship between characteristics and the firm as it was during - or immediately after - a period of rapid growth. They do not in any way indicate whether these characteristics helped to facilitate or influence that period of rapid growth in the first place. As Gibb (2000: 20) caustically notes, "it would be remarkable if firms who were growing were not developing their markets, changing their management organisation, changing their systems and so on!"

Thus, without an understanding of what firm growth looks like over time, including how, when and why growth trajectories change, any exploration of what enables (or is linked to) that growth is arguably premature. As Achtenhagen *et al*. (2010: 295) astutely observe, an "inference of causality can only be made when there is a temporal ordering of events." With this in mind, the CIT interview comprised two components: (1) a participant-led discussion of "company development" since 2000, noting any crucial events (positive or negative) and (2) a semi-structured discussion about products, customers and competitive advantages (see Appendix 4 for the discussion guide).

During part (1) (approximately 45 minutes), respondents were asked to talk through their company's "development" since 2000, with special attention paid to the years before the 2006-2009 period. Companies were asked to identify any "critical moments" during this time, both positive and negative. In the context of this study, a critical incident was any identifiable moment (or set of moments) that had a direct impact on the firm's performance, whether financial or otherwise. Unlike Flanagan's (1954) early work (but in line with the current use of CIT e.g. O'Gorman and Evers, 2011), the focus was on the incidents themselves, rather than individual behaviours or emotions associated with those events. Critical incidents did not have to have a concrete start or end date, as critical incidents are not always discrete or isolated events, but sometimes "periods" or "episodes" (Cope and Watts, 2000); an approximate timeframe was satisfactory, provided that sufficient detail was provided to ensure the criticality of the incident (Flanagan, 1954). Important incidents generate particularly emotional responses and are more likely to be remembered than other activities (Gremler, 2004), but vague reports do suggest that the incident may not be as well remembered as required. A major criticism of the CIT is its reliance on retrospective data, which can be damaged by self-censoring or recall bias (Michel, 2001; Harrison and Mason, 2004). However, it a respondent provides full and precise details about an incident, it can be assumed to be critically important and the information accurate (Flanagan, 1954). It is also thought that, in some instances, reflection can actually allow for the discussion of events that may have been difficult or impossible to articulate during or immediately after their occurrence (Greiner, 1972).

Part (2) focused specifically on the firm-level structures and interactions with customers that can affect customer perceived value. A number of semi-structured questions were asked in the final 15 minutes of the interview, if they had not already been addressed in the context of Part (1). Very often, these issues had already been raised (and then discussed at length) during Part (1).

Sample

Sampling for this phase was quite straightforward. The final question of the questionnaire (see Appendix 3 for the finalised questionnaire) asked respondents whether or not they would be interested in participating in further phases of research; those that were submitted their email address for further communications. Of the 200 respondents who completed the questionnaire, 77 agreed to be contacted, 43 of which were HGFs and 34 of which were non-HGFs. Each of these respondents was contacted by email in July/August 2011, to thank them for their participation in Phase 1, to introduce Phase 2 and to re-confirm their interest in participating.

Interviews were subsequently arranged (and conducted) with 11 HGFs and 10 non-HGFs.

In most CIT studies, the emphasis is less on the number of participants than on the incidents and coverage of the issues under investigation (Flanagan, 1954). Once new themes and categories stop emerging from the data, theoretical exhaustiveness or saturation is considered to have been achieved (Butterfield *et al.*, 2005). During data collection, saturation occurred after 8 or 9 interviews had been conducted for each group.

Format

Each of the interviews followed the same format. Great care was taken to ensure that the respondent felt informed and comfortable, before and during the interview (Bryman and Bell, 2007). Each interview was conducted face to face with the respondent and took place in the respondent's own office. This allowed for a quiet and "safe" environment, in which participants felt they could speak candidly (Bryman and Bell, 2007). The interviews were arranged to be approximately 1 hour in length; some were slightly shorter, but many interviews continued well past the hour mark, as participants became more and more involved in the discussion. The average length of the interviews was 68 minutes and on average firms identified 3 critical incidents to discuss in depth.

Each interview was attended by the author, who facilitated the interview. The researcher was accompanied to each interview by a member of the Scottish Enterprise Customer Research team, who acted as an observer. Their role was to observe the interview, take detailed notes and, after the interview was complete, to classify the events/episodes and associated issues into thematic categories. Their input was designed to facilitate a further trustworthiness check during data analysis, as advocated by Butterworth et al. (2005). The observer had not been involved in the development and testing of the interview guide.

The rationale behind the selection of the SE observer was twofold. Firstly, the individual is a professional researcher, with over a decade of experience in qualitative business research. They were felt to be particularly capable in terms of summarising key themes and sorting incidents into thematic categories. Their position at SE is also far removed from policy and funding decision-making and, as part of their role, are used to conducting research as an "independent researcher" evaluating businesses' perceptions of SE and its policies on behalf of SE. The second reason why this individual was selected comes down to issues of access. Whilst the researcher would have preferred to have a colleague from Strathclyde perform this role, this simply wasn't feasible, given the amount of time required and the demands placed on university staff.

Given the political issues associated with this research having been funded by Scottish Enterprise (see section 5.3.1), there are important considerations for having an SE-affiliated observer attend the interviews. As noted earlier, issues of power (e.g. influence over funding decisions), respondent confidentiality and trustworthiness of data have been of particular concern throughout this research process. To mitigate these risks during interviews, all participants were asked to "opt-in" to the observer's attendance. The position of the observer within SE was also explained, if requested, and it was noted that their role in SE was strictly research. No participants objected to their attendance. Confidentiality and anonymity for interview participants was strongly emphasised throughout the interview process. There may be questions about the reliability and trustworthiness of the data collected from the interviews, but the researcher is confident that this was not affected by the presence of the SE-affiliated observer. The research found participants to be very forthcoming with information and were just as forthcoming with "negative" information about their firm (e.g. drop in sales, problems with staff, product misalignment etc.) as they were with positive information. The discussions were measured and reasoned, with no evidence of participants trying to make their organisations sound particularly attractive or "investment worthy". Importantly, there was no mention of Scottish Enterprise in the discussions.

As per the discussion guide (Appendix 4), the interview began with introductions and a brief explanation of the research project. Interviewees were told that the work was exploring business development and performance in Scottish firms. At no time were they told that the research compared HGFs with non-HGFs, nor were they told what category their own firm fell into. The interview language was kept neutral and jargon-free, and referred to business development, business performance, successes and learning experiences. The interview started with a number of requests for descriptive company information (*age, sector, number of employees* etc.), to ease participants into the interview (King, 2004), before moving into the CIT-based discussion of company development.

Moving into the discussion of their company's development, respondents were asked to talk through their company's development, noting any important moments and events (both positive events and "learning experiences") for the company and how they impacted the company's development and success. In line with Cope & Watts (2000), this research considered positive and beneficial events to be equal in importance to more problematic and challenging events: both types of events are of critical importance to company growth and development. The terms "negative event", "crisis" and "bad experience" etc. were avoided by the interviewer, in an attempt to lessen any embarrassment or reluctance respondents might feel to address events that were perceived to show their company in a negative light.

To best track moments critical to the company's growth over time, each respondent was given a "company timeline" on which they were asked to illustrate their firm's development through the interview. This exercise was well received during pilot-testing, but had a more mixed reception during the first few interviews: many respondents preferred to talk through incidents, rather than actively noting them down. As a result, the interview format was modified (King, 2004) so that the "company timeline" mapping became an optional exercise during the interview. The discussion on company development was led by the interviewees, and driven by what they identified as critical incidents (Cope and Watts, 2000); the research questions identified in the discussion guide emerged quite naturally during this process, allowing for further probing to gain richer detail, clarify questions and ambiguities, and to fill in missing details (Easterby-Smith *et al*., 2002), particularly when respondents were unaccustomed to describing a critical incident in full (Edvardsson and Roos, 2001).

Role and conduct of the interviewer

In qualitative interviews, the role of the researcher is to obtain detailed and accurate information, whilst ensuring that the interview and respondent are not influenced by inter-personal relationship factors (King, 2004). In the case of this phase of data collection, the goal was for the interviewee to participate actively in the interview and to shape its direction, rather than responding to a number of pre-set questions in a structured Q&A type exercise (Cope and Watts, 2000; King, 2004). Thus, the role of the interviewer was seen to be that of a facilitator and collector of data, keeping the discussion on topic, probing for more insight as required and noting key points. A conscious effort was made to avoid any kind of leading questions (Flanagan, 1954), lest respondents by influenced in any way by the interviewer's perceptions (Edvardsson, 1992; King, 2004). The respondent was encouraged to take on the majority of the talking, with the interviewer recognising them as the "expert" (Flanagan, 1954) on their firm and its development.

Another key responsibility of the interviewer was to build trust with the interviewee and to manage the ethical issues associated with this type of research, particularly confidentiality. To encourage trust, the interview participants were informed in advance of the interview as to what would be required during their participation, including the request to talk through the firm's development and any key incidents along the way. Participants were given the interviewer's contact information (office telephone, personal telephone, office email address) and were told they could be in touch at any time with any questions or concerns they might have about the research project and the interview in particular. At the start of the interview, participants were informed that data was being collected for research purposes only and that all information would be kept confidential unless specified otherwise by the firm. A digital voice recorder was then produced; participants were informed that it is standard practice in this type of research for interviews to be recorded (Butterfield *et al*., 2005) and were asked whether or not they would consent to having the interview recorded. All companies consented. At the end of the interview, the respondent was assured again about the confidentiality of the conversation.

5.6.4 Method of analysis and trustworthiness checks

After the completion of each interview, the digital audio file was transcribed verbatim[25] into a word document. Notes taken by the researcher and the SE observer were also written up as soon as possible after each interview. As per Flanagan's (1954) process, data analysis took place as soon as possible after each interview. The analysis of CIT data is often considered to be the most challenging part of the CIT process (Butterfield *et al*., 2005), particularly the development of categories for incidents and related items, which are often inductively derived (Gremler, 2004). Whilst this process should have an element of objectivity, it is necessarily somewhat subjective (Flanagan, 1954). For the purposes of this research, *a priori* categories were developed from the conceptual framework and incidents and related issues were first coded to these. A number of further categories emerged from the data itself (Graebner, 2009). NVIVO was used to store data and analysis was undertaken using this platform. Data analysis took place from October 2011 to May 2012.

Historically, there were few trustworthiness checks associated with the CIT (Butterfield *et al*., 2005), but this has changed dramatically in the past few decades. There are now a number of suggested checks including triangulation (particularly of categories) (Ellinger and Bostrom, 2002), reliability of data collection procedures (Andersson and Nilsson, 1964) and validity (content validity, relevance, construct validity and concurrent validity) (Ronan and Latham, 1974). It is also becoming increasingly common for "independent judges" to be involved in the analysis process

[25] The audio files were sent to Ashbrook Research, a Glasgow-based research company, who completed the verbatim transcriptions. Data confidentiality and security was of extreme importance to the researcher. As per Ashbrook's contract and Scottish Enterprise policy, the firm was required to comply with the provisions of the Data Protection Act 1998 and Data Security provision, assuring confidentiality of all data and company information. The author reviewed each transcribed document for accuracy. The transcripts, along with the original voice recordings were used in conjunction with one another during the data analysis process.

to identify critical incidents from transcripts, to determine categories and to allocate the identified incidents appropriately (Butterfield *et al*., 2005).

This research followed a number of these checks, which mirror those suggested for work from a CR perspective. Methodological trustworthiness, a critical part of the CR position, was emphasised in this research (Healy and Perry, 2000), particularly methodological transparency to allow for critical auditing by other experts (Bøllingtoft, 2007). Constructs have also been based on existing literature (see Chapter 4) and the literature has helped to inform the coding process (through *a priori* categories). To ensure adequate triangulation and analytic generalizability for CR (Bøllingtoft, 2007), it took the concept of "independent judges" one step further, by having an independent observer attend each interview, where they took detailed notes, identified incidents and determined appropriate categories. Their analysis was then compared with that produced by the author, to determine the soundness and reliability of identified incidents and categories (Butterfield *et al*., 2005). In keeping with other HGF studies (e.g. Fischer and Reuber, 2003; Mason and Brown, 2013), further triangulation was undertaken for those interviewed firms which were account managed by Scottish Enterprise (12 out 21). In these cases, the firm's Account Manager was also interviewed about the firm's growth and performance and asked to identify any critical events which had impacted firm development. These interviews not only helped to triangulate incidents, but also to confirm the reliability of firms' reports of past growth and development. Rather than focusing on validity, which is often seen as a Positivistic ideal, the focus was on "authenticity" of constructs, data and classifications (Guba and Lincoln, 1994), where a *priori* categories were developed from the literature, but further developed from the data (Bøllingtoft, 2007) to ensure fit.

5.7 Critical reflection

Having now outlined the CR philosophical foundation underpinning this study, as well as discussed and justified how the research was designed and conducted, it is important to note that there are, of course, some potential implications for this research as a result of this approach. Whilst every aspect of this research design has been chosen to best suit the issues under investigation, in breaking with the Positivist position prevalent in HGF, the author recognises that there are implications in terms of the methodology and data collection techniques used in this research.

Whilst many HGF studies draw on aggregate quantitative data, the comparative approach adopted in Phase 1 was more complex than if only one cohort of firms were targeted. Fortunately, with the HGF population in Scotland very limited, it was possible to collect data from 40% of them. This has resulted in a strong data set for HGFs. On the other hand, however, the comparative sample of non-HGFs was unfortunately not as robust. Despite rigorous sampling, including purposive and simple random stages, the resulting sample was necessarily less representative of the larger population. With data collected from less than 1% of all Scottish non-HGFs, it is impossible to say with any certainly whether there are common factors, capabilities, or critical events among that group. Fortunately, this thesis is interested in significant differences between HGFs and non-HGFs and the samples have been robust enough to allow for this comparative analysis.

In attempting to explore the nature and cause of rapid growth in Phase 2, as well as explore issues related to customer perceived value creation, the CIT was identified as a particularly useful tool, given its demonstrated suitability to for complex process issues (Leitch *et al*., 2010a) such as strategic growth within the context of a CR position (Seelos and Mair, 2010). However, the CIT does have its critics, particularly with regard to issues such as its reliance on retrospective data which can suffer from recall bias (Michel, 2001) as well as “survivor bias” in a firm-level context (Garnsey *et al*., 2006). However, the CIT is increasingly seen in entrepreneurship and marketing studies, with authors developing a number of checks to ensure the trustworthiness of the method. A number of these were adopted during this study, particularly the triangulation (of events) that is so important within the CR perspective (Bøllingtoft, 2007).

Finally, as with many other recent studies of HGFs (e.g. Mason and Brown, 2009; Du *et al*., 2013), this research used the OECD definition which necessitates a cross-sectional view of firm growth over a short 3 year period. Whilst this research has attempted to explore firm growth over a longer period, it was been unable to take a truly longitudinal approach, which would undoubtedly have provided further insights.

5.8 Conclusion

Building on the conceptual framework and research questions discussed in Chapter 4, this chapter has addressed the philosophical position (Critical Realism) underlying this thesis. It has also discussed in depth the methodological approach taken, including conducting exploratory interviews with 5 high growth firms, which explored and verified the conceptual framework. The two phases of data collection were addressed. Phase 1 comprised a large-scale quantitative questionnaire, designed to identify significant differences between HGFs and comparable non-HGFs, drawing on scale items that explore a firm's ability and likelihood to positively influence customer perceived value creation. With 200 responses split evenly between both groups, data from the questionnaire fed into the development of Phase 2. This final phase of data collection involved depth interviews with comparative samples of 11 HGFs and 10 non-HGFs using the Critical Incident Technique, which explored the process of firm growth and probed issues pertaining to perceived value creation. The chapter has also noted the political issues unique to this research and has concluded by reflecting on the implications of the methodological approach adopted.

Chapter 6 Questionnaire findings

6.1 Introduction

Having discussed the methodological approach of this thesis, including the rationale for three phases of data collection (exploratory interviews; aggregate quantitative questionnaire; and depth interviews following the Critical Incident Technique), as well as potential limitations of the approach in Chapter 5, this chapter will now discuss the findings from the questionnaire used in Phase 1. It will present a brief overview of the questionnaire rationale and data analysis, before outlining response rates and respondent demographics. The chapter will then provide a more detailed discussion of the data collected to answer this thesis' two primary research questions, comparing samples of HGFs and non-HGFs across a number of measures. It will then finish with a brief discussion of key observations from the questionnaire data and note areas to be explored further in Chapter 7. A final version of the questionnaire can be found in Appendix 3.

6.2 Data analysis overview

6.2.1 Rationale

As outlined in Chapter 5, this questionnaire did not seek to test specific hypotheses (Sawyer and Peter, 1983), as many other quantitative HGF studies have done (e.g. Littunen and Niittykangas, 2010). Rather, its aim was to explore the research suppositions identified in Chapter 4, comparing equal samples of high growth and non-high growth firms to identify whether any significant differences exist between the two groups. The ultimate goal of the questionnaire was not to test and confirm this thesis' conceptual framework, but to identify areas of significance for further exploration (Kent, 2001) using depth qualitative interviews (see Chapter 7).

The questionnaire was designed so that collected data could be analysed with statistical software. SPSS was used for all analysis, which was predominantly planned, but partly emergent as required. Given the items and scales used, as well as the goal of identifying differences between independent samples of HGFs and non-

HGFs, a combination of χ^2 testing and independent-samples t-testing was planned and executed. For each of these tests, the 5% Expected Value limitation was upheld.

6.2.2 Research questions, suppositions and analysis

As outlined in Chapter 4, this research sought to address two research questions:

(a) What causes HGFs to grow faster than other firms? and

(b) Is the creation of customer perceived value an enabler for rapid firm growth?

To explore the first question of this thesis - *how and why HGFs are experiencing growth* - the questionnaire collected data about a number of key elements including customer base, geographic markets and physical presence, firm offerings and growth offerings. Responses from the high growth and non-high growth groups were then examined to explore any areas of similarity or difference; results of these χ^2 tests are reported in section 6.4.

In terms of addressing this thesis' second research question, *is the creation of customer perceived value an enabler for rapid firm growth*, a more nuanced approach to data collection and analysis was required. Building on the HGF and value literature, and as discussed in Chapter 4, a number of suppositions were articulated about the firm-level capabilities HGFs are likely to have and the firm-customer interaction level activities they are likely to undertake, both of which are thought to have a positive influence on the creation of customer perceived value:

Supposition 1: HGFs are likely to exhibit a strongly customer focused ideology / orientation, to be flexible and adaptable in their operations and to be actively learning from their customers. These structures are likely to positively affect customer perceived value.

Supposition 2: HGFs are more likely to be strongly customer-focused and engaging deeply with their customers, particularly existing customers.

Supposition 3a: HGFs are likely to work closely with their customers, taking an active role in co-creating high-value offerings.

Supposition 3b: HGFs are more likely to be providers of customized and integrated "solutions", rather than focusing solely on set products or services.

To explore these suppositions, particularly when comparing a sample of HGFs to a sample of non-HGFs, indirect measurement was required (Kent, 2001). It was necessary to draw on a number of scale measures that are aligned with the constructs of the conceptual framework. These included, *inter alia*, enacting organisational environment, competitive priorities, speed and flexibility, customer focus and customer integration. Each of the scales selected needed to demonstrate acceptable reliability and were required to have an alpha level of at least 0.70 (Cronbach, 1951; Nunnally, 1978; Bryman & Cramer, 2011). Responses from the two groups were examined for each of the scales using independent-samples t-tests to determine if any significant differences exist between the groups. The results of this analysis are reported in section 6.5. Whilst many quantitative studies undertake an analysis of non-response bias and/or comparisons between early and late responders (Kent, 2001), these tests were not performed for this thesis.

6.3 Respondents

As discussed in Chapter 5, the sample for this questionnaire comprised two comparative samples of high growth firms (n = 230) and non-high growth firms (n = 250). Paper and online questionnaires were prepared and distributed based on participants' preferences. Of the 480 questionnaires distributed, 218 were returned. However, a small number of these questionnaires (n = 18) had varying levels of incomplete data. The decision was made that any questionnaire with missing data, regardless of the amount, would be deemed unusable and excluded from analysis (Baruch, 1999; Kent, 2001). As for the non-responders (n = 262), a small number were in touch to explain why they would not be participating (n = 9). The most commonly cited reason was a lack time available to complete the questionnaire (n=8).

The final count of complete, usable questionnaires was 200: 106 questionnaires were completed by HGFs and 92 by non-HGFs, resulting in a general response rate of 42%[26]. There is debate over the acceptability of such a response rate, with some authors outlining that response rates lower than 50% are not acceptable (e.g. Mangione, 1995). However, others note that very strong studies have been published with response rates as low as 30% (Mitchell, 1985; Bryman, 1989; Baruch, 1999), provided that the items being examined are reliable and have strong explanatory power. Some feel that a set of 100 cases (in total, or per group) is ample for robust analysis (Kent, 2001), but it is always acknowledged that the larger the number of responses, the greater the accuracy of analysis (Bryman and Cramer, 2011). In terms of the response rates between the two groups, there was a slightly higher rate for HGFs of 46% (106 complete, usable surveys were received from the 230 distributed) and a slightly lower rate for non-HGS of 37% (92 of the 250 surveys were returned completed). Unfortunately, the percentage of the population sampled (n/N) has little influence on a sample's accuracy or error (Bryman and Cramer, 2011).

6.3.1 Demographics

The questionnaire took stock of a number of demographic characteristics within each group. Of particular concern to HGF researchers are firm *age* and *size*. These characteristics are often considered to have an important influence on firm growth and feature prominently in much of the high growth literature. However, there is still little consensus on the precise effect of *age* and *size* - as well as *sector* - on rapid firm growth, with studies often reporting conflicting results.

Respondent firm age

[26] 200 completed and usable questionnaires were received out of the 480 distributed.

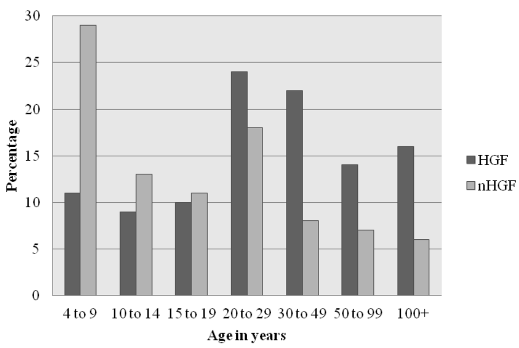
As one can see in Table 6.1 and Figure 6.1, the respondent firms in this questionnaire represented a variety of age ranges, barring for young firms[27]. There is visibly a higher distribution of younger firms (4-9 year age band) among non-high growth firms and a higher distribution of more established firms (20-49 year age band) within the HGF sample. Despite having selected a completely random sample of non-HGFs, in this sample HGFs are significantly older than non-HGFs ($\chi^2 = 22.266$, df = 6, p < .01), with no influence from size or sector (p = ns). The mean age band for non-HGFs was 15-19 years of age [M = 3] and for HGFs it was 20-29 years of age [M = 4].

This more "mature" age for HGFs is in line with other recent work examining HGFs in Scotland, which found that HGFs are on average around 20 years old (Mason and Brown, 2010). A similar study in the US found that the average age for HGFs was 25 years old (Acs *et al.*, 2008), so there is increasing evidence that HGFs are perhaps not the young "gazelles" under 5 years old that they are commonly thought to be (Henrekson & Johansson, 2010).

Table 6.1 Age of respondent firms

Firm type	Age (years)	Frequency	Per cent
HGF	4-9	11	10.4
N=106	10-14	9	8.5
	15-19	10	9.4
	20-29	24	22.6
	30-49	22	20.8
	50-99	14	13.2
	100+	16	15.1
nonHGF	4-9	29	31.5
N=92	10-14	13	14.1
	15-19	11	12.0
	20-29	18	19.6
	30-49	8	8.7
	50-99	7	7.6
	100+	6	6.5

Figure 6.1 Age of respondent firms



27 As per the OECD guidance on HGF measurement (Ahmad and Gonnard, 2007), firms under 3 years were excluded from this study for both the HGF and non-HGF groups. New ventures are thus not represented.

Respondent firm size

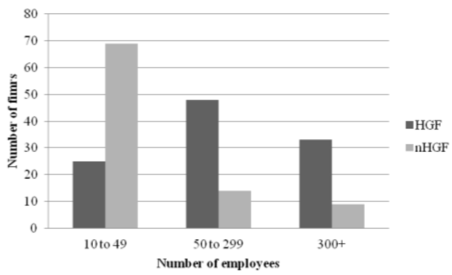
Firm size has been another common focus in HGFs studies, despite acknowledgements that any relationship between HGFs and firm size is very much ambiguous (Henrekson & Johansson, 2010). Previous work on Scottish HGFs has identified that approximately half of these firms (48%) are medium-sized enterprises (50-299 employees); the remainder are equally distributed between small and large firms (Mason and Brown, 2010).

This study found a similar size distribution for HGFs: 45% were medium sized firms (50-299); 24% were small firms (10-49 employees); and the remaining 31% were large enterprises (300+ employees) (see Table 6.2). For non-HGFs in this sample, the picture is quite different. The sample is very much dominated by small firms, which account for 75% of all respondent non-HGFs. This appears to be somewhat representative of the larger Scottish business base, which is dominated by small businesses[28]. As one might assume, there is a positive correlation between company age and size for both groups of firms (for HGFs $r = 0.254$, $n = 106$, $p < .01$; for non-HGFs $r = 0.508$, $n = 92$, $p < .01$). Logically, older firms appear to employ a greater number of employees than younger firms.

Table 6.2 Number of employees

Firm type	#Employees	Frequency	Per cent
HGF	10-49	25	23.6
N=106	50-299	48	45.3
	300+	33	31.1
nonHGF	10-49	69	75.0
N=92	50-299	14	15.2
	300+	9	9.8

Figure 6.2 Number of employees



Given the significant different mean sizes between the HGF and non-HGF groups (and the significant relationship between firm size and type - $\chi^2 = 52.226$, df = 2, p <

.01), size is an important differentiator between the two cohorts of firms within this study. It will thus need to be accounted for throughout the questionnaire analysis, as there may be strategic or process differences among smaller and larger firms.

Respondent firm sector

The Scottish Government (and thus other public sector agencies in Scotland) operates using a sectoral classification system developed by the Scottish Government/Scottish Enterprise, rather than drawing solely on the Standard Industrial Classification (SIC). This sectoral classification was developed using UK SIC 2007 codes[29] and identifies a number of Scottish "key sectors" (Creative industries; Energy; Food & Drink; Financial services; Life sciences; and Tourism), as well as a number of other sectors including Aerospace, Defence & Marine (AD&M); Chemical sciences; Construction; Enabling technologies; Forest industries; Manufacturing; Textiles; and Other services[30]. This thesis has chosen to use these Scottish Government sectors for consistency with other past and on-going HGF research in Scotland, both within the public sector and academia.

As one can see from Table 6.3, both the HGF and non-HGF groups cover a wide variety of sectors. This is representative of the heterogeneous nature of businesses in Scotland, as well as the Scottish HGF population in particular (Mason and Brown, 2010). Within the HGF sample, construction and enabling technologies[31] are two particularly prevalent sectors, with a number of HGFs also operating in the energy and financial services sector. The non-HGF sample is also dominated by enabling technologies companies, but sees a high proportion of firms engaged in forms of service provision outwith the other sectors.

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[28] Nearly ¾ of the firms comprising the wider Scottish 10+ employee business base are classified as small businesses. Author's calculations from Scottish Enterprise data.
[29] For further detail on the development of Scotland's sectors using UK SIC 2007 data, please refer to the Scottish Government's "Key Sector Statistics Database User Note". Further information is available from Scottish Enterprise upon request.
[30] This sector is a kind of "catch all" for service firms that do not fall neatly into one of the other more specific sectors (e.g. training, non-sector specific consultancy, etc.)

It is important to caveat the sectoral classification used here. Whilst it is arguably more responsive to changing forms of business provision than the traditional SIC groupings (particularly within the Scottish context[32]), this system was developed using SIC codes. It thus has similar limitations: it is difficult to explore in any depth the exact offerings of firms within any particular sector and thus it is very likely that there is considerably more ambiguity around the precise sectoral distribution of firms than is evident in Table 6.3.

Table 6.3 Sectoral distribution of respondent firms

Firm type	Sector	Frequency	Percent
HGF	AD&M	1	0.9
N=106	Construction	21	19.8
	Creative industries	1	0.9
	Enabling technologies	23	21.7
	Energy	12	11.3
	Food & Drink	8	7.5
	Forest industries	1	0.9
	Financial services	14	13.2
	Life sciences	4	3.8
	Textiles	2	1.9
	Tourism	3	2.8
	Manufacturing	7	6.6
	Other services	9	8.5
nonHGF	AD&M	2	2.2
N=92	Chemical sciences	3	3.3
	Construction	8	8.7
	Creative industries	4	4.3
	Enabling technologies	20	21.7
	Energy	6	6.5
	Food & Drink	9	9.8
	Financial services	7	7.6
	Life sciences	1	1.1
	Textiles	1	1.1
	Tourism	9	9.8
	Manufacturing	7	7.6
	Other services	15	16.3

[31] "Enabling Technologies" is a technology and IT focused sector, which also comprises firms operating in the areas of advanced materials, bioscience, electronics, photonics and sensor systems, advanced engineering, and Information and communication technology.

[32] For example, Aberdeen (shire and city) has a large population of firms denoted by SIC codes to be engineering or manufacturing companies. As the majority of these firms sell solely to the Oil & Gas sector, the Scottish Government classification system considers them to be part of the Oil & Gas supply chain and classifies them as operating in the "Energy" industry.

6.4 Research question (a): What causes HGFs to grow faster than other firms?

As identified earlier in this thesis, despite decades of research on high growth firms, there is still very little understanding about what causes them to see such rapid turnover growth. Arguably a major shortcoming in the current literature is the failure to specifically address where increased sales volume and value comes from. Who are HGFs selling to and where are these customers located? What is being sold? And where is the greatest sales growth coming from? The questionnaire collected data on each of these questions in an attempt to better understand the nature of HGF offerings and associated growth.

6.4.1 Customer base

Given that customers are an integral part of turnover growth (either in terms of sales volume or sales value), it is shocking how little is known about how high growth firms target and engage with potential and existing customers, as well as which customers contribute the most to increased sales growth. In general, HGFs have been found to shy away from large consumer markets, preferring instead to develop close relationships with a small number of customers (Feindt *et al.*, 2002; Brush *et* al., 2009; Hinton & Hamilton, 2009), usually in the business-to-business sphere (BERR, 2008; Mason & Brown, 2010) rather than B2C.

The questionnaire data collected appears to support the observation that HGFs prefer to work with customers with whom a relationship has already been established. As Table 6.4 shows, the majority of HGFs surveyed have most of their sales come from repeat customers (62%). For non-HGFs this figure is lower (47%), as they see a greater level of sales coming from new customers (14%). There is a significant difference in the percentage of sales from repeat customers between both groups ($\chi^2 = 8.671$, df = 2, $p < .05$). There is no influence from firm size or age (p = ns).

Table 6.4 Source of company sales (customers)

Firm type	Customers	Frequency	Per cent
HGF	New	4	4
N=106	Repeat	66	62
	Both	36	34
nonHGF	New	13	14
N=92	Repeat	43	47
	Both	36	39

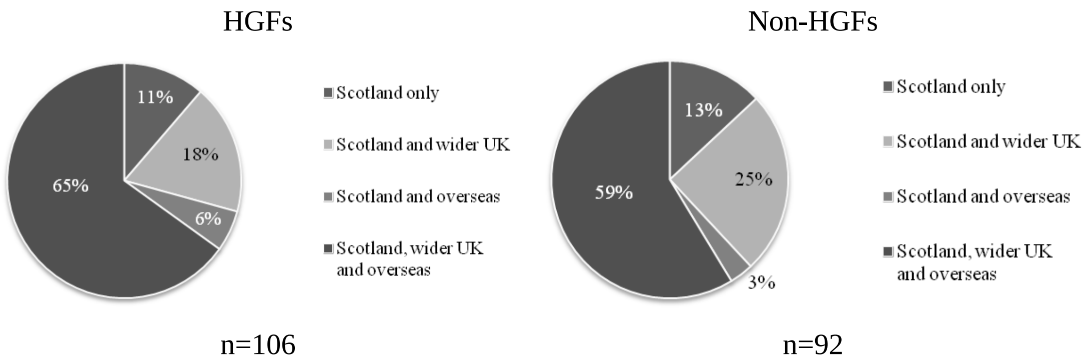
It appears that HGFs in this sample are more likely to derive the majority of their sales from repeat, rather than new customers. However, approximately 1/3 of both groups acknowledge the need to balance sales from both new and repeat customers. Given that there will inevitably be customer churn, if firms are to have repeat customers at all, it is essential to engage with new customers who can then potentially transition to repeat purchasers over time.

6.4.2 Geographic markets and physical presence

Given the observation that HGFs prefer to work with a smaller number of customers, a number of authors posit that HGFs are quite risk averse and prefer to operate within existing markets, whilst others note high levels of international activity (e.g. Zahra *et al.*, 2000; O'Gorman, 2001).

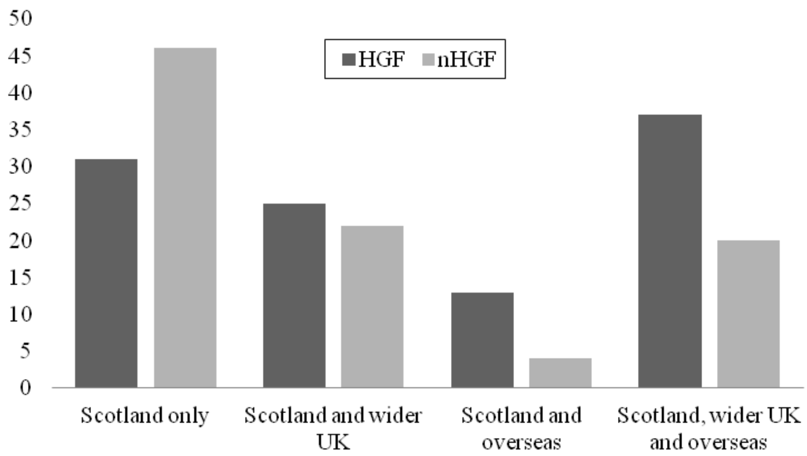
The vast majority of HGFs surveyed (89%) are operating internationally, selling to customers and markets outside of Scotland and the wider UK. Interestingly, a very similar picture emerged for the non-HGF group, where 87% of firms are also selling outside of the UK (see Figure 6.3). This finding suggests that high growth companies are not more likely to be selling internationally than their counterparts experiencing slower levels of growth (p = ns). The existence of sales to international markets is uninfluenced by company age, size or sector (p = ns). This may well be due to the fact that Scotland, as a peripheral nation, offers limited domestic growth opportunities, thereby eventually forcing all firms to look abroad for further opportunities for sales growth.

Figure 6.3 Geographic markets for respondent firms



The international activity of HGFs does seem to be of a particularly committed nature (see Figure 6.4), as many HGFs appear to have a physical presence in international markets. More than 71% of the HGFs firms surveyed have a physical presence outside of Scotland and this cohort is more likely to have physical operations abroad than the non-HGF cohort ($\chi^2 = 12.019$, df = 3, $p<.01$), with no influence from age, size or industry (p = ns). This indicates that HGFs are highly internationalised, perhaps focusing on more committed forms of internationalisation (e.g. JVs and FDI) than simply exports.

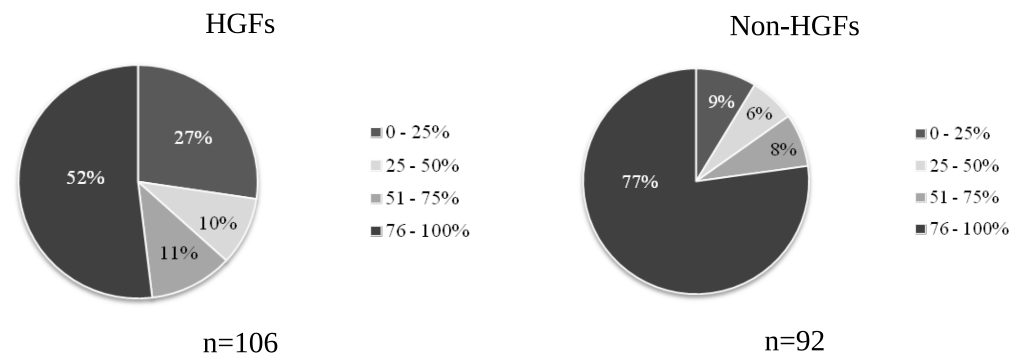
Figure 6.4 Physical locations for respondent firms



This committed internationalisation potentially has a significant impact on employment in Scotland. As Scottish companies grow overseas, there is often less need for Scotland-based manufacturing facilities, distribution centres and domestic sales operations. Previous research on HGFs has shown that, rather than benefiting Scotland, international sales and growth can lead to home-country redundancies, often leaving only a HQ with a handful of high level jobs (Mason and Brown 2010).

Given that so many HGFs have physical locations overseas, it perhaps comes as no surprise that they also have a smaller percentage of their overall workforce located in Scotland. As shown in Figure 6.5, only 52% of HGFs employed the vast majority (75-100%) of their staff in Scotland. This contrasts with the non-HGF cohort surveyed, which showed that 77% of these companies have the majority of their workforce (75-100%) located in Scotland.

Figure 6.5 Firm employment in Scotland



Furthermore, over one quarter of HGFs (27%) actually have less than 25% of their employees located in Scotland – this compares to a figure of 9% for non-HGFs. Therefore, the data indicates that the direct economic footprint in terms of local "home country" employment is actually significantly less for HGFs than a similar cohort of non-HGFs (χ^2 = 15.353, df = 3, $p < 0.05$). As these firms become older, they also appear have a smaller percentage of their overall workforce located in Scotland.

Whilst the operational definition of HGFs in this thesis has involved turnover, many other HGF studies examine employment growth. The observation that HGFs have a smaller local employment footprint has important implications for this branch of

HGF research, particularly given the current focus on HGFs as major job creators (NESTA, 2009).

6.4.3 Firm offering

Unfortunately, there is a dearth of information in the literature about the offerings sold by high growth firms. Surprisingly, authors have failed address what HGFs are selling and what type of offering is seeing the greatest growth, as well as whether HGFs are particularly reliant on sales from new products or services. The questionnaire collected data to provide a baseline understanding of HGF product offerings and growth offerings, which is an important addition to our current knowledge and understanding about HGFs.

Primary offering

As shown in Table 6.5, there is a relatively similar picture in terms of the primary offering of both HGFs and non-HGFs: approximately half of the firms in each group are selling a combination of physical products and intangible services as their primary offering to customers. HGFs are not more likely than firms in the non-HGF sample to be selling any particular type of primary offering (p = ns) and company age and size do not appear to be related either (p = ns).

Table 6.5 Primary offering to customers

Firm type	Primary offering	Frequency	Per cent
HGF	Physical products	32	30
N=106	Services/intangible offerings	20	19
	Combination of both	54	51
nonHGF	Physical products	26	28
N=92	Services/intangible offerings	26	28
	Combination of both	40	44

The prevalence of firms selling primary offerings which combine both physical products and services is perhaps a reflection of changing customer expectations, whereby “services” (e.g. after-sales support) are often expected to be included in the purchase price of many physical products (e.g. IT equipment). As Gummesson

(1995: 250) has reasoned, customers are no longer buying distinct goods or services. Rather, they are buying offerings which are expected to in turn render a form of service, be it direct (e.g. defined after sales support) or indirect through on-going support and assistance built into a product (e.g. optical scanning machines produced by the Scottish firm Optos, which can also read and interpret the results of collected scan data and prepare a diagnosis).

Offering contributing to greatest sales growth

In addition to understanding a high growth firm's primary offering (physical product, intangible service, or combination), it was equally important to gauge what types of offerings were contributing most to the firm's sales growth - fixed, flexible or bespoke[33]. Customisation of offerings is becoming increasingly important for consumers, particularly for those looking for a "solution" to a particular business problem or need (Doster and Roegner, 2000) rather than an "off the shelf" offering. The value literature discusses the importance of flexible and customisable offerings, noting that these types of offerings not only contribute to customer perceived value creation (Tuli *et al*., 2007), but also result in closer relationships with existing customers (Grönroos and Ravald, 2009). This can in turn result in repeat purchases and referral by existing customers, which will have an important impact of the firm's financial performance (Voyles, 2007). There can also be a high monetary exchange value attached to more bespoke offerings, which can potentially positively affect turnover.

In terms of the type of offering seeing greatest sales growth, HGFs are more likely to be seeing growth from either flexible (39%) or bespoke (42%) offerings, whereas non-HGFs are seeing the most growth from flexible offerings (41%). There is a significant difference between the growth offerings of both groups of firms (χ^2 = 8.658, df = 2, p<.05), although age and size are not contributing factors (p = ns).

[33] "Fixed offerings" are set products/services; "flexible offerings" are core products/services that allow for some modification; and "bespoke offerings" are products/services that are uniquely built and tailored to individual customer requirements.

Table 6.6 Greatest growth offering

Firm type	Offering type	Frequency	Per cent
HGF	Fixed	20	19
N=106	Flexible	41	39
	Bespoke	45	42
nonHGF	Fixed	31	34
N=92	Flexible	38	41
	Bespoke	23	25

This data indicates that HGFs may be better placed than non-HGFs to influence customer perceived value creation, given that they are more likely than non-HGFs to be selling (and seeing growth from) more customisable offerings.

Innovation and revenue from new products

In line with the customisation of firm offerings, innovation is also recognised to play a role in influencing customer value creation. Firms can help to create value for their customers "by providing a new or more affordable way of accomplishing a task, solving a problem, or satisfying a need that was at best inconveniently satisfied in the past" (Barringer *et al.*, 2005: 673), whether through product refinement or innovation. Active management of product development and innovation processes allows firms to move up the "value chain", providing their customers with better product/service offerings which in turn creates value for customers and stimulates growth for the firm (Hanan, 1987; Doorley and Donovan, 1999).

However, it is important to remember that the concept "innovation" includes more than simply new product innovation. Any incremental changes to an existing product - or even a business (e.g. strategy, structure and marketing) - are considered to equally important but more "hidden" sources of innovation (NESTA, 2007).

Looking at innovation activity, it is clear that there are quite consistent levels of innovation occurring in both the HGF and non-HGF groups. There is no significant difference between the groups in terms of organisational innovation (new or improved corporate strategy, advanced management techniques, organisational structure or marketing plan) (p = ns) or new or improved services (p = ns).

Table 6.7 Innovations in the past 3 years

Firm type	Innovations in the past 3 years	Frequency	Per cent
HGF	New/improved products	66	62
N=106	New/improved services	47	44
	New/improved corporate strategy	72	68
	New/improved advanced management techniques	45	42
	New/improved organisational structure	75	71
	New/improved marketing plan	66	62
nonHGF	New/improved products	75	82
N=92	New/improved services	48	52
	New/improved corporate strategy	54	59
	New/improved advanced management techniques	39	42
	New/improved organisational structure	72	78
	New/improved marketing plan	65	71

Whilst both HGFs and non-HGFs are undertaking significant new product development (NPD) (χ^2 = 7.150, df = 1, p < .01), there does appear to be a small difference between the groups in terms of new or improved products: 62% of HGFs have introduced a new or improved product in the past three years, but this figure is slightly higher amongst the non-HGFs (82%). Perhaps unsurprisingly then, HGFs see a more limited proportion of their revenue derived from new products (χ^2 = 27.277, df = 3, p < .01).

Table 6.8 Revenue from products developed in the past 3 years

Firm type	%of revenue from NPD	Frequency	Per cent
HGF	0-25%	62	59
N=106	26-50%	32	30
	51-75%	10	9
	76-100%	2	2
nonHGF	0-25%	24	26
N=92	26-50%	42	46
	51-75%	11	12
	76-100%	15	16

The majority of HGFs (89%) derive less than half of their turnover from NPD revenue; for non-HGFs this figure is somewhat lower (72% of firms). There does appear to be a small group of non-HGFs (16%) that derive the majority of their revenue (76-100%) from new products (compared with only 2% of HGFs), but in general neither group appears to be heavily reliant on new products for revenue.

In the case of HGFs, this limited reliance on NPD revenue may be linked to their propensity to provide more flexible and bespoke offerings. As discussed in Chapter 3, there has been a significant shift in the kinds of product and service offerings firms are selling to their customers and, more importantly, how firms are developing and implementing these offerings: many have moved away from the traditional "push" mentality of new product and service development in favour of more customer-led "solutions provision" (Shepherd and Ahmed, 2000; Davies *et al*., 2006; Sawhney, 2006; Cova and Salle, 2007). Arguably, if a firm is offering more bespoke "solutions", any product offering (no matter how new) would be tailored for (and specific to) individual customers. Such products would therefore not able to be directly commercialised on a large scale (Sawhney, 2006) and thus may not be accurately captured by traditional NDP frameworks (Shepherd and Ahmed, 2000), which would in turn have an effect on reported NPD revenue figures.

6.5 Research question (b): Is the creation of customer perceived value an enabler for rapid firm growth?

As identified in Chapter 4, the second research question this thesis sought to address was whether or not there is evidence to substantiate claims in the literature that HGFs are customer focused and creating unique value for their customers in a way that differentiates them from other firms and contributes to their financial performance.

The current evidence for such a relationship is limited at best. Barringer *et al*. (2005) observed that HGFs are more likely than slower growing firms to create unique value for customers, by helping customers to maximize utility, reduce costs and increase organizational effectiveness (through products or processes). A more recent study drawing heavily on Barringer *et al*. (2005) claimed to have confirmed this finding (Zhang *et al*., 2008), yet failed to explain in any detail what (a) what they consider to constitute customer value or customer value creation; (b) how they determined the construct "creating unique value for customers"; and (c) how this construct was addressed and evaluated. It is clear from the paucity of empirical research on the relationship between customer value creation and rapid firm growth that significant further data collection and analysis is required before one can say with any certainty that a relationship (let alone a positive one) exists.

In order to provide a baseline understanding of how (or if) HGFs differ from their non-HGF counterparts in terms of customer value creation, this questionnaire assessed these two groups on a number of measures that arguably have an influence on a firm's ability to positively influence customer value creation: environmental dynamism (unpredictability and volatility), enacting organisational environment; competitive priorities; speed and flexibility; customer focus; and customer integration.

6.5.1 Environmental dynamism

It is widely recognised that the more dynamic or turbulent a firm's external environment, the more innovative, proactive and externally-oriented it will need to become (Naman & Slevin, 1993; Dess *et al.*, 1997; Crant, 2000). HGFs are recognised to be particularly dynamic and flexible firms (Hinton and Hamilton, 2009) and the literature clearly demonstrates that rapidly growing firms are found most often in dynamic regions or industries (Jovanovic, 1982; Davidsson & Delmar, 1997; Carroll & Hannan, 2000). However, it is not always clear how and why a particular region or industry is classified as "dynamic" - it often appears to be an author's own perspective. It was thus essential to better understand how HGFs themselves perceive their own environmental dynamism (environmental unpredictability and volatility), particularly in contrast with the perceptions of non-HGFs.

Unpredictability

An independent-samples t-test was conducted to compare perceived environmental unpredictability between HGF and non-HGF groups. There was no significant difference in the scores for HGFs ($M = 4.20$) and non-HGFs ($M=4.10$) ($t(196) = .78$, p = ns). Additionally, despite a sufficiently high Cronbach's alpha score ($\alpha>0.7$) whilst pre-testing this scale, with all data collected the alpha value ($\alpha=0.699$) dropped below the accepted threshold of 0.70. This indicates limited internal consistency of the scale and, given that this scale had had an item removed [*Business unit labour relations*], this scale has been omitted from further analysis.

Volatility (VOL)

This scale had an acceptable Cronbach's alpha score ($\alpha=0.834$). An independent-samples t-test was conducted to compare perceived environmental volatility between HGF and non-HGF groups. There was a significant difference in the scores for HGFs ($M = 3.73$) and non-HGFs ($M = 4.04$) ($t(196) = -1.94$, $p <.05$).

High growth firms appear to consider the pace of change (volatility) of their external environment to be slightly slower than the non-HGFs sampled. This is not to say that HGFs' environments are in fact less volatile than those of non-HGFs - only that they perceive them to be so.

6.5.2 Firm level

As discussed in Chapter 3, a number of firm-level competencies are important if a firm is to be able to positively influence customer value creation. These include having a customer-focused ideology; a clearly defined value proposition; and an understanding of both customer wants and needs, in addition to knowing how these can best be met (or exceeded). High growth firms are considered to have a unique organisational environment, often exhibiting a dynamic and customer-focused ideology (Hinton and Hamilton, 2009), with a strong focus on end-users and end-user engagement (Mason and Brown, 2010) and building lasting relationships with customers (Barringer *et al*., 2005).

To test these assumptions, and explore firm-level competencies for value creation, a number of scales were used to determine if significant differences exist between the HGF and non-HGF samples. These items, linked to the principles of customer perceived value, included: a firm's enacting organisational environment; competitive priorities; and organisational speed and flexibility.

Enacting organisational environment (ENORG)

Enacting organisation environment refers to a firm's willingness and ability to process and internalise customer insight and information into the firm and its processes for strategic performance (Escrig-Tena and Bour-Llusar, 2005). High growth firms are considered to have a unique organisational environment, particularly in terms of commitment to (and understanding of) their customers (Barringer *et al*., 2005). One would expect them to score themselves relatively well. This scale had an acceptable Cronbach's alpha score (α=0.87).

An independent-samples t-test was conducted to compare enacting organisational environment between HGF and non-HGF groups. There was no significant difference in the scores for HGFs (M = 5.26) and non-HGFs (M =5.33) ($t(196) = -.535$, p = ns).

Both HGF and non-HGF groups appear to agree equally about their firms' willingness and capabilities with regards to their enacting organisation environment. HGFs do not consider themselves to be any more willing or capable of focusing on customers and internalising insights to facilitate performance than non-HGFs do.

Competitive priorities (COMP)

A firm's competitive priorities have a direct influence on its ability to influence value creation. Arguably cost is becoming less of a competitive priority, particularly for those firms that choose a differentiation strategy based on reciprocal promises of value with their customers, where both parties seek an equitable exchange (Ballantyne and Varey, 2006; Ballantyne *et al*., 2011). Little has been done to better understand the competitive priorities of HGFs, however, given their supposed customer-focused ideology (Hinton and Hamilton, 2009) and desire to create value (Kim and Mauborgne, 1997), one would expect them to place less emphasis on price and more on other competitive priorities.

This scale measured how oriented a firm is to competitive priorities that are less focused on cost than on quality and performance for customer satisfaction. It had an acceptable Cronbach's alpha score (α=0.77). An independent-samples t-test was conducted to compare competitive priorities between HGF and non-HGF groups. There was no significant difference in the scores for HGFs (M=5.07) and non-HGFs (M=5.35) ($t(196) = -1.944$, p = ns).

Both HGF and non-HGF groups appear to agree equally that their firms' competitive priorities focus less on cost and more on quality and customer satisfaction. HGFs do not appear to consider themselves to be any more focused on quality and customer satisfaction than non-HGFs do.

In an effort to triangulate this scale and to ensure validity of responses, questionnaire respondents were asked to rate their level agreement to two additional statements:

(i) My company is focused on providing the best offering at the lowest cost; and
(ii) My company is focused on differentiating itself from competitors by providing a unique customer offering.

Neither group was more likely than the other to agree to being focused on providing low cost offerings: HGFs (M = 4.29) and non-HGFs (M = 4.33) ($t(196) = -.135$ p = ns). This reflects their answers for the scale.

Both HGF and non-HGF groups also had similar levels of agreement with regard to whether their firms focus on strategic differentiation by providing a unique customer offering: HGFs (M = 5.61) and non-HGFs (M = 5.90) ($t(194) = -1.736$ p = ns). This indicates that differentiation is perceived to be equally important amongst both groups.

Speed and flexibility (SPFL)

The literature recognises that organisational speed and flexibility are powerful competitive abilities, allowing firms to best respond to changing market and customer needs (Escrig-Tena and Bour-Llusar, 2005). This is particularly important given that many firms have moved away from the traditional "push" mentality of product and service development in favour of more customer-led offerings, which can require greater demands of the organisation. HGFs are thought to have a high degree of operational flexibility, which in turn allows them to respond quickly to changing customer needs as well as new opportunities (Hinton and Hamilton, 2009), so one would expect them to score themselves relatively well.

This scale had an acceptable Cronbach's alpha score (α=0.83). An independent-samples t-test was conducted to compare organisational speed and flexibility between HGF and non-HGF groups. There was a significant difference in the scores for HGFs (M=4.75) and non-HGFs (M=5.26) ($t(196) = -3.012$, $p < .01$).

High growth firms appear to have lower levels of agreement about their organisational speed and flexibility than the comparable sample of non-HGFs. This is not to say that HGFs are in fact less capable of speed and flexibility than non-HGFs, only that they perceive themselves to be so.

6.5.3 Firm-customer interaction level

In addition to firm-level competencies, a second critical component in customer perceived value creation is the firm-customer interaction level. As discussed in Chapter 3, this is where the dialogue, exchanges and encounters necessary to create perceived value occur between a firm and its customers. Whilst authors claim that HGFs are customer focused and create unique value for their customers (e.g.

Barringer *et al*., 2005), there is an absence of empirical data that directly addresses the extent to which HGFs are focused on, and interacting and collaborating with, their customers. In fact, the operating definition of "customer value" in the literature seems to be more in line with the concepts of "exchange value" (e.g. Smallbone *et al*., 1995) than that of customer perceived value.

To develop a baseline for understanding the firm/customer interaction level underpinning customer perceived value, two scales were used to gauge if significant differences exist between HGFs and non-HGFs: customer focus and customer integration.

<u>Customer focus (CFOC)</u>

Customer focus is absolutely critical for business growth, where organisations can outperform competitors by exceeding customer expectations (Chen and Paulraj, 2004). However, this arguably requires a strong customer focus throughout the firm, at both ideological and interaction levels. With customer needs ever-changing, firms need to establish and maintain close contact and interaction with their customers to understand evolving needs and desires, encourage continual two-way interactions and information flow (Kumar *et al*., 2010) and incorporate any customer insight into strategic planning and other business processes (Chen and Paulraj, 2004). High growth firms are recognised to develop such close customer contact (Siegel *et al.*, 1993) and to have a keen sense of customers' needs and desires (Barringer *et al.*, 2005), so would be expected to score themselves quite well.

This scale measured how companies perceived their customer focus and had an acceptable Cronbach's alpha score (α=0.85). An independent-samples t-test was conducted to compare customer focus between HGF and non-HGF groups. There was a significant difference in the scores for HGFs (M=5.53) and non-HGFs (M=5.84) ($t(196) = -2.471$, $p < .05$).

High growth firms appear to have lower levels of agreement about their customer focus than the comparable sample of non-HGFs. This is not to say that HGFs are in fact less customer-focused than non-HGFs, only that they perceive themselves to be so.

In order to ensure continual customer focus, it is arguably critical that all members of an organisation's staff - current and future - share that customer commitment and are able to deliver accordingly. With this in mind, respondents were asked to rate their level agreement to two additional statements pertaining to their staff:

(i) Relative to others in our industry, our firm spends more on skills training and staff development; and
(ii) We find it very difficult to recruit staff with a strong customer/sales focus.

Neither group was more likely than the other to agree to spending more on skills training and staff development: HGFs (M=4.35) and non-HGFs (M=4.58) ($t(190) = .992$, p = ns). Interestingly, there does appear to be a relationship between the groups and the ease at which they recruit staff with a strong customer/sales focus ($\chi^2 = 12.925$, df = 6, $p < .05$). High growth firms (M = 3.84) perceive fewer difficulties in recruiting customer focused staff than non-HGFs (M = 4.38) ($t(196) = -2.386$, $p < .05$).

The results of this customer focus scale are at odds with findings from the literature. This issue will benefit from further qualitative exploration.

Customer integration (CINT)

In addition to having a strong customer focus, firms must also be able to integrate customer insight and requirements, tailoring processes and outputs to suit customer preferences (Koufteros *et al*., 2005). As firm-customer relationships strengthen over time (Grönroos, 1997), it becomes possible for firms to involve their customers in the “co-creation” or “co-production” of offerings (Prahalad and Ramaswamy, 2000). However, this process is highly dynamic (Etgar, 2008) and interactive (Wikström, 1996), requiring a strong understanding of customer insight throughout the organisation. HGFs are noted to engage closely with end-users (Mason & Brown,

2010) to add value to customer offerings (Smallbone *et al*., 1995), so one would expect to see evidence of strong customer integration as well.

This scale measures the extent to which customers and customer insight are integrated into a firm, ensuring that the "voice of the customer" permeates all aspects of the organisation (Koufteros *et al*., 2005). It had an acceptable Cronbach's alpha score (α=0.87). An independent-samples t-test was conducted to compare customer integration between HGF and non-HGF groups. There was a significant difference in the scores for HGFs (M=5.04) and non-HGFs (M=5.50) ($t(194) = -3.089$, $p < .01$).

High growth firms appear to have lower levels of agreement about their customer integration than the comparable sample of non-HGFs. This is not to say that HGFs integrate their customers and customer insight less than non-HGFs, only that they perceive that they do.

In an effort to triangulate this scale (and to ensure reliability of responses), respondents were asked to rate their level agreement to one further statement later on in the questionnaire:

(i) Our customers have little input into the development of our product/service offerings.

Neither group was more likely than the other to agree to this statement: HGFs (M=2.92) and non-HGFs (M=2.92) ($t(174) = -.044$, p = ns). Both HGFs and non-HGFs agree that customers are involved in their product/service development.

Given that these findings contrast with observations in the literature, further exploration will be useful.

6.6 Conclusion

This chapter has discussed in depth the findings from the questionnaire used in Phase 1 of data collection for this thesis. It has briefly discussed the questionnaire rationale and data analysis and outlined response rates. A number of issues have been explored using χ^2 tests including the demographic characteristics of participant firms (age, size sector), their customers, markets and product offerings. A summary of the χ^2 values can be found below in Table 6.9.

Table 6.9 χ^2 values

	χ^2 value
Age	22.266
Size	52.226
Source of company sales (customers)	8.671
Geographic location	12.019
Geographic markets	1.976
Firm employment in Scotland	15.353
Primary offering to customers	2.511
Greatest growth offering	8.658
New products in the past 3 years	7.150
Revenues from products developed in the past 3 years	27.277

This data sheds important light on the types of offerings HGFs are selling (more flexible or bespoke offerings), who they are selling to (predominantly existing customers) and what types of offerings they are seeing the greatest turnover growth from (flexible and bespoke offerings). It also highlights that HGFs are no more likely than their non-HGF counterparts to be selling to customers outside of Scotland, although HGFs are more likely to have physical operations abroad. These findings help to fill some of the knowledge gaps in the current HGF literature.

The chapter has also presented data collected to explore the issue of customer value creation within HGFs. It has compared samples of HGFs and non-HGFs (using independent samples t-tests) across a number of scales, including environmental dynamism, enacting organisational environment, competitive priorities, speed and flexibility, customer focus and customer integration. Whilst noted throughout this chapter, a summary of the results of the t-tests is in Table 6.10 below. Correlation matrices are noted in Tables 6.11 (HGFs) and 6.12 (non-HGFs).

Table 6.10 Independent samples t-test values

Scale	t value	p value
VOL	-1.94	p < .05
ENORG	-.535	p = ns
COMP	-1.944	p = ns
SPFL	-3.012	p < .01
CFOC	-2.471	p < .05
CINT	-3.089	p < .01

Table 6.11 Correlation matrix for scales (HGFs)

	VOL	ENORG	COMP	SPFL	CFOC	CINT
VOL	1					
ENORG	.161	1				
COMP	.126	.372**	1			
SPFL	.184	.416**	.446**	1		
CFOC	.149	.403**	.405**	.635**	1	
CINT	-.028	.201*	.266**	.404**	.506**	1

Table 6.12 Correlation matrix for scales (non-HGFs)

	VOL	ENORG	COMP	SPFL	CFOC	CINT
VOL	1					
ENORG	-0.73	1				
COMP	.208*	.262*	1			
SPFL	.148	.333**	.296**	1		
CFOC	.048	.447**	.349**	.454**	1	
CINT	.186	.126	.204	.360**	.388**	1

* Correlation is significant at the .05 level
** Correlation is significant at the .01 level

These tests have identified some interesting findings. In terms of environmental dynamism, which is noted to have a positive influence on an organisation's flexibility and growth intentions (Wiklund and Shepherd, 2003) as dynamism increases, the non-HGFs indicated they had higher levels of perceived volatility within their business environments. Non-HGFs also perceived higher levels of speed and flexibility within their organisation's than the HGFs did.

For issues pertaining to their organisational environment and competitive priorities at the “firm level”, no significant differences emerged between the HGF and non-HGF groups.

In terms of working with customers, non-HGF respondents perceived higher levels of customer focus and customer integration within their firms than the comparative HGF respondents did. These are interesting findings – particularly given what the literature tells us about HGFs being strongly customer focused (e.g. Parker *et al*., 2010).

These insights have been feed into the development of Phase two of data collection for this thesis, depth interviews using the Critical Incident Technique. The following chapters will present the findings from theses interviews.

Chapter 7 CIT interview findings

7.1 Introduction

This chapter will present findings from the CIT interviews used during Phase 2 of data collection. This phase sought to address the explore the two questions underlying this thesis, (a) *what causes HGFs to grow faster than other firms* and, as part of this growth process, (b) *whether the creation of customer perceived value is an enabler of this rapid growth*, as well as each of the suppositions outlined in Chapter 4. This chapter will begin with a short overview of the data analysis procedures used during the CIT process and will provide some key demographics of the firms (HGFs and non-HGFs) that participated in the interviews. The remainder of the chapter will present the interview data and findings, beginning with an exploration of the firm growth process, particularly the role that “critical incidents” play in firm growth, and a number of the attitudes and aspirations underlying and influencing firm growth. It will then explore in depth the issue of customer perceived value creation, investigating the prevalence of firm-level structures and competencies as well as firm-customer interactions that are considered to have a positive effect on customer perceived value.

7.2 Data analysis overview

This second phase of data collection involved depth interviews with participants, following the principles of the Critical Incident Technique. The CIT process used in this phase was based on Flanagan’s (1954) principles (including the research process he outlined), but rather than focusing on one particular incident it sought to identify any incidents that were felt to have had a direct impact on the firm’s development and performance, whether positive or negative. Given the exploratory focus of this thesis, and the multi-faceted and complex nature of firm growth itself (Leitch *et al*., 2010a), it was important to think about the most applicable methods for data collection and analysis (Easterby-Smith *et al*., 2008), which was deemed to include both qualitative and quantitative data analysis (Achtenhagen *et al*., 2010: 297). It was always planned for the quantitative questionnaire discussed in Chapter 6 to provide a "baseline" about HGF activities (products; customers; growth offerings) and to feed into the development of this subsequent phase of qualitative data collection. Given this thesis' focus on the process of rapid growth, and how activities to positively influence customer perceived value affect this process, depth interviews using the CIT were deemed to be the most suitable means by which to collect the qualitative data necessary to evaluate this thesis' conceptual framework and suppositions and to further explore and probe some of the more ambiguous data from the Phase 1 questionnaire.

7.2.1 Interview structure

With these tasks in mind, the CIT interview comprised two components. The interview began with a participant-led discussion of "company development" since the year 2000 (or, since the company's inception if this was more recent than 2000), noting any crucial events. Respondents were encouraged to consider positive as well as negative events and were not held to discrete or isolated events - any "periods" or "episodes" were noted to be equally important to the discussion (Cope and Watts, 2000). Noted in Chapter 5, early interview participants were given a timeline to assist in talking through incidents. Some participants liked talking through the timeline, whereas others preferred to talk through incidents in a less structured manner. Given that the stories of company growth were often complex, with participants jumping backwards and forwards in time, the timeline was perhaps viewed as too rigid by some respondents. Growth stories were seldom clear or linear. As the respondents had the power to choose the incidents discussed within an overall framework, they were more likely to discuss incidents that had high organisational involvement (Burns *et al*., 2000) or emotive context (Gremler, 2004), thus helping to facilitate higher levels of disclosure (Burns *et al*., 2000). For the HGFs, additional attention was paid to events occurring shortly before the 2006-2009 period, although firms were never made aware of their "high growth" status or directed to focus their discussion on this time period. This discussion comprised the bulk of the interview, approximately ¾ of the allotted 1 hour interview time.

The remainder of the interview (approximately the last 15 minutes) involved a semi-structured discussion about products, customers and competitive advantages, drawing on the constructs of the conceptual framework, as well as the constructs tested in the Phase 1 questionnaire. Whilst a section of the interview guide was developed for this discussion (see Appendix 4), these issues were usually organically raised and addressed during the first part of this interview, rather than as a separate discussion. Note that the interview guide does not specifically query "critical incidents". The interviews were designed to be participant-led, with the discussion guide acting as an "aide memoire" to the researcher for key issues to be addressed and explored during the discussion.

Each interview was recorded and transcribed, resulting in nearly 25 hours of audio and 187 double-sided pages of transcripts.

7.2.2 Data analysis

In line with Miles and Huberman (1994), interview data was transcribed and coded as soon as possible after each interview, allowing for analysis to occur on an on-going basis. Audio files, field notes and transcripts were stored in NVIVO and this platform was used to support the coding and analysis, allowing for more efficient coding of blocks of text, particularly when coding to multiple categories and sub-categories was required. As often happens in qualitative research, the categories identified in this research were neither exhaustive nor mutually exclusive (Marshall and Rossman, 2006).

As noted in Chapter 5, the data analysis for this phase was partly planned and party emergent: a number of *a priori* categories were developed from the literature constituting a coding frame (Chell, 2004), with further categories emerging from the data itself (Graebner, 2009). This is in line with the CR research process to ensure a strong theoretical foundation for data analysis (Bøllingtoft, 2007). The initial focus was on identifying, coding and categorising incidents considered to be critical to company development and growth (see section 7.4.1). Once coding for these items was complete, interview transcripts were them coded for those items pertaining to customer perceived value (see section 7.5). After all interviews had been coded, analysis began. This comprised three main steps:

1. Comparison within interviews;
2. Comparison between interviews within groups (HGFs and non-HGFs); and
3. Comparison between groups (HGFs versus non-HGFs).

Comparison within interviews

As discussed, each interview was transcribed and coded for both critical growth events and value creation items. A key task was to "disentangle the chronology of events" (Chell, 2004: 55) and determine a temporal perspective of firm development. An "independent observer" was also present at every interview to take notes, identify incidents and code them to categories independently of the researcher. For those companies within the sample who were account managed by Scottish Enterprise (12 out of 21), post-interview discussions were also conducted with their Account Manager to (a) have the Account Manager identify critical incidents in the firm's development over the past 10 years, allowing for triangulation of incidents as well as additional data capture (and coding). With 2-3 sets of interview notes and codes collected for each company, it was necessary to rigorously compare the codes and categories to ensure consistency.

Comparison between interviews within groups

As an increasing number of interviews were conducted, it was also important to compare categories and codes within the two groups under study - high growth firms and non-high growth firms. This allowed for an emerging understanding of key themes and similarities/differences amongst the HGF group and then amongst the non-HGF group.

Comparison between groups

Finally, having conducted all the interviews and completed the within-group comparison, a direct comparison began of the HGF group and the non-HGF group. This phase was critical for fulfilling the fundamental purpose of this thesis of exploring what makes HGFs grow faster than non-HGFs and what the role of customer perceived value creation is in this process.

7.3 Respondent firm overviews

As discussed in Chapter 5, participants for this phase of research were drawn from the sample of questionnaire respondents who noted they were interested in being a part of the subsequent phase of data collection. Interviews were arranged and conducted with representatives from 11 high growth firms and 10 non-high growth firms[34].

These companies were quite diverse in terms of their demographics, spanning a number of sectors and geographic areas (see Table 7.1), however they were all operating in the B2B sphere. HGFs had to have had an average annualised turnover growth rate of at least 20% during the period 2006-2009 as per OECD guidance (Eurostat-OECD, 2008), whereas non-HGFs had significantly lower growth rates ranging from 2-10% (an average rate of 5.8%). A number of HGFs were still experiencing rapid growth at the time of interview, which allowed for the collection of both retrospective and real-time data (Pettigrew, 1992).

Whilst financial information on these firms was available through Companies House (accessed via FAME) and from Scottish Enterprise records[35], detailed financial information was also requested during the course of each interview as part of understanding firm growth ambitions, performance track record and projected

[34] These companies were all registered and Headquartered in Scotland. They represented a mixture of ownership types including private companies, limited liability companies and PLCs.

[35] Scottish Enterprise keeps detailed records on company financials for each of the firms involved in their Account Management programme. The researcher was fortunate to have complete access to these records.

growth. Firms were largely very willing to provide this sensitive information on the condition that anonymity would be assured[36]. As a result, the 21 companies interviewed have been anonymised throughout this chapter.

Table 7.1 Overview of participant firms

Company	Founded	# Emp.	Sector	Location	Growth rate (06-09)
HGF_1	1992	231	Other services	Aberdeen	22
HGF_2	1962	758	Food & Drink	Airdrie	20
HGF_3	1988	421	Enabling technologies	Glasgow	29
HGF_4	1993	143	Life sciences	Dundee	20
HGF_5	1973	177	Manufacturing	Glasgow	24
HGF_6	2002	113	Other services	Falkirk	43
HGF_7	1998	371	Other services	Glasgow	22
HGF_8	1925	216	Construction	Glasgow	29
HGF_9	1988	35	Enabling technologies	Aberdeen	27
HGF_10	1978	42	Manufacturing	Dundee	30
HGF_11	1995	18	Other services	Aberdeen	24
nHGF_1	2003	22	Food & Drink	Ayr	5
nHGF_2	2003	15	Other services	Edinburgh	9
nHGF_3	1891	95	Textiles	Airdrie	2
nHGF_4	1995	22	Financial services	Glasgow	5
nHGF_5	1987	70	Chemical sciences	Bellshill	3
nHGF_6	2003	21	Food & Drink	Bellshill	10
nHGF_7	1994	40	Life Sciences	Glasgow	4
nHGF_8	1905	59	Construction	Paisley	6
nHGF_9	1989	14	Tourism	Edinburgh	6
nHGF_10	1950	135	Other services	Wishaw	8

A respondent from of each of these firms participated in a CIT interview. All respondents had been with the company since at least 2006 (the majority - 18 of the 21 - had been with the firm even longer), so were able to provide an account of the firm's performance before and during the growth period, as well as insight into company competencies and interactions with customers that might contribute to the creation of customer perceived value.

[36] This extra collection of financial information was very useful, as company-held turnover records at times differed quite significantly from those figures as reported through FAME.

7.4 Exploring HGF growth

A central theme throughout the HGF literature concerns the process by which firms grow. As discussed in depth in Chapter 2, traditional assumptions within the literature view company growth as a phased exercise, involving the movement through different discrete stages of a company "life cycle". Whilst this view has come under increasing criticism for being too simplistic, few studies have attempted to provide a new conceptualisation of firm growth, particularly rapid firm growth.

It is in this context of a limited knowledge base that this thesis has focused on addressing the issue of *how do high growth firms grow?* To be blunt, the current literature base is inadequate for helping us to understand what forces propel businesses towards different stages of turnover growth and, without this fundamental understanding of the firm growth process, it is arguably impossible to ever understand what factors might engender - or be linked to - a period of rapid firm growth. The CIT interviews were designed to identify critical incidents for firm development and to evaluate how these incidents relate to the process of firm growth.

7.4.1 Critical incidents

To better understand the process of firm growth, interview respondents were asked to identify what they considered to be critical events that had an impact, positive or negative, on their company development since the year 2000. Firms could list as many critical events as they chose. In total, 119 incidents were reported, 69 of these by HGFs and the remaining 50 by non-HGFs. The average number or critical events per HGF was 6; for non-HGFs and average of 5 critical events were reported per firm.

As one can see from Table 7.2, the interviews identified a plethora of different events. Some of these, for example a new owner for the company, were considered by some respondents to be positive and yet negative to others. Such polarizing events have been denoted as either positive (+) or negative (-).

The events also covered a variety of general themes and business functions. As part of the coding and classification exercise, it was important to consider how to best categorise these incidents. Many researchers have utilised a basic dichotomy for categorising different types of organisational events or triggers, differentiating between internal and external (Zahra and George, 2002) or endogenous and exogenous events (Abrahamson and Fairchild, 1999). Whilst helpful, such a basic dichotomy had limitations when attempting to categorise critical incidents, as many were not wholly endogenous or wholly exogenous. Although still quite crude, critical incidents have been classified as *endogenous, exogenous* or *co-determined*, and then further classified by thematic area as per other work classifying organisational events (Terpstra and Olson, 1993) (see Table 7.2). Interestingly, but perhaps not surprisingly, the vast majority of these critical events were common to all firms, regardless of their growth rate. Basic counts have been provided for clarity to better understand the range and number of incidents identified by HGFs and non-HGFs. Those *a priori* categories and codes for incidents identified from the literature have been denoted with a "*". The remainder have emerged from the data analysis.

Table 7.2 Critical incidents affecting firm development and performance

	Thematic area	**Critical incidents**	**Count**	**HGF**	**nHGF**
Endogenous*	Management team*	MBO	3	1	2
		New MD*	1	1	0
		Succession planning	1	1	0
		Change of Non-Exec board	1	0	1
		Management team sum	*6*	*3*	*3*
	Product development*	New product/service* offering	13	5	8
		Modified product/service offering	1	1	0
		R&D spending*	1	1	0
		IP protection (-)	1	0	1
		New IP (licensed)	2	0	2
		Product review	1	0	1
		Product development sum	*19*	*7*	*12*
	Sales & marketing	Reputation	2	2	0
		New market exploration*	3	2	1
		Sales & marketing sum	*5*	*4*	*1*
	Organisational structure & culture	New corporate acquisition*	4	4	0
		Change in culture (+)	1	1	0
		New premises	3	1	2
		Organisational structure & culture sum	*8*	*6*	*2*
	HRM	New employee	1	0	1

		HRM sum	*1*	*0*	*1*
	General management	Strategic review Diversification (horizontal)* Diversification (vertical)* Change in delivery arrangements	14 6 2 2	9 5 2 0	5 1 0 2
		General management sum	*24*	*16*	*8*
		Endogenous sum	***63***	***36***	***27***
Exogenous*	Regulatory environment*	Change in government regulations*	1	1	0
		Regulatory environment sum	*1*	*1*	*0*
	Economic environment*	Technological development* Government spending Economic downturn/recession (-) Access to public sector assistance	1 1 6 1	1 1 0 0	0 0 6 1
		Economic environment sum	*9*	*2*	*7*
		Exogenous sum	***10***	***3***	***7***
Co-determined	Company ownership	New owner (+) New owner (-)	3 1	1 1	2 0
		Company ownership sum	*4*	*2*	*2*
	Financing*	Capital raised through equity sale Bank financing VC financing *	5 1 1	5 0 0	0 1 1
		Financing sum	*7*	*5*	*2*
	Customers	New customer	4	2	2
		Customers sum	*4*	*2*	*2*
	Sales contracts*	New contract* Lost contract	10 5	8 3	2 2
		Sales contracts sum	*15*	*11*	*4*
	Internationalisation*	Customer-pull Market-led Opportunity-led Exports*	2 5 1 4	2 5 1 1	0 0 0 3
		Internationalisation	*12*	*9*	*3*
	Marketplace advantage*	First mover advantage*	2	1	1
		USP sum	*2*	*1*	*1*
	Partnerships	New distribution channel End of partnership	1 1	0 0	1 1
		Partnerships sum	*2*	*0*	*2*
		Co-determined sum	***46***	***30***	***16***

Endogenous incidents

Comprising the majority of identified incidents for both HGF and non-HGF groups (53%), *endogenous* critical incidents were events which occurred as a direct consequence of actions undertaken by a firm itself.

The most commonly cited of these events was the implementation of a strategic review within the firm, with HGFs reporting almost twice as many of these critical incidents as non-HGFs [HGF=9; non-HGF=5]. In many cases, for both HGFs and non-HGFs, this review was initiated by new or on-going difficulties within the firm, rather than as part of a planned or proactive review exercise. As HGF_2 discussed:

> *"We were really suffering financially, but we had a meeting about the company's options and future and [two of the Directors] decided that they were up for taking the fall together. They decided to plough on and find business and that's very critical on several points. The most critical thing that that meeting spawned was a resolution that we would need to broaden the customer base if we were to survive. We wouldn't be where we are today without that resolution."*

Another frequently cited endogenous incident was the development of a new product/service offering [HGF=5; non-HGF=8]. Non-HGFs reported more of these incidents, reflecting the questionnaire data discussed in Chapter 6 which identified that non-HGFs had been more likely to introduce new products/services than non-HGFs.

> *"So we developed a few products in that [tray bake cake] range and that meant we started picking up extra customers and – into 2004 – we had the attention of a number of wholesalers. So, by the end of 2004, we were faced with the challenge of having to decide if we ramp up the business very quickly to meet that growing demand." nHGF_1*

The development and launch of a new product was often recognised as critical for prompting new sales, amongst other changes.

> *"When I bought [the company] it was selling about 16,000 green boxes [workplace First-Aid kits]. But what about people at home and what about other places too. So we developed one specifically for the car, which was picked up during design by RAC and now we sell to them and they brand it. So now we are supplying all the RAC First Aid kits which have been good for sales." nHGF_10*

Other endogenous incidents included, *inter alia*, events related to the company's management team (e.g. an MBO or the installation of a new Managing Director), sales & marketing (e.g. recognition of the company's reputation), organisational structure & culture (e.g. the acquisition of another firm) and human resource management (e.g. the addition of a new employee). HGFs cited somewhat more of these triggers than non-HGFs [HGF=36; nHGF=27]

Exogenous incidents

The second type of critical events is classified as *exogenous*. These were changes to a business which originated externally and were fundamentally determined by factors outside a company's direct control. These events included changes in the regulatory environment and the economic environment, such as technological development or an economic downturn or recession.

For example, one of the high growth firms interviewed explained how a Health and Safety Evaluation (HSE) regulation change offered a significant opportunity:

> *"We used to just get a supplier to register their services and then that information would be shared between all purchasers working on the UKCS [UK Continental Shelf]. And then it became mandatory to include an HSE for every contract and we saw a real opportunity that we could include that in what we were doing and then they [paying subscribers] didn't have to do six different HSE assessments a year which all seem different but they are not. To a lot of people that service was worth a fee and that really adds up." HGF_1*

The non-HGFs interviewed identified more of these exogenous critical incidents than the HGFs [HGF=3; nHGF=7]. These events comprised only 8% of all the incidents identified.

Co-determined incidents

Finally, a set of incidents were classified as *co-determined*, as the ultimate stimuli for these events was neither purely internal nor external to the firm. Rather, they were a result of both exogenous forces as well as factors internal to the firm. A co-determined trigger common to both groups was the acquisition of a new customer [HGF=2; nHGF=2], which provided the opportunity for increased sales.

"I remember exactly the moment that we met what would turn out to be a major customer. I was attending a conference in Cambridge and one of the company scientists came up and took a catalogue and he didn't know the company at all. He looked at this material and said that looks exactly like what we need - tell me how does that work, what does it do, can you send me a sample. So we did and within the week we had this major new American client and that was a really important opportunity for the company." nHGF_5

The receipt of a new sales contract (co-determined by both the firm and its customer) was also of significant importance to the firms interviewed and was the most commonly cited co-determined event. It was of particular importance to HGFs [HGF=8; nHGF=2], who were more likely to identify the impact of new contracts than the non-HGFs interviewed.

"Of course we also try to balance our own investment and development with larger government contracts. Now, this isn't something that happens every day, but we were one of the partners selected to build housing for the Commonwealth Games. This contract has had a really significant effect on [the company] over the past few years and we anticipate that there will be positive effects further down the line as well. I suppose we now view it kind of as our insurance policy - extra revenues on top of our other activities that gives us some cushioning to allow us to do other things." HGF_8

Other identified co-determined incidents included events related to company ownership (e.g. acquisition of a controlling stake in the firm by a new owner), financing (e.g. new capital raised through equity sales), internationalisation (e.g. market-led internationalisation or exporting), marketplace advantage (e.g. first mover advantage), and partnerships (e.g. a partnership resulting in a new distribution channel). These co-determined events comprised 39% of all identified incidents and were more commonly identified as critical by HGFs than by non-HGFs [HGF=30; nHGF=16],

7.4.2 Firm growth process

All of the events cited, and identified above, occurred between the years 2000 - 2011 and were discussed in the context of the process of firm development over this period. It is therefore important to think of them not as isolated incidents, but rather as key moments in a firm's unique growth journey. With CIT studies often relying on content analysis of identified incidents, it is recognised that this reliance on frequency analysis means that incidents "are typically analyzed with minimal contextualization and very little interpretation or explanation" (Gremler, 2004: 79). Whilst counts of incidents have been provided, this has been for purposes of clarity rather than analysis.

The data collected clearly identifies that these incidents are part of a larger growth process, which will be addressed in detail in Chapter 8. Thus, the CIT interviews conducted for this thesis have been analysed as narratives (Burns *et al.*, 2000), in order to best demonstrate the role of the identified critical incidents within the firm-specific context of processual development and growth. Summaries of each firm's development since 2000 can be found in Appendix 5.

7.4.3 Attitudes and aspirations

During the CIT interviews, a number of issues came to light that were not directly related to the critical events under discussion. As HGFs and non-HGFs told their stories and recounted their company development, a number of differences between the two groups started to emerge. The differences did not concern the incidents recounted or the specific firm information reported, but rather specific company attitudes and aspirations that ran through - and underpinned - the entire discussion. These included firm attitudes, specifically self-awareness and self-criticism, growth ambitions, and the propensity to take risks.

It was important for the researcher to determine whether these were reflective of the individual respondent's personal attitudes and aspirations, or whether they reflected those of the wider organisation. As noted in Chapter 5, triangulation interviews with SE Account Managers occurred when possible and confirmed that the specific attitudes and aspirations noted by the researcher were representative of sentiments and beliefs espoused throughout that wider organisation.

Self-awareness and self-criticism

As noted in Chapter 6, data collected from the questionnaire failed to identify significant differences between the HGF and non-HGF groups on two of the constructs (enacting organisational environment; competitive priorities), but demonstrated significantly higher levels of agreement for non-high growth firms in terms of firm speed and flexibility, customer focus and customer integration. These findings were quite unexpected as, given what we know about HGFs and how they behave, one would have assumed that HGFs would be more likely to have higher rates of agreement in terms of items such as competitive priorities, speed and flexibility, customer focus and customer integration.

As CIT interviews were conducted, however, it became clear that HGFs demonstrated a higher degree of self-awareness and self-criticism than their non-high growth counterparts. For example, whilst non-HGFs were very happy to discuss their successes and used much more upbeat language - *"we're doing great"; "we had some big successes that year"* -, generally HGFs were more subdued, noting that *"things are ok"*, or *"that was a decent year"* and generally remaining, as articulated by HGF_1, *"quietly optimistic"*. As HGF_6 explained,

> *"We are slightly conscious about blowing our own trumpet. We like to be careful how we communicate to our clients and competitors, so we just want to be seen quietly going about our business and not be too ostentatious about it."*

However, this caution appears to stem from an ingrained sense of self-criticism, as HGFs demonstrated a high level of awareness of firm weaknesses and areas for improvement. Many saw this focus as vital if they were to keep developing and improving their businesses. Approximately seven minutes into their interview, HGF_11 emphatically stated *"we are always striving. And we are not perfect!*". As they explained:

> *"I guess the underlying ethos of the company is always aspiring for excellence. My favourite quote is Seth Gordon – a well-known marketing guy, blogger – 'very good is the enemy of excellent'. It takes a bit of getting your head round, but the idea is that, if you are aspiring to be excellent, even if something is very good you still change it or you try and improve it.*

> *Simple idea, but really powerful. I wouldn't say that's how we always function day-to-day; it's not an absolute philosophy, but that's what we aspire to."*

In contrast, the non-HGFs interviewed were much more likely to express satisfaction with their current business and its performance. In a number of instances, firms chose to gloss over any areas for improvement, noting that *"things are going fine"* or *"we've got some issues, but who doesn't!"* This differing self-awareness and self-criticism was demonstrated quite powerfully during discussions about how both groups generate - and respond to - customer feedback.

For HGFs, collecting customer feedback was considered to be a regular activity, whether through formal surveys, KPIs or more informal anecdotes. Regardless of the collection mechanism, the value of such feedback was considered to lie in the constructive criticism or complaints from customers, rather than in the compliments. As HGF_10 explained:

> *"to be honest with you, I don't even look at the positive comments; I just concentrate on the negative ones. There is usually something that can help explain it, but that doesn't mean we shouldn't be doing something about it."*

HGFs routinely noted that constructive customer feedback was considered essential for both identifying areas for improvement and for feeding customer sentiment and insight back into the organisation.

The collection of customer feedback appeared to be equally important for the majority of non-HGFs. They too used a combination of formal and informal means to gather feedback. However, they did not always demonstrate the same dedicated focus on constructive criticism as the high growth firms. For many of these companies, feedback collection often appeared to be more of a "tick box" exercise or an opportunity to hear about successes, rather than a way of identifying opportunities for change and development.

> *"The way I do it is, if you take 100%, you got 10% of the people that are always going to complain and you try and identify those and ignore them as they are just going to take up all*

your time. You have another group that love everything - and we love those comments - so you focus on those and everything in between." nHGF_2

The issue of encouraging - and taking advantage of - constructive criticism links closely with another apparent difference between the two groups, the desire for continuous improvement. HGFs not only appeared to seek out constructive criticism, but also prioritised using such feedback to continually improve their offering and service to customers.

"A lot of the work we are doing now is at a different level to what we did 10 years ago. Not that we were ever really bad at what we did, but we've progressed – we've continually developed to a higher professional standard." HGF_5

This process of self-reflection and continuous improvement appeared to play an important role in the growth ambitions of HGFs and how these firms ultimately positioned themselves for growth.

Growth conceptions and ambitions

Within the HGF literature, there is significant discussion about how researchers should measure and conceptualise growth, however there is little discussion about growth ambitions or growth conceptions within the HGFs, or other firms, under investigation. Within the context of this research, it became clear very quickly during the CIT interviews that HGFs and non-HGFs were operating from two very different paradigms concerning growth, both in terms of conceptions of growth and growth aspirations.

HGFs, when asked to describe what they meant by "growth" articulated a very high conception of growth. The majority of these firms (10 out of 11) noted that they considered positive growth to be *"in the double digits"* or *"at least 15 per cent"* or *"somewhere around 15-20"*, with these firms noting that even 10% growth would constitute a *"bad year"*. This articulated conception of growth reflects the ambition within HGFs to achieve strong growth. As HGF_3 explained:

> *"We are kind of targeting 15-20[%], 15-20[%] is the kind of number we are looking at and that's what we're on track for this year. Obviously sometimes you see it going bigger. We are finding we are now in a position where we have got the scale and the flexibility, so we have found a really nice sweet niche spot in the market. So, big enough to be able to deliver the chunky projects, but also small enough to be flexible and creative in how we can deliver. It used to be that a £1m [deal] was like 'oh we have just done a £1m deal'; a £1m deal is nothing now, it's absolutely nothing. We can't announce it yet, but we have just done an £18m deal."*

These companies were notable in their ambitious - and clearly articulated - targets for growth, which were often explained within the context of the company's business strategy and forward plan. These targets were not just ambitious, but also rigorously defined, measured and monitored through a number of metrics including, *inter alia*, *"return on sales"*, *"profit per employee"*, *"sales [turnover]"* and *"profit"*.

> *"Yes, we have a five year plan for 15-20% growth year on year. This is broken down by key product areas as well, so these are expected to see double digit growth annually too. The metrics we use are percentage turnover increase, percentage profit, turnover and I use a profit per employee [measure] as well." HGF_4*

However, when discussing company development and growth with the non-HGFs, quite a different picture emerged. Whilst most non-HGFs were eager to talk about growth, be it past, present or future, when probed about what they meant by "growth", few were able to articulate a conception, including an approximate number (3 out of 11 companies). Many of the non-HGFs (7 out of 10) noted that they calculated their break-even point and sought to meet that; they considered any sales above and beyond this point to be growth (be it 1%, 5%, 10% or more).

> *"We are trying to generate business at £8,500 per month to meet our annual fixed costs, but we have only once in the last four months achieved that. But July and August are terrible anyway because of holidays and it's a flat time of year anyway. [In] May we did £14,000 new business which was great. June we did £4/5,000 and we are bumbling along at £1,000/£2,000 last couple of months. But there are a number of good things in the pipeline which could do well in the next couple of months and cover our costs so I am quite happy." nHGF_4*

Given their difficulty conceptualising and articulating growth plans and ambitions, it was not so surprising that many HGFs appeared to consider growth to be an issue of "*being in the right place at the right time"* or *"luck"* or *"chance"*, rather than a result of ambition or formal planning. This attitude is reflected in the fact that the majority of non-HGFs interviewed lacked the formal growth plans, strategies, metrics or measurement frameworks identified by the HGF sample to set growth targets and to predict and "manage" growth.

> *"We don't have any concrete plans [for growth]. I think at the moment we are primarily trying to keep the ship stable and see where we go from there."nHGF_5*

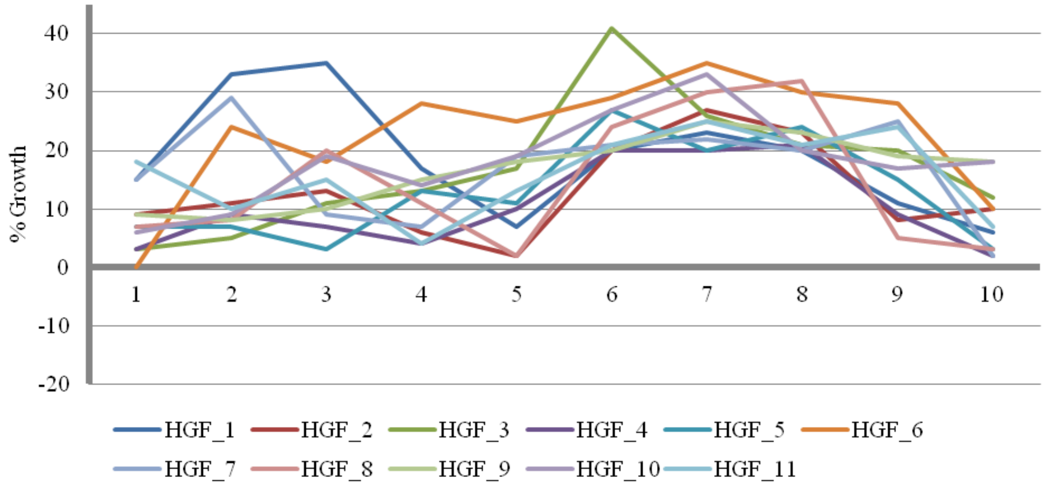
A number of non-HGFs (4) discussed why no such formal plans or frameworks were in place. These firms noted that situations *"outside our control"* had resulted in minimal planning.

> *"Well, we all talk daily I speak to the guys every day and we always speak about what is happening, but we just never seem to get enough time to sit down and plan what we are going to do. Like last Sunday - we were supposed to meet last Sunday, but Gary's babysitter had called off so he had to take care of kids. And it was the same the week before that when the weather was really bad and all the trains were cancelled and we just couldn't all get in one place to sit down together." nHGF_6*

> *"We keep meaning to get to that, but you know how it is - there's always so much to do. There is the day job of looking after clients and then the other day job of looking after the business. And it's hard to get the balance right because it's not always viable - we can't always be sitting around for hours at a time to debate where we're going when we have things to get through now."nHGF_3*

The different attitudes between the HGF and non-HGF groups appear to be reflected in their company performance. Looking at HGF growth rates from 2001 through to 2010 (see Figure 7.1), it is clear to see that, whilst there are ups and downs, these companies are seeing consistent growth year on year, with many seeing annual growth of 10% or higher. None of the HGFs interviewed had experienced a year of "negative growth" since 2001. As expected, given the criteria for selection of HGFs used in this thesis, growth was particularly rapid for these companies during 2006-2009. Examining individual company growth patterns, it appears that HGFs often have somewhat "stepped" growth patterns, with periods of rapid growth interspersed with periods of lower growth.

Figure 7.1 HGF growth rates 2001-2010

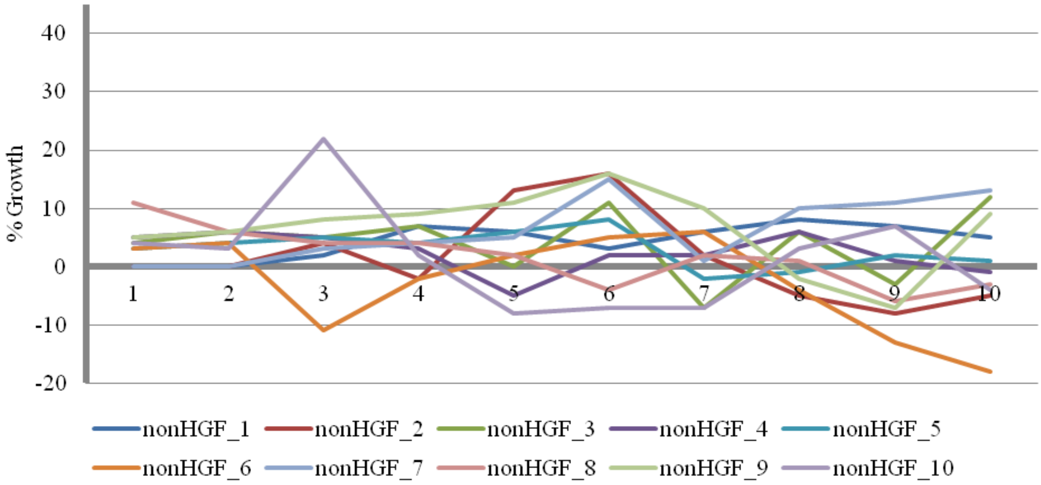


A number of the high growth firms interviewed noted that, whilst growth is a priority, they actively encourage "*plateaus*" between periods of growth, in order to *"review where we're at and where we're going"* and to *"set the house in order"*. As HGF_2 noted:

> *"We've had definite phases of rapid growth. The key learning point for us here was it's better to have planned phases of growth, which is what we did for a few years in succession and now we're sitting back for a bit. We are expecting to grow reasonably steadily – I would hope – over the next 4 years."*

A very different picture of growth emerged for the non-HGF sample (see Figure 7.2). These companies exhibited a much higher degree of variation and fluctuation, often seeing significant positive growth one year and then significant "negative growth" the next. Unlike the HGFs which had seen year on year growth (no matter how small that growth may have been), a number of the non-HGFs (7 out of 10) had actually seen decline, with growth rates well into the negative range. In a number of cases, there was sustained decline over a number of years.

Figure 7.2 non-HGF growth rates 2001-2010



Such erratic growth may well be related to the difficulty many non-HGFs had in conceptualising and articulating their plans and ambitions for growth. With non-HGFs more reliant on revenues from new customers, as identified in Chapter 6, they are more likely to be dependent on "one-off" transactions than the non-HGFs who primarily serve existing customers. This would result in more sporadic and therefore unpredictable growth, as they would not be able to rely as heavily on recurring revenue resulting from on-going customer relationships.

Propensity for risk-taking

During the interviews, issues pertaining to risk-taking or risk-averse mentalities and behaviours also emerged.

The HGFs interviewed demonstrated quite a propensity for risk-taking, whether it be in terms of geographical markets and customers, new products to the market, or even change within the organisation itself. Interestingly, the issue of "risk" was never directly raised by any of the HGF participants and, when probed about this issue, few even used the word "risk".

> *"Yes we'll take a punt – we're never fearful of jumping on a plane. We can scale [our business] and so you won't find us saying we be shouldn't pursuing particular opportunities*

> *or markets. We've never done anything in Kazakhstan before, but we'd definitely give it a go and look at it!" HGF_3*

> *"I am not scared to try things and I am not scared to fail, but if I do fail I want to be fast and ideally I want it to be small!" HGF_8*

A very different sentiment was noted throughout the non-HGF population. Many of these companies initially raised the issue of risk and proceeded to talk candidly of issues related to the risk-reward trade-off. The majority of these firms (8 out of 11) noted that stability and maintaining the *status quo* was considered preferable to taking any unnecessary risks.

> *"The business is in a fairly steady state. It's a kind of organic rather than, you know, gung-ho because if we wanted to do that, we would need to probably hire a sales person and get more production going, and you've got to spend - and borrow - to get that. I know that, but [the business] is growing organically and that's the way it's worked for us so far. And sometimes when you try too hard, you don't get." nHGF_1*

> *"Things have been working for us and I'd rather we keep doing what we know we can do rather than trying something new and risking not being here in 6 months' time." nHGF_3*

In approximately half of the non-HGFs (6 out of 11), risk was seen to be synonymous with financial risk, where companies were loath to undertake any venture requiring additional financing (e.g. bank financing, VC financing, financing from personal savings etc.). The overarching sentiment was that stability and survival was preferable to risk-taking and uncertainty.

It is understandable that non-HGFs did not want to put themselves in jeopardy by adopting too risky a strategy, financial or otherwise. However, by *"playing it safe"* and *"sticking to our knitting"*, many of these companies appeared to have taken a large risk in terms of their capability to engage and interact with their customers to facilitate customer perceived value.

7.5 Exploring customer perceived value

As discussed in Chapter 4, the second research question this thesis sought to address was *is the creation of customer perceived value an enabler for rapid firm growth?* Although a number of studies have identified value creation as a discriminator of high growth firms (Smallbone *et al*., 1995; Kim and Mauborgne, 1997; Barringer *et al*., 2005; Zhang *et al*., 2008), they have failed to empirically explore and explain this supposed relationship between value creation and growth. This thesis attempted to fill that gap by exploring whether HGFs are positively influencing customer perceived value creation and, if so, how this process occurs and whether it is indeed a differentiator of HGFs.

This involved examining the issue of value creation at two levels: firm level and firm-customer interaction level. As per the conceptual framework in Chapter 4, firm level structures and competencies that arguably facilitate a firm's ability to positively influence value creation for their customers include having a customer focused ideology/orientation, exhibiting a higher degree of operational flexibility and being able to learn from - and with - customers. Of equal importance is what is happening at the customer-firm interaction level. A number of interactions noted to help facilitate value creation were also explored, including customer engagement, co-creation and the provision of customer "solutions".

During the interview data analysis, transcripts were coded based on these categories. A number of these codes were developed from the literature (see Chapter 3), whilst others were emergent during the analysis process. Those *a priori* categories and codes identified from the literature have been denoted with a "*". The remainder have emerged from the data analysis. A summary of the categories and codes is provided in Table 7.3.

Table 7.3 Coding of items related to the creation of customer perceived value

	Category	Code
Firm-level	Firm ideology / orientation*	CORPORATE CULTURE CUSTOMER FOCUS* CUSTOMER INTEGRATION* REUPTATION CORPORATE SOCIAL RESPONSIBILITY MORALS AND ETHICS TRUST* VALUE PROPOSITION*
	Operational flexibility*	SPEED* FLEXIBILITY* RISK-TAKING RISK-AVERSION
	Capacity for learning*	SELF-AWARENESS SELF-CRITICISM SELF-REFLECTION BENCHMARKING CUSTOMER FEEDBACK (USE) PERCEIVED STRENGTHS PERCEIVED WEAKNESSES CONTINUOUS IMPROVEMENT CERTIFICATIONS GENERATIVE LEARNING* ABSORPTIVE CAPACITY*
Interaction-level	Customer engagement*	NEW CUSTOMERS REPEAT CUSTOMERS COMMUNICATION (TYPE) COMMUNICATION (FREQUENCY) ENGAGEMENT* RELATIONSHIP BUILDING* CUSTOMER FEEDBACK (COLLECTION) UNDERSTANDING
	Co-creation activities*	CO-PRODUCTION* NEW PRODUCT DEVELOPMENT* INNOVATION* PRODUCT RE-DEVELOPMENT
	Solutions provision*	PARTNERSHIPS CUSTOMISATION* INTEGRATION* POST-DEPLOYMENT SUPPORT*

Other	Growth*	AMBITIONS INTERNATIONAL FOCUS SALES CYCLE STRATEGY METRICS* PROFITABILITY
	Value*	COMAPNY RECOGNITION COST SAVING TIME SAVING FLEXIBILITY*

It is important to note that whilst these codes have been assigned to particular categories, in a number of instances certain codes are relevant to (and have implications for) a number of different categories, at both firm and customer interaction levels. For example, whilst customer "communication" may be categorised under "customer engagement", it is equally important for co-creation activities and solutions provision as well and is ultimately determined by a firm's ideology and its ability to learn from customers.

7.5.1 Firm-level structures and competencies

As discussed, at the firm level, companies need to be prepared for, and committed to, helping their customers create potential value through the interaction platform. There are a number of structures and competencies that arguably enable firms to positively influence customer perceived value, including:

- a customer focused ideology and orientation permeating the organisation;
- enough operational flexibility to be able to provide offerings in a timely manner, whilst customising them for customers as required; and
- the capacity to learn from and with customers, to ensure that the organisation's remains current and constantly striving to better serve their customers.

Given that HGFs are recognised to have unique strengths in these areas (Mason and Brown, 2010; Parker *et al.*, 2010), a key research supposition was that HGFs in this study would demonstrate significant firm-level competencies.

Research supposition 1: HGFs are likely to exhibit a strongly customer focused ideology / orientation, to be flexible and adaptable in their operations and to be actively learning from their customers. These structures are likely to positively affect customer perceived value.

Customer focused ideology/orientation

From the interviews, it became clear that HGFs tend to have a much more customer focused ideology than their comparative non-HGFs. This is not to say that the non-HGFs interviewed were not customer focused, but rather that they were considerably less so in direct comparison with the high growth firm sample.

> *"Our customers are everything to us. And we will do anything in our power to build long-term relationships with them." HGF_7*

> *"Of course our customers are important, but we have to remember that they are one part of everything we do here." nHGF_8*

Although non-HGFs demonstrated higher levels of agreement about their customer focus and customer integration than the HGFs in the questionnaire, when probed further about this during interviews, it became evident that self-awareness and self-criticism may have had a moderating role on their responses. Whilst non-HGFs did recognise the importance of understanding meeting their customers' needs, and the need to integrate that customer insight into the company, particularly for strategic planning, they appeared to lag behind the HGFs in terms of some of the more critical aspects of customer focus. These included being proactive, responsive and self-reflective to exceed the expectations of each and every one of their customers. A number of non-HGFs (6 out of 11) noted that they put most of their attention into the biggest clients, with smaller customers not receiving the same amount of focus or attention.

> *"Well, we've only got so much time, so we focus based on the size of the account. If the account is coming up towards the size of [a] £1m account then they get more of our time*

> *than if it's a tiny little account £25,000/£30,000 - then we might only go out to speak with them once a year." nHGF_9*

A very different picture emerged for the high growth firms, every single one of which demonstrated a significant focus on customers, regardless of whether these were new or existing customers and large or small accounts. As HGF_10 noted, "*everything we do is driven by - and is for - our customers."* The HGFs interviewed strongly exhibited a sense of customer focus and really differentiated themselves from the comparative non-HGFs in this regard. To many of the HGFs, customers were not simply external purchasers of products or services, but "*really part of this company*" and "*part of the [HGF_8] family*". HGF_5 observed that:

> *"Once you start actually working with a customer and get to understand where they are where you're going together, something magical happens. It's as though they become part of you - and that's where you really want to get to."*

Underlying this commitment to customers within HGFs, operationalised through customer focus, integration and a strong enacting organisational environment, was an articulated organisational focus on reputation and trust. Interestingly, these two issues were never specifically identified by non-HGFs, although they were discretely probed by the researcher. For HGFs, however, reputation and trustworthiness appear to form the foundation upon which the organisation is built. These firms stressed the importance of *trust*, *integrity*, *responsibility*, *morals* and *values*. As HGF_3 emphasised:

> "*[our sales] are very much relationship sales; it's a business sale but it's a relationship sale. It's all about trust and long term outcomes that benefit us and our customers.*"

This trust-building is arguably essential for facilitating engagement and relationship-building with customers and, ultimately, influencing customer perceived value.

> *"Integrity is an absolute fundamental to us and goes so many ways. It goes internally; it goes externally. We have walked away from situations where we didn't feel there was a cultural alignment and it fundamentally defines how we are working with our customers." HGF_6*

Operational flexibility

Another important firm-level capability, particularly for influencing customer perceived value creation, is operational flexibility. This is something that HGFs are considered to exhibit more strongly than non-HGFs (e.g. Hinton and Hamilton, 2009), with speed and flexibility allowing HGFs to respond quickly to changing customer needs as well as new opportunities. As discussed in Chapter 6, from the questionnaire HGFs appeared to have lower levels of agreement about their organisational speed and flexibility than the comparable sample of non-HGFs.

By and large, the HGFs interviewed demonstrated a significant propensity to be flexible, adapting quickly to evolving customer needs and wishes, be it in terms of products or markets. Organisational flexibility (and the inevitable issue of "change") was talked about in favourable terms amongst this group, with the majority of HGFs (8 out of 10) articulating that change was an inevitable part of doing business. HGF_8 aptly noted *"it's always scary, but always necessary"*, with HGF_6 wisely elaborating that "*if you don't do what your customers want, and you aren't prepared to innovate and change, quite simply you're going to fail*." This understanding of the need to adapt quickly to customer requirements, no matter what level of flexibility is required, appeared to be ingrained within HGFs.

> "*We have a customer - who operates from Livingston - who has this specific bit of kit for the oil and gas sector. We had been working with him for a few years when he told us wanted to do business in China with the Chinese National Petroleum Corporation, but our [supplier registration] service wasn't available over there yet for them to use and could we do something about that. What else do you do but jump on a plane and spend three months in China and get the service up and running there!" HGF_1*

> *"We are listening to our customers and listening to the market and adapting to the changes. But some of it is of our own making as well, because as we are offering new and better services, we are creating more opportunities." HGF_11*

A different picture emerged within the non-HGFs, who appeared to be more methodical and less flexible in their approach to meeting customer needs. This appeared to be very much tied into the issue of risk-taking addressed earlier, whereby non-HGFs were cautious about making any decisions or changes in too hurried a manner, lest they put organisational stability at risk. This was articulated particularly well by nHGF_8:

> *"If we have a decision to make, we like to get everyone around the table and kick the hell out of the subject and see where it goes. Because the company has never borrowed money, it has its own cash resources and there is never any pressure to make decisions under financial pressure. So we tend to talk about things a lot, put them to the side and bring them back again and dust them down. And that's good because you eventually make a decision without being pressured into it."*

Unfortunately, by taking this slow and steady approach, many non-HGFs miss the opportunity to adapt quickly to either meet changing customer needs, thus limiting both the value the firm can provide and their ability to take advantage of new or important opportunities.

> *"The first Monday of every month we get the team together and we sit down and we go through things saying, well hey guys we have done this and that's really good but we could maybe do that and pick up that and such like and move things forward. And then we revisit things at the next month's meeting to see what's happening and to see if we're going to take things forward or not and then we go from there, one step at a time." nHGF_7*

<u>Capacity for learning</u>

The final firm-level competency explored during the interviews was the capacity for organisational learning, both from and with customers. Within the context of this research, the propensity for (and success of) organisational learning appears to be influenced by the issues of self-awareness, self-criticism, self-reflection and desire for continuous improvement previously discussed.

The interviewed HGFs, in addition to being more self-aware, more self-critical and focused on continuous improvement, were also openly committed to organisational learning. Every one of these firms identified and discussed what they considered to be their biggest strengths and weaknesses, as well as what they had done (or were doing) to actively turn weaknesses into strengths. These firms openly admitted that things did not always go to plan, with HGF_1 noting that "*things don't go smoothly all the time.*" However, each firm acknowledged that these ups and downs are actually beneficial. HGF_11 noted that *"mistakes and problems are actually a bit of advantage"*, as they allow companies to identify any shortcomings and *"lessons learned"* and to begin a process of development and learning. As HGF_2 described:

> *"We had two hugely expensive mistakes with two new products that we brought to market. We had put a lot of money into marketing, developing and manufacturing the products and then they just flopped [in the marketplace]. It was a painful learning curve, but we learned a lot from that about that particular marketplace, but most of all about ourselves as an organisation. We realised that we hate working in partnership with other people and we like to do things ourselves and as a result have tried to diversify as much as we can in-house. It's not all rosy - sometimes it works and sometimes it doesn't, but there's always something to learn." HGF_2*

> *"We have really worked to develop our sales and account management - particularly for strategic opportunities and complex political sales - over the past few years. We kind of knew this area wasn't as good as it could be and did some research and this reinforced what we knew, but it was still a shock when we say it. It's fair to say that we scored below what we wanted, but it was good to validate that gut feeling and then you can go and say 'right, this is the priority - this is what we're trying to improve'. So, we've really tried to build on that and learned a lot over the past few years. I would say if you look at where we were and then where we are now, we've come a long way but it's been hard work!" HGF_3*

Unfortunately, for the non-HGF interview sample, it was much more challenging to gain any insight into - or understanding of - what these firms think about organisational learning, how (or if) they undertake learning and how (or if) this benefits them. Whilst the issue of "lessons learned" was raised at the end of every interview, the majority of the non-high growth firms (8 out of 10) used this time as an opportunity to complain about things that they find frustrating (*"don't trust those bloody banks")*, or things that have gone wrong ("*technology is expensive and even if you've just upgraded you'll have to pay even more to fix all the glitches!")* rather than to actively reflect on their experiences, successes and difficulties.

> *"The biggest lesson we've learned is people management and frustration. You know, you employ somebody and you're thinking they're bullshitters [sic], you know, they'll come here*

and they're going to conquer the world, and then they don't do anything. So that's the frustration – people are my biggest frustration. I keep thinking sometimes, it's me that doesn't employ the right people but, you know, you talk to others, and they say, well I thought you had all the good ones – and I say, but I thought you had them." nHGF_10

"A big lesson is staff taking advantage. We had a guy went off sick at Christmas/New Year last year with 'stress'. He was off for three months on a rolling sign off. Came back and within a week he had handed his notice in and gone somewhere else. What was he doing when he was off? Getting interviews! So he was on full pay for three months and then buggered [sic] off!" nHGF_4

Despite prompting, it was difficult to identify whether these non-HGFs have a learning prerogative and whether they try to learn from any of the unpleasant experiences identified.

7.5.2 Firm-customer interactions

As discussed in detail in Chapter 3, interaction is at the heart of any discussion on value and value creation, as it is through firm-customer communication, exchanges, interactions and encounters that firms are able to influence value creation for their customers. At the interaction level, there are a number of processes that are thought to facilitate customer value creation through interaction, including customer engagement, co-creation activities and solutions provision.

Given that HGFs are recognised to have strong end-user engagement (Mason and Brown, 2010), to be creating value for their customers (Barringer *et al*., 2005; Zhang *et al*., 2008), and to be focused on building longer-term relationships with customers (Brush *et al*., 2009), key research suppositions for this thesis expected that HGFs in this study would demonstrate significant competencies in terms of firm-customer interactions that would positively affect customer perceived value creation.

Research supposition 2: HGFs are more likely to be strongly customer-focused and engaging deeply with their customers, particularly existing customers.

Research supposition 3a: HGFs are likely to work closely with their customers, taking an active role in co-creating high-value offerings.

Research supposition 3b: HGFs are more likely to be providers of customized and integrated "solutions", rather than focusing solely on set products or services.

<u>Customer engagement</u>

From the questionnaire, it was identified that both HGF and non-HGF samples were selling to a combination of new and repeat customers, with HGFs relying on a larger repeat customer base than comparative non-HGFs. However, little was known about how both sets of firms were engaging and communicating with these customers.

Method of communication

The HGFs interviewed tended to focus on more proactive two-way engagement activities that have a high impact on customer value. These often included operating Account Management programmes for customers, drawing on regular telephone, email and face-to-face communications, as well as providing opportunities for customers to be involved in the development and creation of product/service offerings.

> *"We are really quite proactive and try to communicate with our customers regularly through a number of different channels - depending on that customer's preferences of course." HGF_10*

These HGFs were trying to facilitate joint activity between the firm and their customers and, ultimately, to facilitate a sense of extraordinary experience for their customers. To foster joint activity, Account Management programmes were quite common within HGFs, particularly for larger clients and those purchasing a more complex offering. HGF_3 discussed their account management system noting:

> *"We have a three account classification. We have strategic, major and managed accounts which, dependent upon the classification, there is a different level of involvement. A strategic account, one account manager would have maximum two strategic accounts. So they are*

focused completely on that. And it's not transactional. Our strategic customers make up sort of 70-80% of our sales, so you focus in on those guys you give them the respect they deserve."

It was often in the context of this Account Management system that HGFs sought to develop a sense of extraordinary experience for their customers, drawing on the relational understanding fostered by account managers to address unique customer needs in depth. This in turn allowed the company to better understand their customers' changing wants and needs.

"Each of our customers has an Account Manager. We have to be really close to our customers - we need to know what they are going to want at least two years before they know they want it. We need to have foresight. It's being able to say right, here's what they are going to want and here's how we are going to plan for - and deliver - that." HGF_2

A different picture emerged among the interviewed non-HGFs. These companies tended to prefer more reactive and one-way engagement activities such as cold calling, advertisements, newsletters and promotions. The rationale for these engagement activities often stemmed from a belief that, if prospective customers were more aware of the company and its offering, they would be inclined to purchase.

"We just launched a specific website this week for a new product. Jackie, our marketing/finance girl, sent an e-mail out - and will continue sending e-mails out - to every single person that has ever had any interest or involvement in IIP that we have been in contact with. It's not a heavy sell, it's just 'here's the website - have a look'." nHGF_4

A number of these non-HGF companies (n=4) also relied heavily on social media, most notably Facebook, as their primary method of customer engagement. However, their use of Facebook was less about starting a two-way dialogue with potential customers and more about capturing the attention of those individuals and signposting them to the company website either directly or through the use of promotional activities.

"I think a lot of people when they set up a Facebook page for their company think it's a bit like a company website. They think they can just post stuff and you're going to get fans. What we thought was that's not going to work and what we also do is we try and get people - when

they are buying on our website - to click onto our Facebook page and join us as a fan there. That means that you've got them and then you can post on a promotion, like 'win a free wee bag of coffee'." nHGF_6

"Facebook has been a good marketing tool. The thing about Facebook is, you launch it and then how do you get people to know that Facebook's there, and what we did initially was that we put a Facebook advert on for so many days, we capped it at so much pence and so many clicks per day, because it can go crazy if you don't cap it, and that gets you your initial following. Then you target those people and try to get them to your other website." nHGF_1

This reliance on one-way engagement activities amongst non-HGFs mirrored their desire to build awareness within their existing and prospective customer bases, which they believed would directly translate into sales. Issues pertaining to interaction or joint activity with customers were seldom acknowledged (1 out of 10 firms) and, when probed by the researcher, glossed over by respondents as *"too expensive"* or *"too time consuming"* or *"not something that we do"*.

Frequency of communication

Differences also emerged between the two groups in terms of the frequency of communication and engagement activities. Within the high growth firms interviewed, customer communication took place on a regular (and often daily) basis. As HGF_6 noted:

"It's constant communication. Some clients are further ahead than others, of course, but we're talking at least a couple of times a week, up to a couple of times a day."

The rationale behind such frequent communication was that these firms sought to build very close and long-term relationships with their customers, rather than have more transactional relationships. To do so, HGFs were quick to articulate the importance of having communications at a "*business*" or "*product*" level, but also at a "*personal*" level. As HGF_10 wisely observed:

"If I don't know about [a client] and what he's like - how he thinks, how he works, what makes him tick - how can we expect to go and help offer to help meet his and his business' needs?"

This frequent customer engagement and communication was not as prevalent in non-HGFs. In line with their preference to undertake more one-way communication activities, the non-HGFs interviewed were more sporadic in their approach, with communications occurring intermittently and not as part of a larger engagement plan or strategy.

> *"We do our best, but maybe we're not as good at this [regular communications with customers] as we ought to be." nHGF_3*

A number of the companies had quarterly email newsletters, but many noted that "*we don't always get it out*" or "*the time-table isn't set in stone - sometimes it slips by a couple of months or so*". Generally, the sentiment from non-HGFs was that they would develop and disseminate any communications on their own terms and in their own time, rather than operating based on the needs and desires of their customers.

> *"I don't want to go out bothering people… but we do have very regular communication with our major clients – they call or email every few months or so." nHGF_2*

Depth of engagement

The methods and frequency of communication adopted by a company also have a direct impact on the depth of engagement that firm will be able to develop with its customers. For HGFs, deep customer engagement was considered to be a core focus within the organisation, as evidenced by their frequent communications with customers, through proactive two-way communication approaches. This deep engagement was often facilitated by having what HGF_3 identified as "*multiple communication interfaces*" between the firm and each customer. As HGF_4 further elaborated:

> *"It's a deliberate policy in that we open the doors at all levels between us and our customers. So, for example, we have our planners talking to their planners, we have our R&E [Review & Evaluation] people talking to their R&E people, QA [Quality Assurance] people talking to QA people and managers talking to managers. They will all be talking directly and that is something we have evolved over the years. Again, it's very much a realisation that the more interconnected we become, the better it is for them and then of course the better it is for us."*

Through investing in customer engagement, HGFs appear to not only be able to attract new customers and satisfy short-term customer needs, they are also able to build long-term relationships that facilitate repeat purchases from existing customers. In looking beyond a transactional approach and focusing on the unique motivational drivers of customers, the HGFs interviewed were actively striving to engage as deeply as possible to provide the best offering- and the most value - they could to their customers.

> *"The best measure for a customer relationship is the types of conversations you have with [clients] and their willingness to engage with you. When I phone the Chief Executive, does he take my phone call? When I say 'I need a meeting with you', do I get to meet him? When I say, 'let's go out for dinner', do they go out for dinner? These are the softer metrics that tell you how solid your relationship is with the customer and that's what we're aiming for. The ultimate goal is that you are a trusted advisor to help fix business problems. You aren't a subcontractor, you aren't a sales guy – it's absolutely focused on the customer's business outcome. Where does the customer want to be and how can we help them get there - that's really where we are focusing our effort." HGF_3*

> *"We work hard at engaging with clients. We try and factor in some basic thinking around, even at an individual level, what type of person is best to be the main point of contact, as we have got different personality types here. Or how might a client want to be communicated with? Some clients are very sociable, so maybe it's going for a beer or a coffee, and some of them want to keep it very business-like so we try and adapt accordingly. It's all about them, after all!" HGF_11*

As has been the case throughout much of this discussion on customer engagement, HGFs differ quite considerably from their non-HGF counterparts in terms of their depth of engagement. Perhaps unsurprisingly, given their more reactive and intermittent communications with customers, the interviewed non-HGFs appeared far less likely to be undertaking any kind of deep customer engagement. Whilst there are many factors that contribute to this, including a perceived lack of time and perceived cost, there seemed to be a genuine belief within these companies that customer engagement was a *"secondary issue"* or *"not core"* to the business. Perhaps this is why many non-HGFs were simply not prepared to devote the time, money and people resources necessary to engage as deeply with their customers as the interviewed high growth firms.

> *"We had a full time marketing girl on full time for a year and she did brochures and newsletters and website updates and all that kind of stuff that that we never have time to do. Then she left earlier this year to take up a new job and we didn't think we really needed to replace her. We decided that she put a lot of work into setting up templates for brochures and on the website and we could then use just them. But finding the time to do all that is something else altogether and we haven't done any of that at all." nHGF_8*

Co-creation

In addition to customer engagement, at the interaction level the issue of co-creation (and its associated activities) is also noted to have the potential to affect customer perceived value, as customers can be directly involved in developing and customising products or services to meet their own unique needs. As the questionnaire identified, both HGFs and non-HGFs were selling a combination of physical products and intangible services, but HGFs were more likely than their counterparts to be seeing sales growth from more flexible or bespoke offerings, which implied an element of co-creation. This finding was further explored during the CIT interviews, which revealed and confirmed significant differences between the HGF and non-HGF groups in regard to co-creation activities.

In line with their customer focus and customer engagement, high growth firms were actively tailoring offerings to their customers' needs to create value, as well as engaging with customers to undertake product/service co-production. HGFs noted a number of ways in which they engage in co-creation, including working with customers to redevelop and customise existing products, involving customers in initial product concept development and working with customers throughout the entire NPD cycle to develop specific, highly customised offerings.

> *"Some people might say that 'a potato is a potato', but that's not really the case. We work closely with our customers to develop potato flavours and textures to suit changing consumer tastes, using consumer preference testing as well as sensory profiling. If our customers are looking for a more 'buttery' potato, we will work with them to get the right amount of butter*

flavour and the right amount of dairy flavour and the right amount of flour-y-ness for that brand of potato and so on." HGF_2

"We like to work with our customers from research through to development and commercialisation. If they are the ones that are buying our products, they should have a say in what those look like and how they function!" HGF_6

Regardless of the co-creation approach chosen, the rationale was consistent among firms: to provide as much value as possible to their customers.

"We design everything with our customers in mind. And when we're thinking about the next generation [of a product], we work with our customers on everything - applications, engineering, knowledge within all parts of the business. Our strength is our ability to customise high end applications - design for total coverage - and this is what gives us the advantage." HGF_5

Many of these HGFs (8 out of 11) articulated that their firm existed to serve customers, noting that they felt "*subservient*" to or "*wholly reliant"* on their customers and that it was their responsibly "*do whatever it is that's best for our clients*".

There was much less evidence of co-creation within the interviewed non-high growth firms. Whilst these firms were developing new products, re-developing existing products and articulating a focus on innovation, the focused interactions with customers that underpin co-creation or co-production activities was notably lacking. For example, whilst nHGF_5 was had its own product development programme, it identified that new products were developed "*based on what our customers tell us they need and what we think might be useful to them, which we then develop, make and take to them as a marketable product.*" Customers were largely attributed to have initial input, but were not involved during the rest of the development, design and manufacturing process.

"We're not Apple, with thousands of people who come in in the morning and can spend all day trying to innovate. And the customer doesn't always know what he wants, so we've got to show him what he might want. We prefer to lead on product development and then sell it." nHGF_10

Although a number of the non-HGFs discussed tailoring items to meet customer needs (3 out of 10), when probed further it was apparent that this was more to do with making substitutions and changes that the firm was willing to agree to, rather than actively developing products through an iterative and two-way process. nHGF_6 demonstrates this relatively inflexible approach - whilst the company identified that they worked with customers to develop products, realistically the customer had very little power in terms of customising their order:

> *"We do a number of [starter] boxes in three different sizes. They all have different stuff inside them like a variety of fair trade coffees or Lavazza products. But if someone did phone in and say 'could you substitute a caramel syrup for a chocolate syrup', we would try to accommodate them. Or if someone phones in and they will rhyme off what they want in the box we might be able to do that if it's a bit of a slower day."*

As with many of the issues explored within this thesis, firm attitudes appear to play a significant role in terms of how they perceive their co-creation activities. The non-HGFs interviewed genuinely believed they were accommodating and providing value for their customers. However, when in direct comparison with the sample of HGFs, this supposed "co-creation" is extremely superficial.

Customer solutions

The final interaction level value creating process explored in the thesis was the provision of customer solutions.

This concept of solutions provision resonated very strongly within the sample of high growth firms, which was perhaps unsurprising given their customer focus, deep engagement with customers and propensity to be engaging in co-creative activities. What was unexpected, however, was that - unprompted - the majority of HGFs (9 out of eleven) identified themselves as solutions providers, articulating that they were "*solutions driven*" and "*selling a solution*". As HGF_6 calmly noted:

> *"We are a solutions provider. The biggest thing about ourselves is that we build and customise solutions for our customers. And we're pretty good at it."*

During the course of the HGF interviews it became clear that these companies were actively engaging with customers to develop and implement “solutions” that were both customised and integrated into their customers’ existing systems.

> *“All our products are tailored specifically to a customer, but we do have a standard machine and can completely customise that. It may well be that [a customer] wants to attach it to four machines in their factory, so that might mean that you have to move some things around a little bit which might mean some redesign and rethink the sizing and the overall layout. The essence of the machine - the functionality of it - doesn’t change but just about everything else can and does.” HGF_10*

Whilst one might expect such customisable and integrated solutions from manufacturing or IT companies which sell predominantly physical products, HGFs across all sectors - including services - discussed their focus on providing customer solutions. This indicates that solutions provision is linked to a firm’s ideology and competitive priorities, rather than to the industry in which it operates.

> *“Our business strategy revolves around solutions. We have the core products and we have the capability to tailor them for each customer. Sometimes the tweaks are pretty small and it’s just a case of getting the integration right and then other times it’s pretty much starting from the beginning, but that ok if that results in a good solution. And that where we see our growth and profitability - solutions growth.” HGF_3*

In direct contrast to the HGFs, during the non-HGF interviews there was no discussion of customised or bespoke products. In fact, only 1 out of the 10 non-high growth firms even mentioned the word “solution” during their interview, and this was in the context of “*finding the best solution for any [staff] disciplinary issues.*” This reflects these firms’ reactive engagement with customers, limited understanding of customer needs and reluctance to provide co-created or heavily customised offerings. Whilst one cannot say whether or not non-HGFs outside this scope of this research are engaging more actively in solutions provision, it is clear that those interviewed for this thesis are following a more traditional company “push” led approach to serving their customers.

7.6 Conclusion

This chapter has presented and discussed the findings from the CIT interviews. It has briefly discussed the data collection and analysis for this phase, as well as presented an overview of the HGFs and non-HGFs interviewed, including key demographics. In the main, this chapter outlined the critical incidents identified as having an important impact of firm development and growth, noting that these can be roughly categorised as *endogenous*, *exogenous*, or *co-determined* incidents. A number of attitudes and aspirations underlying - and contributing to - the firm growth process have also been discussed, with significant differences noted between high growth firms and non-high growth firms in terms of self-awareness, self-criticism, conceptualisations of growth and growth ambitions. The issue of customer perceived value creation has also been explored in depth, looking at firm level structures and competencies as well as firm-customer interactions that can help to create perceived value for customers. From the interview data, it is clear that HGFs are more deeply engaged with their customers, working to co-create value by providing customers with holistic "solutions" to their unique needs. The next chapter will discuss these findings in detail, within the context of this thesis' research objectives.

Chapter 8 Discussion

8.1 Introduction

This chapter draws together the questionnaire and CIT interview findings presented in Chapters 6 and 7. It will begin by discussing the process of firm growth, particularly the role that critical events play in "triggering" a change in a firm's status quo, thus allowing it to alter its growth trajectory. These *trigger points* are conceptualised as the first point in a larger firm growth process, which also includes a critical *transition phase* as well as a *turning point*. This chapter will then discuss the important role that company attitudes and aspirations play in the firm growth process. Next, elements pertaining to customer perceived value, particularly firm-level structures and competences (customer focused ideology/orientation; operational flexibility; capacity for learning) and customer-firm interaction level activities (customer engagement; co-creation activities; solutions provision) will be discussed in depth, before the relationship between customer perceived value and rapid firm growth is revisited in light of this thesis' findings.

8.2 How HGFs achieve growth

As identified in Chapter 4, the first overarching goal of this thesis sought to explore what causes HGFs to grow faster than other firms, specifically w*ho and what are HGFs seeing greatest sales growth from* and *what does a HGF's growth process look like.* Surprisingly, neither of these areas have been satisfactorily explored - or even addressed - within the HGF literature. This is surprising as, if one is looking at firms which are undergoing (or have undergone) rapid turnover growth, one needs to focus on how these firms are achieving an increase in sales - who are the HGFs selling to and what offerings are they seeing growth from. Data collected from both the questionnaire and the CIT interviews has helped to provide much-needed insight into HGFs' customers and products, as well as how these companies develop and achieve growth over time.

8.2.1 Customers

Despite customers being at the heart of any discussion on turnover growth, the HGF literature fails to adequately discuss who HGFs are selling to and whether or not particular customer bases are contributing to increased sales and subsequently growth. All that is known is that HGFs have been found to shy away from large consumer markets (Feindt *et al.*, 2002), preferring to work with a small number of established customers (St. Jean *et al.*, 2008; Hinton and Hamilton, 2013), usually in the business-to-business sphere (BERR, 2008; Mason and Brown, 2010).

Data collected from the questionnaire and CIT interviews has provided useful (and much needed) insight into the customer base of HGFs. The data demonstrated that HGFs were more likely to see a greater percentage of their sales come from repeat customers than their non-high growth counterparts, who tended to see a higher percentage of sales coming from new customers. Whilst this data appears to support the observation that HGFs prefer to work with established customers (St. Jean *et al.*, 2008; Hinton and Hamilton, 2009), it is important to note that the HGFs studied did not work exclusively with existing customers. Given that there will inevitably be customer churn, if firms are to have repeat customers at all, it is essential to engage with new customers who can then potentially transition to repeat purchasers over time. Thus, HGFs were also actively engaging with new customers, in the hopes of transitioning them into their existing customer portfolio. However, the bulk of their sales came from repeat customers.

The data collected during this research does not support the observation in the literature that working with a small number of companies is stereotypical of, or beneficial to, high growth firms (Feindt *et al.*, 2002; Hinton and Hamilton, 2013). The HGFs interviewed sold to a variety of customers, with some seeing smaller customer bases than others. For example, HGF_2 had approximately 7 major customers; HGF_1 had nearly 10 times that number. The size of these HGFs' customer bases seemed to be, as one might expect, determined by the firm's offering as well as its industry structure. One interesting point to note, however, was recognition throughout the HGF sample of the need to have a diverse customer base, rather than relying heavily on a small number of customers. In fact, this issue frequently arose when firms identified a lost contract or lost customer as a critical incident; such events often resulted in HGFs making a concerted effort to diversify their customer base in order to make the firm less reliant on a small number of critical clients for turnover.

Whilst the literature posits that HGFs work with a limited client base, such assumptions might be strongly influenced by the firm selection within these studies. A number of HGF studies (e.g. Feindt *et al.*, 2002) have focused on young, small high growth firms - the "*gazelles*" initially identified by Birch (Birch and Medoff, 1994). Such firms, given their young age, will simply not have had the time to build as large a client base as more established companies. In contrast, the HGFs participating in this study tended to be medium-sized companies which were on average 25 years old. Given that these firms were older and larger than those in many other studies, they had been able to develop a range of customers over time and were also better placed to service a larger number of customers than a small firm with limited resources and personnel may be.

8.2.2 Markets

In conjunction with exploring customer bases, data was also collected on the physical and market presence within the sample of HGFs. The literature in this area is quite limited, with studies often reporting contradictory results. For example, whilst a number of studies have found that HGFs prefer to operate within existing markets to mitigate the risks associated with international expansion (Smallbone *et al.*, 1995; Hinton and Hamilton, 2009; Parker *et al*., 2010), other studies have shown HGFs to be risk-taking "market creators" (Brush *et al.*, 2009), and market "prospectors" rather than defenders (O'Regan *et al.*, 2006). Other authors have identified that HGFs facilitate growth by entering new geographical markets, particularly those beyond their own local area (Barringer and Greening 1998; Iacobucci and Rosa 2005), and thus exhibit high levels of internationalisation (Mason and Brown, 2010), particularly export activity (Zahra *et al.*, 2000; O'Gorman, 2001).

The data collected for this thesis identified that the vast majority of HGFs were operating internationally. Not only were they selling to customers and markets outside of Scotland and the wider UK, but nearly two thirds of the HGFs also had a physical presence abroad. Whilst studies have found that HGFs are much more likely to engage with international markets than their slower-growing counterparts (BIS, 2010), the data collected does not support the notion that the HGF cohort is significantly more internationalised. In fact, both HGF and non-HGF groups saw a majority of their sales come from international customers. This may well be due to the fact that Scotland, as a peripheral nation, offers limited domestic growth opportunities, thereby eventually forcing all firms to look abroad for further opportunities for sales growth. This supports assertions that many Scottish HGFs reflect the notion of “born global firms” (Mason and Brown, 2013), internationalising sooner and faster than as per the traditional internationalisation models (Rialp *et al.*, 2005).

Whilst the literature notes that the more dynamic or turbulent a firm’s external environment, the more innovative, proactive and externally-oriented it will need to become (Naman and Slevin, 1993; Dess *et al.*, 1997; Crant, 2000), the data collected did not indicate that HGFs perceive their external environment to be particularly volatile. There was also no evidence to support that, within the context of this research, environmental volatility was positively related to the physical and market presence of HGFs.

8.2.3 Products

Despite considerable discussion of innovation (Freel and Robson, 2004; O’Regan *et al.*, 2006; Coad and Rao 2008; Mason *et al.*, 2009), diversification (Parker *et al.*, 2010) and R&D behaviour (Hölzl, 2009) in the HGF literature, a discussion of product offerings in the context of HGFs has been sorely lacking. To fill this knowledge gap, this thesis collected data to explore the types of product/service offerings in HGFs and whether these offerings had an impact on turnover growth.

As identified from the questionnaire, HGFs (much like their non-HGF counterparts) are selling predominantly a combination of physical products and intangible services as their primary offering to customers. This is perhaps reflective of changing customer expectations, whereby "services" (e.g. after-sales support) are often expected to be included in the purchase price of many physical products, such as IT equipment (Davies, 2004). However, in terms of offerings contributing to sales growth, HGFs differ from comparable non-HGFs.

The data identified that HGFs are more likely to be seeing growth from either flexible or bespoke offerings. These types of offerings require significant customisation, which can often be challenging and costly to deliver (Sawhney, 2006), particularly as customisation will vary between offerings and can range from segment-specific to customer-specific customisation (Krishnamurthy *et al*., 2003). However, customisation of offerings is becoming increasingly important for consumers, particularly for those looking for a "solution" to a particular business problem or need (Doster and Roegner, 2000) rather than an "off the shelf" offering. As such, the data indicates that HGFs are well placed to influence customer perceived value creation through the provision of more customisable offerings.

This choice of product offering is directly related to a firm's competitive priorities. As companies increasingly shift their focus from simply meeting the basic operational needs of their customers (e.g. by providing a cheaper offering and reaping exchange value), in favour of providing more customised (and expensive) "solutions", competitive priorities must necessarily shift away from price. Previous research has found that HGFs are more likely to focus on differentiation, whilst non-HGFs focus on price (Smallbone *et al*., 1995). However, the data collected indicated that both HGFs and non-HGFs were more focused on quality, performance and customer satisfaction than on price. This changing sense of competitive priorities, regardless of growth rate or performance level, may again stem from changing consumer tastes, where customers are willing to pay a premium (Johansson *et al*., 2003) for customised offerings that offer a sense of perceived value.

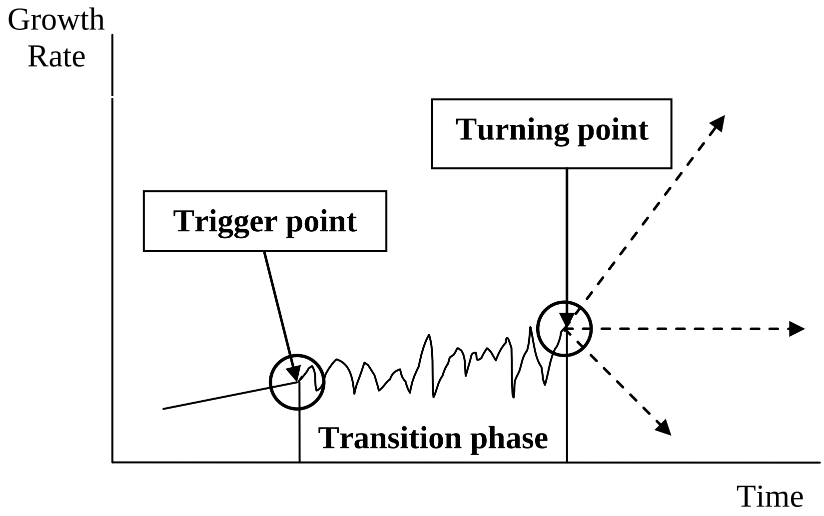
8.2.4 Firm growth process

Despite more than two decades of research on high growth firms, our understanding of how these companies grow over time is still extremely limited. As a result of more superficial aggregate quantitative studies dominating the HGF literature, authors have noted that the theoretical building blocks underpinning firm growth theory remain relatively underdeveloped (Garnsey *et al*., 2006), particularly in terms of their internal growth processes and dynamics (Leitch *et al.*, 2010b; McKelvie and Wiklund, 2010).

With data collected on critical events over a period of approximately ten years through the CIT interviews (and financial information available to triangulate identified events with documented turnover changes), it was possible to map firm development and growth for each of the 21 interviewed companies, both high growth and non-high growth. As discussed in Chapter 7, a variety of critical incidents were identified by respondents, some of which were perceived to be positive and others to be negative.

It was clear from the data, however, that these critical events play an important role in changes in firm performance and, in the case of HGFs, rapid firm growth. However, it is notable from the interview data that positive performance or growth seems to be less about a particular critical event or "*trigger point"*, and more about how a firm responds to that trigger. Arguably, these trigger points are simply the first step in a more comprehensive and complex process, as conceptualised and depicted in Figure 8.1. The data indicates that this process comprises an initial *trigger point,* followed by a *transition phase,* culminating in a critical *turning point* for the firm's development and growth potential. This conceptualisation provides a more nuanced understanding of the firm growth process, notably that "triggers" are simply one part of a larger (and very complex) process.

Figure 8.1 The "trigger point" process



Source: Author

<u>Trigger point</u>

The critical incidents identified during interviews appeared to trigger changes in firm development and performance. This supports other observations in the general business and management literature that firms can face critical junctures (Vohora *et al*., 2004), turning points (Garnsey *et al.*, 2006), tipping points (Bessant *et al.*, 2005; Phelps *et al.*, 2007) and organisational triggers (Walsh & Ungson, 1991), which cause a change in the organisation's status quo. As discussed in Chapter 7, the critical incidents manifested themselves in a wide variety of forms, including *endogenous* triggers (e.g. management change), *exogenous* triggers (e.g. regulatory environment change) or *co-determined* triggers (e.g. receipt of a new contract). Examining firm growth for interviewed firms over the past 10 years, these trigger points appear to occur between phases of a company's development and growth, denoting that they are, in fact, precursors to changes in firm performance and growth rate. It is essential to note that all firms interviewed - regardless of their growth rate - encountered critical triggers, but not all firms encountered the same specific trigger points.

Whilst some of the identified trigger points arose as a result of chance events (e.g. regulatory change), others appear to have been deliberately planned and opportunistically executed by the firm (e.g. new product, strategic review). A key point to make is that a trigger, or critical event, is not a definitive opportunity for growth, in contrast to how this concept is commonly applied within the growth literature (e.g. Vohora *et al.*, 2004). Rather, as strongly demonstrated within this research project, it is merely a guarantee of change. A trigger fundamentally upsets a firm's status quo and acts as a systemic change to the structure and workings of a firm, which in turn provides a critical opportunity to alter that firm's growth trajectory. These opportunities are of the greatest benefit to those firms capable of "opportunity recognition" and "risk recognition". When they are effectively identified and capitalised on, triggers can provide an opportunity for growth in the medium to long term. However, triggers are often destabilising and result in a turbulent "transition" period in the short term, as companies struggle to adapt to the systemic changes brought about by triggers.

<u>Transition phase</u>

Following the initial critical event/trigger point, interviewed firms often encountered an important *transition phase*. This period - of variable length depending on the situation - was often a time of considerable instability and flux. Firms struggled to adapt to the changes brought by the initial trigger and many discussed the difficult decisions that management had to make. A particularly poignant example of the instability caused by a trigger point was articulated by one of the non-high growth companies:

> *"We had a client that had been with us for many years - we don't tend to lose business and we had been doing pretty well - and then we lost our biggest client early 2007. This really hit the company a bit. We didn't have all our eggs in that particular basket, but it was still crippling and it was painful and we had to make a lot of tough choices. We had to let people go and try to renegotiate our lease for better terms, but we ended up having to move [premises] just to keep [the business] going." nHGF_4*

One might think that "negative" events such as the loss of a customer are particularly challenging to manage, however all types of triggers appear to result in challenging transition phases. For example, a very positive initial trigger such as the award of a major new contract can subsequently necessitate the rapid expansion of production capabilities, thus testing a firm's organisational resources and management capabilities (Barney, 2001) during the following transition period. Such an expansion of production capabilities often requires a firm to also take on new employees, which is both costly and time consuming and can lead to the organisation and its key staff members becoming considerably over-stretched during the recruitment and training process. This in turn can put severe pressure on management time, re-directing the firm's leadership resources away from their core tasks such as business development (Hambrick and Crozier, 1985) as management tries to ensure that their contractual obligations will be met. In doing so, it is very easy to focus all energies on day-to-day issues and to lose track of the bigger picture, including business development, communications with existing customers and engagement with potential customers (St. Jean *et al*., 2008).

> *"We couldn't afford a £3,000 cutting and packing machine because at that point we didn't have any profit in the business – so we were faced with the challenge of delivering the [wholesale] order, delivering it on time, cutting it, packing it and not having the tools or the equipment to be able to do that. So we had to bring in family members - including our children - and had to train them up in cutting and packing everything by hand. Let me tell you, we all had blistered fingers and it took a hell of a long time and we didn't get anything else done until we filled those big orders." nHGF_1*

Another part of the reason that firms seem to struggle post-trigger appears to be that many firms encounter further "secondary triggers" during the transition phase. Some of these secondary triggers can be negative, which further exacerbate any organisational over-stretch that the company may already be experiencing. The following quotation demonstrates this how an initial trigger (installation of a new MD) led to a number of trying secondary triggers that needed to be managed:

> *"The running of the business at that time was really poor in terms of the management, which had an impact on our culture. When we installed our new MD October 05, he made a lot of changes. He realigned our whole management structure which was great and invested in new IT infrastructure which also seemed great, but a within a few months we had an absolutely abysmal upgrade that did not work and our clients were unhappy because there*

were so many things going wrong and as a result our attrition rate was really high. It took a lot of hard work to get us back on track after that!" HGF_7

When the company installed a new MD, they had no idea that - in addition to managing this change - they would also be faced with technological difficulties and customer attrition as well. Fortunately, the company proactively managed this time of flux and change, which resulted in a number of years of rapid growth.

However, this seems to be where HGFs differentiate themselves from their non-high growth counterparts. The transition period appears to be absolutely critical for determining the ultimate success of the opportunity presented to the firm by the initial critical event or trigger. This reflects observations by Bessant *et al*. (2005) that the way in which firms cope with opportunities is more important than the opportunity itself. It is thus important to stress that HGFs were much more likely to successfully manage the ups and downs of the transition phase, without becoming "bogged down" with day-to-day tasks or problems. They managed to minimise the organisational overstretch, loss of focus, reduced customer engagement and reactive decision making that, in many cases, paralyzed their non-HGF counterparts. This allowed the HGFs to navigate the transition phase, whilst positioning themselves for growth when the transition phase culminated at a *turning point*.

Turning point

As discussed above, the transition period is a time of flux and change, comprising both positive and negative elements, the length of which can vary considerably depending on the firm's specific circumstances, resources and managerial capabilities. During this time, not all companies will capitalise on trigger points with equal success, nor will the transition phase necessarily lead to growth. Ultimately, however, a critical *turning point* comes when a firm exits the transition phase to start its new growth trajectory, whether that is growth, a plateau or decline. However, unlike others note (e.g. Garnsey *et al*., 2006). The turning point is not a standalone event, but rather the culmination of many events, processes and challenges all stemming from the initial "trigger".

In some cases this turning point might be a particular moment in time, for example the signing of a contract award (post-contractual discussions and uncertainties) or the completion of an acquisition deal and any necessary restructuring and so on. HGF_2 faced one such definite turning point. The company, after losing a critical contract (the trigger point), had a strategic review and decided to begin a large-scale programme of R&D (secondary trigger), developing a number of own-brand higher-value products, with the intention of getting these products into leading UK supermarkets. The R&D process was extremely challenging and resource intensive (both capital and human), but culminated in a critical turning point where major contracts were signed with the UK's top three retailers and turnover proceeded to skyrocket.

In many other cases, however, this turning point seemed to be a culmination of many factors over a period of time, rather than one particular identifiable moment. Nevertheless, these turning points, irrespective of their length, are critical moments at which a firm moves away from the post-trigger transition period to start on a new growth trajectory. It is important to note, however, that a firm's new trajectory can be positive (e.g. a period of high growth), neutral, negative (e.g. firm decline) and anything else in between. As previously discussed, whilst trigger points can lead to growth (as evidenced within the HGF sample), many of the non-HGFs did not benefit from their identified triggers and actually declined as a result of the organisational turbulence associated with the transition phase.

So, what is it that makes HGFs more capable of successfully capitalising on critical triggers and managing the subsequent transition phase for growth? And how do they avoid the organisational paralysis that often stems from overstretch, reactive decision making and the loss of strategic focus? In short, these firms appear to exhibit a number of attitudes and aspirations that set them apart from comparable non-HGFs and which arguably have a positive influence on how firms "sense" and "seize" (Teece, 2007) opportunities for growth.

8.2.5 Firm attitudes and aspirations

Noted in Chapter 6, the questionnaire data collected was somewhat unanticipated. Not only did two of the constructs (enacting organisational environment and competitive priorities) fail to identify significant differences between the HGF and non-HGF groups, a number of other constructs (speed and flexibility; customer focus; customer integration) resulted in higher levels of agreement for non-high growth firms than their HGF counterparts. This data was somewhat counterintuitive as, given what we know about HGFs and how they behave, one would have thought that HGFs would be more likely to have higher rates of agreement than comparable non-HGFs in terms of items such as competitive priorities, particularly focusing on quality and service rather than price (Smallbone *et al*., 1995), speed and flexibility (Hansen and Hamilton, 2011), customer focus (Mason & Brown, 2010; Parker *et al*., 2010) and customer integration.

This raised an important question: is there a difference between how a company perceives its capabilities (e.g. customer focus) and how an external audience might view them? Given the questionnaire data, the high growth firms in this study appeared to be more critical of their capabilities than the comparative sample of non-high growth firms, despite their obvious organisational performance and success. So why were they likely to score themselves more conservatively on the attitudinal scales operationalised in the questionnaire?

As each CIT interview was completed, it became increasingly apparent that, despite what the questionnaire results initially indicated, there were significant differences between the high growth and non-high growth firms, particularly in terms of constructs related to customer perceived value creation such as customer focus and customer integration. As discussed in Chapter 7, during the interviews it quickly became clear that the HGFs demonstrated a higher degree of self-awareness and self-criticism than their non-high growth counterparts. They also articulated different conceptions of, and ambitions for, growth.

Self-awareness and self-criticism

The CIT interviews identified that HGFs demonstrated higher levels of self-awareness than the non-HGFs in this study, particularly in terms of self-criticism and the desire for continuous improvement. The HGFs were keenly aware of any weaknesses and areas for improvement but, more importantly, exhibited a determination for improvement, usually drawing on customer feedback and constructive criticism. This reflects Hambrick and Crozier's (1985: 39) observation that more successful firms avoid "being lulled into a sense of infallibility" and that they actively work to ensure continual improvement.

Previous work on young HGFs (the so-called "gazelles") identified that companies which relied on customer complaints were less likely to survive and to grow (Parker *et al.*, 2010), given that such complaints imply inherent customer dissatisfaction. However, the data collected for this thesis does not support such an observation. The HGFs interviewed were actively focused on improving their operations to the highest standard possible. A critical part of this process involved addressing any problem areas or issues identified by their customers and using this constructive feedback as the basis for improvement. In these cases, customer complaints did not have a limiting effect of firm growth. The self-awareness and self-criticism demonstrated by HGFs had an important influence on how these firms conceptualised their competencies and performance, as well as items pertaining to value creation.

Growth conceptions and ambitions

The HGF literature is replete with studies exploring growth ambitions in HGFs (e.g. Smallbone *et al.* 1995; Gundry and Welsch, 2001; Wiklund and Shepherd, 2003; Wiklund *et al*., 2003). Whilst a number of these have noted a positive correlation between the growth ambitions of a firm's founder and that company's own rapid growth (e.g. Delmar & Wiklund, 2008), there is often little discussion about what the authors mean themselves by "growth ambitions" and, far more importantly, what this term means to those HGFs being studied. It is often implicitly assumed that researchers and research participants have the same perceptions of growth (Achtenhagen *et al*., 2010). As Birley and Westhead (1990: 667) remark, one must differentiate between a founder's *growth motivation* and the *growth oriented vision and mission* that this motivation may inspire within a firm.

It quickly became clear during the CIT interviews that HGFs and non-HGFs were operating within two very different paradigms concerning growth, both in terms of conceptions of growth and growth aspirations. As discussed in Chapter 7, HGFs, when asked to describe what they meant by "growth", conceptualised and articulated very strong growth rates, usually in the 15-20% range. These firms also demonstrated equally high ambitions to achieve such significant growth. A growth-oriented vision is considered in the literature to be characteristic of many high growth firms (Doorley & Donovan, 1999) and the data collected supports this assertion. The HGFs interviewed were focused on growth, with rigorously defined, measured and monitored growth plans in place.

In fact, a number of the high growth firms interviewed noted that, whilst growth was a priority, they actively managed the rate of growth to avoid growing too quickly over too short a space of time. These firms discussed encouraging "plateaus" of slow or no growth, in between periods of rapid growth, in order to give the company time to consolidate and prepare for future growth. Such active management of growth rates has been noted in other studies as well (Wiklund *et al*., 2003; Hansen and Hamilton, 2011), with firms occasionally opting for slower growth to develop internal processes, competencies, etc.

<u>Methodological implications of attitudes and aspirations</u>

When comparing the questionnaire and CIT interview data, one had to query why non-HGFs appeared to view their capabilities more positively than HGFs during the questionnaire, yet demonstrated more limited capabilities during interview.

It has been acknowledged for quite some time that attitudinal scale construct measures require a great deal of respondents, asking them to engage in a "higher-order cognitive process that involves not only recall but weighting, inference, prediction, interpretation and evaluation" (Podsakoff and Organ, 1986: 533). Such self-reporting is thus not immune from bias. Social and societal pressure and has been identified to lead to "social desirability bias" (SDB) in attitudinal scale research (Fisher, 1993; King and Bruner, 2000; Achtenhagen *et al*., 2010), which occurs when respondents try to present themselves in the most favourable manner relevant to that particular situation (King and Bruner, 2000), through either *self deception* or *impression management* (Zerbe and Paulhus, 1987). Such behaviour can alter the validity of measurement items and can lead to "spurious or misleading research results" (Fisher, 1993: 303). It is also worth considering that respondents were influenced by the fact that this research project was funded by Scottish Enterprise (and that an SE-affiliated observer attended the interviews). For instance, were non-HGFs trying to "put their best foot forward" to improve any chances of funding or support and were HGFs (who are much more likely to be able to access funding through SE given their historical turnover performance) content to report more candidly?

Given the researcher's observations during interviews, the questionnaire responses from non-HGFs did not appear to be influenced by impression management or self-deception, but rather by higher levels of organisational complacency and satisfaction with the status quo. Given the differing attitudes, conceptions, self-awareness and self-criticism between the HGF and non-HGF groups noted during interviews, upon reflection it is perhaps unsurprising that responses to the questionnaire's attitudinal scales might reflect these differences. In terms of the influence of Scottish Enterprise on participant responses, after careful consideration the researcher does not believe that SE's involvement in this research project has had a significant effect on the responses of participants (or the trustworthiness of those responses). During the interviews firms (both HGF and non-HGF) were very open and forthright, sharing confidential turnover and performance figures with the researcher. They were also forthcoming about "negative" incidents or organisational issues, even if these painted the organisation in a less than favourable light. There was no evidence of "positioning", or even evidence of interest in SE, its support and how such support could be obtained. The conversation was wholly focused on each individual firm and there was a sense of genuine enthusiasm, honesty and excitement from each respondent about sharing their firm's successes and tribulations with the researcher. Whilst it is impossible to be truly sure that there was no influence from SE on participants, given the researcher's observations and experiences she is confident that the data reported is both trustworthy and reliable.

8.3 Exploring customer perceived value creation

The second issue this thesis sought to investigate was whether the creation of customer perceived value is an enabler of rapid firm growth, specifically whether *HGFs are positively influencing perceived value creation through interactions with customers* and, if so, *how does this process occur and does it influence rapid growth*. Despite assertions in the literature that HGFs are differentiated from their non-HGF counterparts by their likelihood to be creating unique value for customers (Smallbone *et al*., 1995; Kim and Mauborgne, 1997; Barringer *et al*., 2005; Zhang *et al*., 2008), there is a lack of empirical evidence available in the literature to confirm such a relationship exists. Data collected during the CIT interviews has provided significant insight into customer perceived value creation within the context of HGFs, particularly in terms of the firm-level structures and firm-customer interactions required to positively influence customer perceive value.

8.3.1 Customer focused ideology/orientation

Ideology, or the beliefs and values that underpin a company's actions and decisions, is widely recognised as having an effect on firm performance (e.g. Beyer, 1981; Goll *et al*., 2001). It is also increasingly recognised to be an important part of influencing customer value creation (O'Cass and Ngo, 2011), particularly when that ideology is focused on customers, service and value, as enshrined in the foundational principles of the Service-Dominant Logic (Vargo and Lusch, 2004; Vargo and Lusch, 2008a). Arguably, only those firms with an articulated and enshrined desire to create and maintain value for customers will ultimately be capable of success.

Despite what the questionnaire may have initially indicated, the CIT interviews brought to light significant evidence of a more customer focused ideology and orientation within the HGF group than within the non-HGFs. As discussed, HGFs exhibited high levels of customer focus and customer integration, as well as a proactive approach towards satisfying - and exceeding - the expectations of each and every one of their customers. Even in terms of competitive priorities, the HGFs focused more on quality and service than price or product leadership (Sawhney, 2006). This confirmed previous observations in the literature that HGFs exhibit a customer-centric ideology and orientation (Mason and Brown, 2010; Parker *et al*., 2010). In fact, the HGFs interviewed demonstrated a number of the hallmarks of not only a customer orientation (Saura *et al*., 2005), but also a "solutions orientation" (Kawohl *et al*., 2009), where companies were focused at an ideological level on creating value for their customers by providing customer-specific solutions to meet business needs.

Underlying this commitment to customers within HGFs was an articulated organisational focus on reputation and trust. This trust-building is recognised in the literature to play a significant role in building and enhancing long-term relationships with customers (Granovetter, 1985), as well as facilitating deep customer engagement (Gregoire *et al*., 2009) and provision of value-laden bespoke offerings or customer solutions (Kawohl *et al*., 2009).

8.3.2 Operational flexibility

Operational flexibility is another firm-level capability that arguably has an important effect on a firm's ability to help create value for their customers. This flexibility has become increasingly important as firms move away from the traditional "push" mentality of product and service development in favour of more customer-led "solutions provision" (Shepherd and Ahmed, 2000; Davies *et al*., 2006; Sawhney, 2006; Cova and Salle, 2007), which requires greater demands of the organisation.

HGFs have been recognised by others to exhibit a higher degree of operational flexibility (Hansen and Hamilton, 2011; Hinton and Hamilton, 2013), and the data collected for this thesis supports these observations. The HGFs interviewed, given their strongly customer-focused orientation, demonstrated significantly more operational flexibility than the comparative non-HGFs. These firms were providing more flexible and bespoke products than their counterparts, which necessarily require a greater deal of operational flexibility than selling more set and static offerings.

The interviewed HGFs also demonstrated more flexibility in terms of opportunity recognition and exploitation, as evidenced by their higher willingness to undertake risks and to deviate from the status quo. This flexibility played a critical role in the HGFs' ability to capitalise on critical trigger points, particularly as greater flexibility is required of an organisation during the post-trigger transition phase to successfully cope with organisational overstretch, secondary triggers etc.

8.3.3 Organisational learning

The final firm-level competency investigated for this thesis, organisational learning has been acknowledged as a critical competence and process within the wider entrepreneurship literature (e.g. Cope and Watts, 2000; Harrison and Leitch, 2005) and small business literature (Hughes *et al*., 2011). Learning is recognised to enable organisations to better "understand and manage their experiences" (Argyris and Schön, 1996: 16), facilitating organisational transformation and re-invention as required (Pedler *et al*., 1991) and contributing to the creation of potential value (Lundvall, 1993). However, it is an issue that is relatively underexplored within the context of high growth firms.

Within the limited HGF literature examining learning, the focus appears to be less about learning as a driver of organisational development and continuous improvement (Wang and Ahmed, 2003) and more about how learning affects innovation and firm productivity (e.g. Du *et al*., 2013). Whilst increased productivity is certainly an important outcome of learning, the data collected for this thesis identified that learning within HGFs occurred as part of an on-going dialogue with customers. Through this dialogue, learning occurred as a two-way process, resulting in organisational improvements for both the firm and their customers. The HGFs interviewed demonstrated both adaptive learning as well as the "higher order" generative learning (Senge, 1990), whereby HGFs (as a consequence of their self-awareness, self-criticism and desire for continuous improvement) constantly challenged the accepted wisdom about their company and how it operated (Slater and Narver, 1995), in order to determine how to best develop the organisation going forward. This was particularly prevalent within HGFs in terms of building on customer feedback and insight to influence organisational change and development. The role of critical events in "triggering" generative learning (Cope, 2003) was also notable, particularly events such as lost contracts, which caused firms to re-evaluate their entire strategy. Not only were the interviewed HGFs open to - and actively engaging in - learning, they also appeared to have higher levels of "absorptive capacity" (Cohen and Levinthal, 1990), as they were particularly capable of recognising and assimilating new information that was helpful to the company.

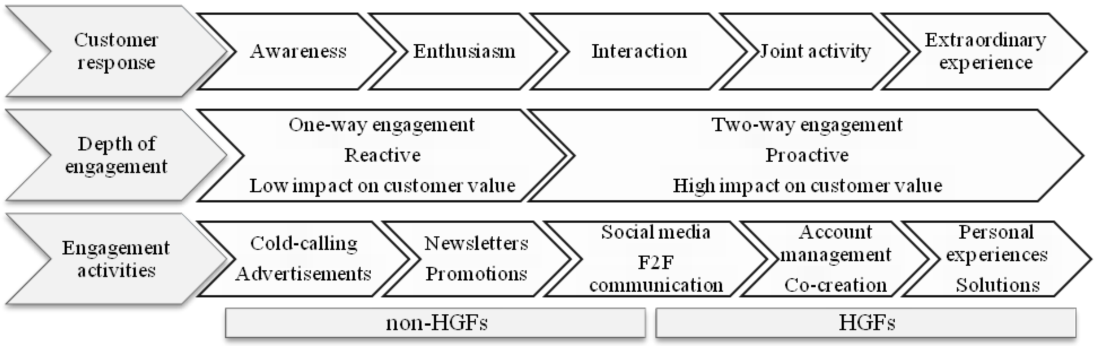
8.3.4 Customer engagement

The literature identifies that the concept of customer engagement (CE) is emerging as a new perspective and conceptual domain (Verhoef *et al.*, 2010; Brodie *et al.*, 2011) linked to the interaction platform (Grönroos, 2011a). Whilst the relationship between customer engagement and value creation remains relatively unexplored (Bolton, 2011), it is widely recognised that deeply engaged customers are more likely to participate in co-created experiences and are thus more likely to develop perceived value (Prahalad and Ramaswamy, 2004; Brakus *et al*., 2009). If customer engagement is successfully executed, it can provide value to the customer (van Doorn *et al*., 2010), as well as to the firm, through "total customer engagement value" (Kumar *et al*., 2010), which can in turn positively affect performance.

As customer engagement is still very much in the development phase (Kumar *et al*., 2010), both as a conceptual domain and as a set of interactions and processes, there is at the moment no consensus on how CE should occur in practice, let alone what methods of engagement would constitute "best practice". However, since every company is unique, it is fitting that firms should choose to engage with their customers in the manner that will be most suitable for each individual customer's unique situation and requirements. At its most successful, customer engagement is considered to be a dynamic and iterative process (Brodie *et al*., 2011) that creates value for customers through interactive experiences, which lead to strong advocacy and brand loyalty (van Doorn, 2011). Achieving deep engagement, particularly engagement resulting in a sense of "extraordinary experience" for customers, allows firms to grow their repeat customer base, whilst attracting new customers for growth

After exploring customer engagement through the CIT interviews, it became clear that HGFs were differing from their non-HGF counterparts in a number of areas, including the method and frequency of communication with customers, as well as the depth of that engagement. These items have a significant influence on customer perceived value and can be thought of as being on a continuum (see Figure 8.2), with some activities allowing for deeper engagement (and therefore more impact on customer value) than others. Whilst this is a relatively simplistic representation (and two of the non-HGFs interviewed could be considered "outliers", given that they operated a kind of "Account management" programme), it depicts the significant differences between the HGF and non-HGF groups in terms of their engagement activities and desired customer response.

Figure 8.2 Customer engagement continuum



Source: Author, developed based on "customer response" principles from Vivek (2009).

In general, the HGFs interviewed were engaging deeply with their customers. As discussed in Chapter 7, these firms tended to focus on more proactive two-way engagement activities (such as Account Management programmes) that have a high impact on customer value. However, given the customer-specific nature of these engagement activities, they required more firm resources (notably time) to effectively operate than more reactive activities such as newsletters or promotions. With this in mind, it was unsurprising that communication between HGFs and their customers took place on a regular basis, with many companies reporting daily communications with customers. Despite the higher organisational demands of such depth engagement, the HGFs interviewed articulated their focus on facilitating customer interactions, with the ultimate goal being to create a sense of "extraordinary experience" (Vivek, 2009) for their customers.

Such a goal is reflective of the HGFs' attitudes (self-awareness, self-criticism and desire for continuous improvement) as well their customer focused ideology. With HGFs espousing many of the principles of Service-Dominant Logic, including an understanding that firm-customer interactions should be a "*process* of parties doing things for and with each other, rather than trading units of output, tangible or intangible" (Vargo and Lusch, 2008b: 29), it is perhaps unsurprising that they are capable of such deep customer engagement. If HGFs and their customers are to participate in the co-creation of experience and value (Prahalad and Ramaswamy, 2004; Brakus *et al*., 2009), such depth engagement is absolutely critical.

8.3.5 Co-creation activities

Like customer engagement, the issue of value co-creation within HGFs has not been addressed within the literature, although it has been usefully theorised and developed within the marketing literature. The current understanding of co-creation (and its lower order concept of "co-production") is as a flexible process, cooperatively driven by firms and their customers. It is thus highly dynamic (Etgar, 2008), interactive (Wikström, 1996) and context specific, thus there no single best practice structure for engaging in co-creation.

Despite HGF studies overlooking the issue of co-creation, HGFs are recognised to exhibit some of the characteristics of co-creation, such as developing new and innovative products for their customers (Smallbone *et al*., 1995) and being end-user focused (Mason and Brown, 2010).

The CIT interviews provided important further insight into co-creation activities within high growth firms, identifying notable differences between HGFs and their non-HGF counterparts. The HGFs interviewed noted a number of ways in which they engage in co-creation, including working with customers to redevelop and customise existing products, involving customers in initial product concept development and working with customers throughout the entire NPD cycle to develop specific, highly customised offerings. Ultimately, co-creation activities were seen by firms as a way of providing additional value to customers through unique and customised offerings. These co-creation activities were fostered at an ideological level by a company focus on customer and value, as well as significant operational flexibility, which enabled HGFs to look beyond a set offering and to engage in co-created offerings with customers.

8.3.6 Solutions provision

The final interaction-level issue explored within this research was the issue of solutions provision, specifically whether HGFs were more likely to be providing customised and integrated “business solutions” to their customers than were comparable non-high growth firms.

As the literature discusses, many firms have moved away from a “push” conceptualisation of product development, in favour of providing customer-led “solutions” (Shepherd and Ahmed, 2000; Davies *et al*., 2006; Sawhney, 2006; Cova and Salle, 2007). HGFs are themselves have been thought to offer “whole service” (Smallbone *et al*., 1995) solutions, with some authors identifying a link between solutions provision and turnover growth (Doster and Roegner, 2000). However, this type of relational offering requires an ideological and operational shift from meeting basic operational needs to participating in the development of solutions to meet unique customer needs - arguably even more so than is required for co-creation. Underpinning the concept of a customer solution is the customisation and integration of every offering (Miller *et al*., 2002; Johansson *et al*., 2003; Krishnamurthy *et al*., 2003; Tuli *et al*., 2007) which meets - and attempts to rectify - a customer's unique needs (Doster and Roegner, 2000).

Within the HGFs interviewed, the concept of solutions provision resonated very strongly, which was perhaps unsurprising given their customer focus, deep engagement with customers and propensity to be engaging in co-creative activities. With a significant majority of HGFs identifying themselves (unprompted) as providers of customer solutions, it quickly became clear that HGFs were much more likely to be providing solutions than their non-HGF counterparts. Their desire and ability to create successful solutions stemmed in large part from a strong focus on customers (and customer value) (Kapletia and Probert, 2010), as well as the organisational flexibility and willingness to work with customers to co-create unique product offerings. These HGFs focused on meeting their customers' unique needs (Sharma *et al*., 2008), by engaging in a relational process to best develop, customise, integrate and support unique offerings (Tuli *et al*., 2007).

8.4 Customer perceived value and rapid firm growth

Having discussed the questionnaire and CIT interview findings in depth, what does this data tell us about the relationship between customer perceived value creation and rapid firm growth? Is there sufficient empirical material to support the assertion within the HGF literature that HGFs are creating unique value for their customers (Smallbone *et al*., 1995; Kim and Mauborgne, 1997; Barringer *et al*., 2005; Zhang *et al*., 2008) in a way that differentiates them from other firms?

Given that the data collected on customer engagement, co-creation activities and solutions provision identified significant differences between the HGF and non-HGFs samples, it is clear that high growth firms in this research have stronger interaction level competencies than their non-high growth counter parts. These interaction competencies, along with their customer-centric ideology and greater operational flexibility, appear to have enabled these HGFs to have a greater influence on customer perceived value creation, subsequently affecting firm performance (Galbraith, 2002; Sawhney, 2006).

The questionnaire data demonstrated that HGFs were selling more to their existing customers and seeing turnover growth from the sales of flexible or bespoke offerings. Exploring these observations in more detail during the CIT interviews, it became clear that HGFs - in direct contrast to the comparative sample of non-HGFs - were engaging deeply with their customers to co-create offerings and unique customer "solutions", thus actively trying to influence the creation of positive perceived value for their customers. This customer perceived value in turn was seen to have an effect on firm performance, as HGFs saw growth from repeat customer purchases, higher value purchases (with bespoke solutions often sold at a premium) and also growth in new customers through word of mouth referrals (Sashi, 2012).

Many of the HGFs interviewed were able to identify and articulate how they helped to create value for customers and how this contributed to their firms' growth and financial performance. In general, company recognitions of value tended to centre on helping their customers to save costs (in both the short and long term), helping their customers to save time (in both the short and long term) and providing customers with a flexible offering that best meets their unique needs.

> *"We have to be competitive in terms of the whole service we provide. Because our machines have a lot of the parts custom designed they are very expensive and of course we need to have a margin. So we can't compete on price. But what we offer our customers is the ability run their ops faster, smoother and more cost-effectively and there's real value in that to them." HGF_10*

> *"It's not the price that makes the difference, but it's what you offer and what [your customers] know you can do to assist them. I think if you put in a headline price of £200,000, you will always have someone who can only pay £190,000. So you try and structure the deal to the individual to suit. It's the flexibility - your flexibility - that makes it." HGF_8*

The CIT interviews also identified the important role that critical incidents or "trigger points" play in the process of firm growth, with HGFs noted to be particularly good at "sensing and seizing" opportunities (Teece, 2007) and proactively managing them (Hinton and Hamilton, 2013) for growth. However, as noted, these trigger points only present an opportunity for change - turnover growth will only occur if a firm is able to translate that opportunity into a change in sales volume and/or value. This is where HGFs, with their firm-level and interaction-level competencies, appear to have a significant competitive advantage over comparable non-high growth firms.

Whilst all the firms interviewed found the post-trigger “transition period” to be challenging, during this period HGFs (unlike the non-HGFs interviewed) were better at remaining focused on their customers, prospecting and engaging with potential and new customers and continuing to engage deeply with their existing customers, so that when the transition phase came to a close the HGFs were much better placed in terms of their sales pipeline and therefore their growth prospects. No trigger, be it a new contract, new product launch or regulatory change, will lead to growth, unless (a) there are customers ready and willing to buy offerings and (b) the firm is capable of making this conversion. Focusing on customer value appears to be a critical advantage in this respect. HGFs were capable of ensuring that both conditions were met.

8.5 Conclusion

This chapter has discussed the questionnaire and CIT interview findings presented in Chapters 6 and 7. It has identified the role of trigger points as critical events which put into motion a larger process of firm growth, which has been conceptualised as comprising an initial trigger followed by a transition phase and finally a turning point. The role of firm attitudes and aspirations has also been discussed, as these have a significant bearing on a firm’s growth, as well as its likelihood and ability to influence customer perceived value. Finally this chapter has addressed elements pertaining to customer perceived value, particularly firm-level structures and competences (customer focused ideology/orientation; operational flexibility; capacity for learning) and customer-firm interaction level activities (customer engagement; co-creation activities; solutions provision) within the context of the interviewed HGFs, which demonstrate that there is a positive relationship between customer perceived value and firm performance. The next, and final, chapter of this thesis will revisit the conceptual framework presented in Chapter 4. It will also discuss this thesis' contributions to theory, before addressing a number of implications for managers and policy makers. Limitations of this thesis and suggestions for future research will then be raised.

Chapter 9 Conclusions

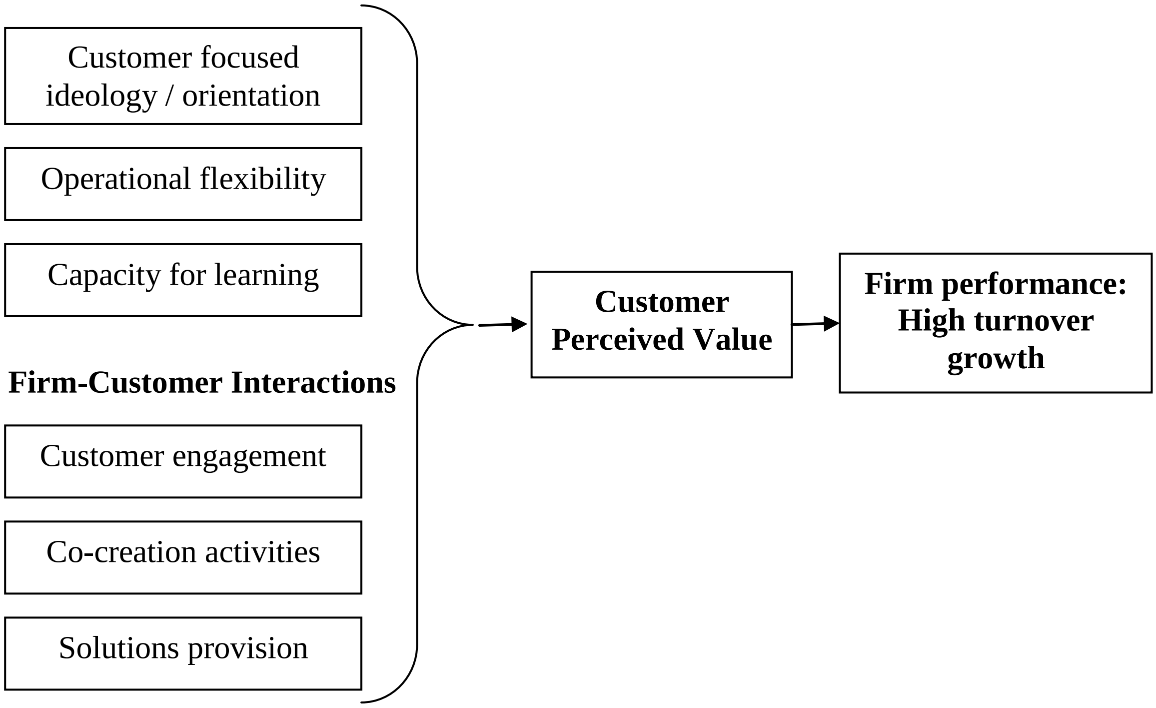
9.1 Introduction

This chapter revisits this thesis' conceptual framework, presented in Chapter 4, confirming the important link between customer value creation and firm growth. Given the paucity of research on this topic, the research underpinning this thesis has yielded a number of contributions. This chapter will discuss the research's contributions to theory, including the role of critical growth triggers, which has led to a better understanding - and new conceptualisation of - firm growth, as well as the significant importance of customer value creation through interaction within high growth firms. Methodological implications will also be discussed, notably the use of attitudinal scales in entrepreneurship research for more amorphous constructs. This chapter will then address a number of implications for managers and policy makers, before identifying the limitations of this thesis and suggestions for future research.

9.2 Revisiting the conceptual framework

As discussed in Chapter 4, a conceptual framework was developed for this thesis, built on the HGF and value literature (see Figure 9.1). A number of research questions to be empirically explored during this thesis were also identified. Each of these will now be revisited, demonstrating that the constructs comprising the conceptual framework indeed form the theoretical foundation of this thesis. They present an important contribution to the HGF literature.

Figure 9.1 Conceptual framework



Source: Author

9.2.1 Exploring HGF growth

This thesis sought to identify what causes HGFs to grow faster than other firms. Specifically, w*ho and what are HGFs seeing greatest sales growth from* and *what does a HGF's growth process look like.* Unfortunately, the first of these questions was sorely overlooked within the HGF literature. This is surprising and somewhat alarming as, if one is looking at turnover growth, one needs to focus on how firms are achieving an increase in sales - who are high growth firms selling to and what offerings are they seeing growth from.

From the questionnaire, we now know that high growth firms in Scotland tend to be selling a combination of physical products and intangible services to a client base of predominantly existing customers. This reliance on existing customers was further emphasised during interviews, reinforcing observations within the HGF literature that HGFs prefer to work with established customers (St. Jean *et al.*, 2008; Hinton and Hamilton, 2009). However, it is important to note that HGFs do not work exclusively with existing customers, but also engage with new customers in the hopes of transitioning them into their existing customer portfolio. Such a focus on existing customers also demonstrates the competence of HGFs to satisfy - and thus retain - customers, which suggests that customer perceived value plays a critical role in repeat customer purchases. This is reflected in their propensity to see sales growth from more customisable and bespoke offerings, indicating the presence of co-creative activities and solutions provision.

With an understanding of where HGF growth stemmed from, it was of great importance to then determine the process through which high growth firms achieve growth and how opportunities were translated into turnover growth. Despite criticisms of the prevailing stochastic growth models (Deakins and Freel, 1998; Levie and Lichtenstein, 2010), rapid firm growth is still very much an under-explored and under-theorised area of the literature, particularly the role that critical events play in the growth process.

The interviews resulted in significant insight into the firm growth process, within both HGFs and non-HGFs. Contrary to the traditional life cycle models of firm growth (e.g. Churchill and Lewis, 1983; Scott and Bruce, 1987), the HGFs interviewed experienced much more idiosyncratic and opportunity-driven growth, as per more recent thinking on firm growth (e.g. Coad, 2009). Periods of lower growth were punctuated by periods of rapid growth, which resulted from "critical events" or "trigger points", be they endogenous (e.g. management change), exogenous (e.g. regulatory change) or co-determined (e.g. new contract). However, unlike other authors who assume that critical events are an opportunity for growth (Garnsey *et al.*, 2006), this research has highlighted that critical events or trigger points do not necessarily lead to growth - they merely present an opportunity for change. They are conceptualised as a systemic change to the structure and workings of a firm, which provides a critical opportunity for altering that firm's growth trajectory**.** Therefore, in many ways, these trigger points are a microcosm of Schumpeter's wider gales of creative destruction, whose turbulent forces generate winners as well as losers (Schumpeter, 1987).

The differentiating factor between HGFs and their non-HGF counterparts did not lie in the presence, frequency, or type of triggers - these were common to all firms. HGFs were different in terms of their ability to sense, seize and *manage* these opportunities, which was largely due to their propensity for risk-taking, focus on strategic planning and operational flexibility. Even more important than an initial trigger point was the post-trigger transition phase, which presented a critical challenge to all companies interviewed and required significant competencies to manage successfully. In this context, the HGFs demonstrated more competencies and dynamic capabilities (Teece *et al*., 1997), particularly in terms of focusing on - and working with - their customers. Unlike the non-HGFs which, during their transition phases, got caught up in day-to-day reactive decision making, thus failing to focus on effectively engaging with customers, the HGFs interviewed followed a different approach. Whilst they too were faced with flux and instability during the transition phase, the HGFs maintained their focus on - and interactions with - their customers. This allowed them to successfully maintain short-term sales, as well as to prospect and position for future sales. Thus, when a "turning point" was reached, the HGFs had a ready and willing customer base to target and were able to effectively leverage these relationships to achieve rapid sales growth.

This importance of a customer focus (at both the ideological level of the firm, as well as at the interaction level) for firm performance and growth, further reinforced the need for the second aim of this thesis - to explore the role of customer perceived value in rapid firm growth.

9.2.2 Exploring the role of customer value

The second aim of this thesis was to explore whether the creation of customer perceived value acts as an enabler of rapid firm growth, particularly whether *HGFs are positively influencing perceived value creation through interactions with customers* and *if so, how does this process occur and does it influence rapid growth*.

As discussed in Chapter 4, a number of firm-level structures and firm-customer interactions are believed to enable a company to provide greater value for their customers, thus contributing to increased firm performance. These firm-level structures are also often associated with high growth firms and include having a customer-centric ideology and orientation (Mason & Brown, 2010), exhibiting a higher degree of operational flexibility (Hansen and Hamilton, 2011) and being able to learn from (and with) customers. Without these structures in place, firms are arguably less capable of providing the breadth and depth of interactions necessary to successfully influence customer value.

Supposition 1: HGFs are likely to exhibit a strongly customer focused ideology / orientation, to be flexible and adaptable in their operations and to be actively learning from their customers. These structures are likely to positively affect customer perceived value.

Despite non-HGFs indicating higher levels of customer focus in the questionnaire, the interview findings confirmed that HGFs exhibit a far more customer-focused ideology than their non-HGF counterparts. This reinforces previous observations that HGFs are strongly customer oriented (Parker *et al*., 2010) and operationally flexible (Hansen and Hamilton, 2011), adapting to changing customer needs and requirements. The HGFs interviewed also demonstrated a significant commitment to organisational learning, actively collecting and using customer insight and criticism for firm development. This combination of firm-level competencies positioned high growth firms to be able to go "*above and beyond*" for their customers, thus enabling them to positively affect customer perceived value. Given these findings, Supposition 1 is upheld, confirming the importance of firm-level structures for value creation and, ultimately, firm performance.

However, customer perceived value creation is thought to ultimately be influenced at the interaction level, during exchanges between a firm and its customers (e.g. Grönroos, 2011a). Deep customer engagement is considered to be a particularly critical form of interaction for value creation; it is also thought to be a characteristic of HGFs (Siegel *et al*., 1993), particularly as a means of building long-term (and value-laden) relationships with customers (Brush *et al*., 2009).

Supposition 2: HGFs are more likely to be strongly customer-focused and engaging deeply with their customers, particularly existing customers.

The findings from the CIT interviews provide strong confirmation for Supposition 2, identifying that HGFs are in fact very much customer focused and are engaging on a deep level with their customers. As discussed in depth in Chapter 7, these firms, in direct contrast with their non-high growth counterparts, are selecting more proactive, two-way engagement activities that best cater to unique customer requirements and thus contribute to customer perceived value creation. Such activities are designed to facilitate interaction and joint activity between firms and their customers, ultimately leading to a sense of "extraordinary experience" (Vivek, 2009) for customers, and have significant potential for positively influencing customer value creation.

Supposition 3a: HGFs are likely to work closely with their customers, taking an active role in co-creating high-value offerings.

Supposition 3b: HGFs are more likely to be providers of customized and integrated "solutions", rather than focusing solely on set products or services.

From the interviews, it quickly became clear that HGFs are focusing on high-value engagement activities, including co-creation activities as well as solutions provision. These firms vary considerably from their non-high growth counterparts in this respect, working closely with customers to develop unique and customised offerings, rather than "pushing" set products to market. It is from these more bespoke products that HGFs are seeing the greatest sales growth, as initially observed from the questionnaire and confirmed in detail during interviews. This evidence supports Suppositions 3a and 3b and identifies that high growth firms are more likely than non-HGFs to be involved in co-creation and solutions provision, providing customised and integrated offerings that best meet unique customer needs. These co-created offerings and solutions not only have a positive impact on customer perceived value (Matthyssens, and Vandenbempt, 2008), but also on firm performance as well.

This evidence confirms the assertions made in the literature that HGFs are delivering superior and unique value to their customers.

9.2.3 Customer perceived value and firm performance

The data collected strongly supports and confirms the conceptual framework of this thesis. Each of the firm-level structures - customer focused ideology/orientation, operational flexibility and capacity for learning - have been found to positively influence customer perceived value. The same is true for firm-customer interactions, which include customer engagement, co-creation activities and solutions provision. Each of these elements positively contributes to customer perceived value. Arguably, firms such as HGFs, who demonstrate all of these structures and interactions, are able to successfully influence the perceived value of their customers.

This customer perceived value in turn appears to have a direct positive impact of firm performance. Satisfied customers with positive perceived value are more likely to make repeat purchases, thus facilitating growth in sales volume and or/value and positively influencing turnover growth. Therefore, the data collected for, and discussed in, this thesis supports the belief in the literature that a firm's financial performance and success rests on its ability to provide maintained superior value to their customers (Rintamäki *et al*., 2007; Sirmon *et al*., 2007) and demonstrates an important link between customer perceived value creation and high growth firms.

9.3 Implications for theory

As noted throughout this thesis, there are significant gaps within the HGF literature that have been in desperate need of empirical attention. Of particular note is the need for theoretical and conceptual advancement of the HGF growth process, as well as a deeper - and more empirically grounded - understanding of customer value creation within HGFs. This thesis has explored and addressed both of these issues. Its findings provide an important contribution to the HGF literature in terms of further developing firm growth theory. These findings also have implications for on-going and future work exploring HGFs, particularly the need to focus on strategic competencies and capabilities, such as those underpinning and contributing to customer perceived value creation and firm growth.

9.3.1 Firm growth theory

Despite decades of research on HGFs, our understanding of the HGF growth process remains limited (see McKelvie & Wiklund, 2010), a shortcoming arguably compounded by the continued use of analysis of variance and other quantitative methods when investigating high growth firms. Recent work on general firm growth theory, such as Levie and Lichtenstein's (2010) dynamic states approach to entrepreneurship or Vohora *et al*.'s (2004) concept of "critical junctures", has been helpful in questioning the relevance of stage-based growth theories and proposing new conceptualisations of growth. However, they both fail to address the process of firm development and growth. There is insufficient explanation - or understanding - of the forces that underpin the transition from one dynamic state to another (Levie and Lichtenstein, 2010) and the critical issue of what happens before, during or after a "critical juncture" is also lacking (Vohora *et al*., 2004).

Thus, the investigation of HGF growth undertaken for this thesis provides a valuable contribution to the literature by exploring the opportunity-driven and processual nature of firm growth and proposing a more nuanced understanding of this process. This thesis has identified the important role of critical events or "trigger points" in the firm growth process, providing a comprehensive list of identified triggers and proposing a simple classification system for them (see Chapter 7). It has also identified and explored the post-trigger "transition phase", a critical phase that ultimately determines whether or not a particular trigger will result in increased firm performance. It is during this transition phase that firms can best position themselves for growth.

The influence of this transition phase is of critical importance for HGF theory, as well as firm growth theory generally. It further demonstrates that growth is not a consistent or predictable process (Parker *et al.*, 2010), but neither is it completely random and a result of luck or chance as some might think (e.g. Coad *et al*., 2012). Rather, growth appears to be the result of a fortuitous marriage between discrete opportunities and company competencies and capabilities, whereby those companies that can (a) identify opportunities and (b) mobilise strong capabilities to take advantage of said opportunities will be the ones that will thrive. This observation has implications for firm growth research going forward, particularly when exploring the phenomenon of high growth firms.

With so many authors focused on identifying owner/manager characteristics (e.g. education level) or demographic characteristics (e.g. firm size and age), there is a real need to look beyond these more static elements in favour of dynamic processes and capabilities, particularly firm strategies and activities. Whilst these are more difficult to explore - and do not lend themselves well to aggregate quantitative analysis - it is only through exploring the changing organisational dynamics, strategies, processes and interactions that we will be able to develop a clearer and more meaningful understanding of the firm growth process.

9.3.2 Strategy and dynamic capabilities

The need for authors to focus on strategies and capabilities has been further reinforced by this thesis' findings pertaining to customer perceived value creation. As discussed, a number of authors have identified a relationship between HGFs and unique value creation (e.g. Barringer *et al*., 2005; Zhang *et al*., 2008), but they have failed to provide sufficient empirical insight to confirm this supposed relationship. This thesis has undertaken this task, exploring this relationship in depth and confirming that customer perceived value creation is indeed an important differentiator of high growth firms. It has further contributed to the HGF literature by exploring the nuances of such value creation, identifying that high growth firms have a number of unique strengths and competencies at both the firm and interaction levels. Whilst this thesis has provided an important contribution to the literature by shedding significant light on the relationship between customer perceived value and firm growth, its findings also have further implications for future HGF research.

Given the importance of firm capabilities (e.g. customer focus and customer engagement) within the value creation construct, there is arguably a need for future HGF research to be grounded in theoretical perspectives that focus on, and allow for, capability development and dynamic change within organisations. The majority of the HGF literature takes a resources-based approach to growth (Leitch *et al*., 2010b), where growth is assumed to be tied to managerial and other resources (Penrose, 1995). As this thesis has demonstrated, growth is less a consequence of firm resources, and more a result of sensing and proactively managing opportunities. With this in mind, HGF research would arguably benefit from more of a "dynamic capabilities" perspective.

This dynamic capabilities perspective was developed partly in response to criticisms of the prevailing resources-based view (Barney, 2001), stemming from Penrose's (1995) work on the growth of firms, which has been seen as too static and externally-focused to fully explain firm growth processes (Eisenhardt and Martin, 2000; Priem and Butler, 2001; Zettinig and Benson-Rea 2008). There is considered to be a crucial distinction between the two perspectives (von Tunzelmann and Wang, 2003): in the resources-base view, *competences* are considered to be "pre-set attributes of individuals and firms", whereas in the dynamic capabilities perspective *capabilities* are considered to involve "both internal and external learning, and accumulation and integration of new knowledge on the part of the firm" (Iammarino *et al*., 2012: 1285). Building dynamic capabilities thus entails "knowledge creation, integration and configuration", which makes knowledge management and organisational learning critical elements in the growth of a business (Weerawardena *et al*., 2007: 298). The importance of such learning has been emphasised within this thesis, particularly in relation to the collection and integration of customer insight.

How well a firm is able to seize growth opportunities is thought to rest heavily on their dynamic capabilities (Teece *et al*. 1997; Teece, 2007), which might explain why some firms are more successful than others. This perspective would thus provide a strong theoretical underpinning for further empirical work exploring high growth firms.

9.4 Implications for managers

Given this thesis' focus on firm level competencies, processes and interactions, its findings unsurprisingly present a number of practical implications for managers. These relate to actively managing the company growth process, as well as strategically interacting with customers to best influence customer perceived value and position for future growth.

Discussed at length in Chapter 8, this thesis has explored the process through which HGFs grow. It has identified the important role that critical "trigger points" play in the company growth process, noting that these triggers are not an opportunity for growth, but rather an opportunity for organisational change. In order to best capitalise on a trigger, managers need to be aware of these critical events and capable of identifying them, either before, during or shortly after a trigger has occurred. In some cases (e.g. exogenous triggers), this might require company "foresighting" or "horizon scanning" (Berry, 1998) to keep abreast of changing regulations, public policy, environmental conditions, or technological developments. For endogenous or co-determined triggers, managers should be able to identify these events quite early (e.g. change in management; new product launch), particularly if they are cognisant of the potential opportunities that triggers bring and the need to begin actively managing these opportunities as soon as possible.

Whilst triggers provide an opportunity for firms to alter their growth trajectories, they are by no means a guarantee of growth. Triggers fundamentally alter the structure and workings of a firm and therefore they can be very destabilizing and disruptive. Given these associated effects, this thesis has emphasised that the post-trigger transition phase is the most critical period for firms, ultimately determining which will see growth and which will not. As a result, management intervention during this time is essential, both to take advantage of any opportunities created by the initial trigger, as well as to manage any organizational conflicts, resource constraints or organizational overstretch that may occur during this period (St. Jean *et al.*, 2008).

So what can managers do? From this research, it was apparent that HGFs had negotiated the trigger point process more successfully than their non-HGF counterparts. The majority had been able to identify a critical incident/trigger either before, during or shortly after the trigger occurred and subsequently actively managed the following transition phase, using this time as a learning opportunity for critical reflection and organizational improvement. Such proactive management often required a sort of "coping strategy", articulated and shared by management and employees. This strategy involved identifying capital and human resources to cope with the trigger (before, during and after), prioritizing opportunities to avoid organizational overstretch and ensuring ongoing customer engagement, pipeline development and medium to longer term planning. A critical message for managers appears to be that if they can (a) recognize triggers in a timely manner and (b) proactively manage the ups and downs of the following transition phase, they are more likely to have successfully positioned their companies for strong performance and future growth.

However, this transition requires a concentrated organisational focus on customers, as well as unfailing interaction and engagement with both new and existing customers. Again, this was a significant strength of HGFs. These firms were able to engage deeply with their customers, irrespective of other constraints and requirements during the transition phase, and they ensured that customer focus and customer interaction remained a top priority. As a result, their existing and new customer bases were maintained, allowing for continued (if not increased) sales post-transition phase. Thus, managers need to be diligent throughout the trigger point process, ensuring that customer engagement and interaction is maintained, particularly engagement activities promoting "extraordinary experiences" for customers (Vivek, 2009).

9.5 Implications for policy

As discussed at the beginning of this thesis, high growth firms have risen up the policy agenda (Shane, 2009; Lerner, 2010) and have been at the centre of economic policy within the UK and other OECD countries for the past decade, given their perceived role as major job creators and key contributors to economic growth (Patton *et al.*, 2003; OECD, 2010; Derbyshire, 2012). Within Scotland, HGFs are recognised to positively affect not only job creation, but also supply chain development and wider economic growth. Thus, the Scottish Government has made it a strategic priority to increase the number of high growth businesses within Scotland by 2015 and has increased its investment to support firms with significant growth ambitions and potential (Scottish Enterprise, 2012).

However, despite this policy focus, the current policy interventions available are generic and not designed for (or even particularly well suited to) supporting HGFs. With this in mind, designing appropriate support mechanisms to generate and support high growth companies will be a significant challenge for policy makers over the coming years (Mason and Brown, 2013). It will also be critical for policy makers to recognise that supporting high growth firms or high growth entrepreneurship is not the same as supporting new venture creation. New ventures are by definition not high growth firms until they are at least 3 years old and employ 10+ employees (Eurostat-OECD, 2008), thus public policy will have to focus on existing businesses as the main generators of future HGFs (Mason and Brown, 2013). As demonstrated by the demographics of the HFGs surveyed for this thesis, these firms will be older, larger and representing a variety of industry sectors.

Without question, interventions and associated support policies for high growth firms will need to be carefully constructed and customised to meet the specific requirements of this small cohort of firms. Given the findings from this thesis, there is arguably a need for policy makers to identify and support firms undergoing critical trigger points, to try and maximise the number of companies who are able to transition successfully into HGFs.

9.5.1 Identifying trigger points

Given the findings from this thesis, a key issue surrounds the question of whether critical "trigger points" can be identified by policy makers. In some cases this identification would be relatively straightforward. For example, if a firm was acquired by a new owner, this ownership change would be lodged with Companies House. Similarly, if a change in regulation occurred, policy makers would likely have been aware of (and able to track) this exogenous trigger before it occurred. However, "behind the scenes" endogenous trigger points within companies would be extremely complex and difficult to identify, particularly when sensitive information is in play. For example, plans for an MBO are often undisclosed until the last minute due to commercial sensitivity. Thus, from a policy making perspective, it is probably more difficult to identify endogenous trigger points (take-overs, MBOs etc.) than exogenous triggers points (technology and regulatory changes etc.). Even trigger points which are co-determined by a firm and another party will be difficult to identify, as these often happen within the confines of a firm and are likely to be kept private (e.g. the injection of new venture capital).

Another important question is whether policy makers can actually stimulate or initiate trigger points within firms. Given the difficulty of actually identifying said triggers, the probability of policy makers inciting these seems remote, particularly in terms of exogenous triggers. However, there may be a role for policy makers in "pushing" firms towards certain potential trigger points. Given the prevalence of ownership and management change triggers in this thesis, there is potentially a role for the public sector to advocate the beneficial opportunities created by various types of ownership and management changes. One potential role for public policy makers would be to provide advisory services for people wishing to undertake various types of ownership change such as Management Buy Outs, installation of non-executive Directors etc.

Notwithstanding some of these problematic issues, undoubtedly the key to identifying trigger points is to monitor firms closely. One method of closely monitoring firms is through the process of Account Management, which is currently operated by a number of business development agencies. For example, Scottish Enterprise has implemented a segmented approach towards the Scottish company base, working with around 2000 firms showing the greatest growth potential. This form of close relational support has a number of advantages in terms of enhancing the ability of policy makers to gain a deep insight into the developmental requirements of these businesses, particularly if individual Account Managers foster the types of intimate, strategic relationships which can identify potential trigger points. Following the identification of these triggers, policy makers could assemble more bespoke forms of assistance to help firms navigate their growth paths successfully.

9.5.2 Temporal support

So what forms of support should be provided for firms undergoing trigger points and what will best facilitate rapid firm growth? Current interventions aimed at HGFs tend to focus on conventional forms of support given to all SMEs, such as generic R&D assistance and financial support (OECD, 2010). Arguably, these traditional "transactional" forms of business support prove of limited value and authors have criticised public policy for not producing more customised forms of support for HGFs, such as assistance with leadership, strategy development and internationalisation (Mason and Brown, 2013). Whilst policy makers are always looking for evidence about how to support HGFs, given the findings from this thesis, it might be of more value to think about *when* such interventions should happen.

As discussed, the post-trigger transition phase is arguably the most perilous for a firm, as it struggles to come to grips with the effects (and aftershocks) of a critical event/trigger. From a policy perspective, this is arguably the most important time to intervene, as positive action taken at this point might make the difference between a firm benefitting from a trigger (ultimately achieving growth) and the firm being severely damaged by it. This would require a policy shift from reactive, time-bound assistance towards more temporal, flexible and proactive support mechanisms that are responsive to time-sensitive company needs. Based on these principles, Scottish Enterprise is currently operating a programme for companies who are encountering key trigger points and require intensive time bound assistance. This “Companies of Scale” programme provides specialist support designed to mitigate the challenges experienced post-trigger, notably strategic assistance on strategy development and implementation, succession planning, acquisition planning and integration and behavioural change (Mawson and Brown, 2013). However, as such interventions tend to be expensive, bespoke and temporal assistance would need to be highly targeted to compensate for its resource-intensive nature.

9.6 Methodological implications and limitations

This thesis undertook two key phases of data collection: a large-scale questionnaire for aggregate data capture, followed by interviews using the Critical Incident Technique to explore key issues in greater depth. Given limited empirical and conceptual work in the literature on the growth process within high growth firms, as well as a lack of empirical evidence to confirm a link between HGFs and value creation, this approach was deemed to be the most appropriate for an exploratory study. Whilst both methods were particularly useful in the context of this thesis, they have highlighted a number of methodological implications for future HGF research, as well as business and entrepreneurship research more generally.

As discussed in Chapter 5, the questionnaire drew on established measures with proven psychometric properties (Slater and Atuahene-Gima, 2004) to mitigate measurement risk and to promote measurement validity and reliability (Churchill, 1979; Bryman and Bell, 2007). However, the data collected from the questionnaire was somewhat unexpected: non-HGFs noted higher levels of agreement than their HGF counterparts on a number of measures, including firm speed and flexibility, customer focus and customer integration. With HGFs seeing faster sales growth than their non-HGF counterparts, one would have thought that these firms would be more likely to have higher rates of agreement in terms of items such as competitive priorities, speed and flexibility, customer focus and customer integration - the competencies that arguably facilitate sales growth.

It was only during the CIT interviews that a possible explanation for this data started to emerge. From the interviews, it quickly became clear that HGFs demonstrated a higher degree of self-awareness and self-criticism than their non-high growth counterparts. This self-awareness and self-criticism had an important influence on how these firms conceptualised their competencies, abilities and performance, including items pertaining to value creation; they also undoubtedly had an impact on how firms had responded to the questionnaire items. For the non-HGFs, comparatively higher levels of agreement appeared to stem from a sense of organisational complacency and satisfaction with the status quo. These different conceptions and attitudes between the HGF and non-HGF groups have important methodological implications for other comparative studies, particularly those relying heavily on attitudinal scales as a data collection tool for comparative analysis.

Given the differing attitudes, conceptions, self-awareness and self-criticism between the HGF and non-HGF groups, in retrospect the questionnaire would have benefited from starting with some form of "benchmarking" exercise. This would have helped to create a baseline understanding of how different groups were prone to answer questions, in advance of completing the attitudinal scales. An initial baseline could help to determine whether certain groups are more likely to provide more moderate responses (Heine *et al.*, 2002) (as HGFs appeared to be in this study), whether there is a "reference-group" effect at play (Festinger, 1954; Heine *et al.*, 2002), or even how much stronger "agree" is seen to be than "somewhat agree" (Carifio and Perla, 2007) amongst each group. As such, this approach should be considered within future comparative research, particularly when high performing firms such as HGFs are the subject of study.

The CIT interviews conducted after the questionnaire where particularly useful in terms of probing questionnaire responses and putting them in context. They also proved to be a highly effective tool for this comparative exploratory research. This was very much the case in terms of identifying and exploring critical incidents during a firm's development and performance, as well as identifying conceptual and attitudinal differences between the HGF and non-HGF groups. This interview technique has a small but growing presence in entrepreneurship research (Curran *et al.* 1993; Chell, 1998; Cope & Watts, 2000; Cope, 2005; Leitch *et al.*, 2010a) and would be a very useful tool for further HGF studies, as it allows for growth to be contextualised within the process of general firm development and evolution.

Although the research undertaken for this thesis strove to be as rigorous as possible, bearing in mind the need for methodological transparency and trustworthiness (Healy and Perry, 2000), there are inevitably limitations to the findings discussed.

As noted in Chapter 2, the high growth literature is dominated by cross-sectional rather than longitudinal studies, despite the fact that firm growth is by nature a phenomenon that happens over time (Davidsson *et al.*, 2005) and thus should be examined over time. Whilst this thesis has acknowledged the importance of longitudinal HGF research, given time and resource constraints it was not possible to undertake a truly longitudinal approach during this research. As a result, the data collection for this thesis occurred at two discrete points in time. Whilst the data collected has led to the important findings discussed in this thesis, it would have been beneficial to collect data at more regular intervals over a longer period of time, to best track firm growth, evolution and development. A truly longitudinal approach would undoubtedly have provided further insights, including an even more nuanced understanding of the firm growth process and an ability to track the development of firm strategies, processes and "dynamic capabilities", particularly those relating to customer perceived value creation.

A reliance on retrospective information from participants is also a potential limitation for this thesis' findings (Golden, 1992). The critical incident technique underpinning the depth interviews necessarily drew on respondents' retrospective accounts, whereby any past incident considered have a significant effect (positive or negative) on firm development was identified. Such retrospective accounts have received criticism for being affected by self-censoring or recall bias (Michel, 2001; Harrison and Mason, 2004). Whilst every effort was made during this research to minimise such bias, working from Flanagan's (1954) observation that if a respondent provides full and precise details about an incident it can be assumed to be critically important and the information accurate, bias is still a potential limitation of the findings.

Another potential limitation concerns the sampling for this thesis. Given the comparative nature of this research, it was important to identify similar samples of high growth and non-high growth firms. As discussed in Chapter 5, the HGF population in Scotland in very limited and thus it was possible to identify and target the vast majority of these companies, resulting in questionnaire data being collected from 40% of the HGFs during the period 2006-2009. On the other hand, identifying and contacting a comparative sample of non-HGFs was not quite as straightforward; questionnaire data was ultimately collected from less than 1% of all Scottish non-high growth firms during that period. As a result, whilst the findings about Scottish HGFs as a group are quite robust, as are significant differences between the samples of HGFs and non-HGFs interviewed for this research, the non-HGF sample is unlikely to be representative of the larger non-high growth firm population in Scotland. Thus, significant differences between the HGF and non-HGF groups are only robust in the context of this research; further research with another sample of non-HGFs would be needed to determine whether these results are replicable with another non-HGF sample or within the larger non-HGF population.

9.7 Areas for future research

High growth entrepreneurship is still a comparatively young field, as reflected in the fragmented and non-cohesive body of HGF literature. With authors using different definitions and measurements of high growth to suit their own aims and data sets, not only is there limited comparability across studies, but conceptual and theoretical development of high growth as a phenomenon remains minimal. There is very much the scope (and need) for further contributions to improve our understanding of the HGF phenomenon.

Given the findings presented in this thesis, further investigation into the role of trigger points in the company growth process would be of great value to the literature. Whilst this thesis has provided a contribution to the firm growth literature by identifying, categorising and analysing the role of critical trigger points in firm growth, substantially more empirical research is required to fully examine the nuances, dynamic nature and consequences of these trigger points. Particular attention should be paid to the issue of acquisition as a critical trigger, which would hopefully generate further empirical evidence and discussion on the role of organic growth (OG) versus acquisitive growth (AG) in HGFs. Whilst authors have acknowledged the urgent need to better identify and understand different types of growth, the literature largely fails to differentiate between AG and OG. This may be, in part, due to the significant practical and methodological difficulties of differentiating between these two forms of growth. However, given the notable incidence of acquisition as a trigger (both positive and negative) within this research, there is an indication that acquisition plays an important role in firm growth, particularly within HGFs. Further research to unpick growth via AG and OG would be of tremendous benefit to the high growth entrepreneurship literature, as it would contribute to an even better understanding of how and why firm growth occurs.

Further HGF research would also benefit from more longitudinal analysis of company growth and evolution. Unfortunately, these studies are relatively rare in the HGF literature (e.g. Birley, 1987; Vinnell & Hamilton, 1999; Delmar & Wiklund, 2008; St. Jean *et al*., 2008; Littunen & Niittykangas, 2010), again largely due to methodological difficulties. However, there is consensus that longitudinal studies are of great value to HGF research and, at present, very much underrepresented in the literature (Chandler & Lyon, 2001; Davidsson *et al.*, 2006; Davidsson & Wiklund, 2006; Delmar & Wiklund, 2008). This kind of longitudinal data collection and analysis would potentially be a fruitful research approach (Davidsson and Wiklund, 2000), particularly in the context of exploring businesses undergoing critical trigger points. It would potentially allow for further exploration of the nature and impact of trigger points over time, thus helping us to better understand and trace the transmission mechanisms by which these events permeate throughout organisations. Exploration of the longer-term impacts of triggers would also be beneficial, particularly whether rapid firm growth can or cannot persist over multiple periods

(McKelvie and Wiklund, 2010; Hölzl, 2011) and whether HGFs are essentially "one hit wonders" (Daunfeldt and Halvarsson, 2012).

Finally, with the issue of persistent growth in mind, there is a significant need to expand our thinking on high growth firms, moving beyond the rigidity of the OECD definition and measurement[37]. Arguably, this focus on identifying HGFs based on average annualised growth over a particular three year period has led to an ingrained belief that there are "stocks" of HGFs in particular regions, as evidenced by current policy thought in Scotland[38]. Rather, it should be noted that any "stock" of HGFs is necessarily short-lived. Although a firm might have one period of high growth, there is no guarantee that they will go on to have another. In fact, as NESTA (2011: 11) notes, "today's high growth firms are unlikely to be tomorrow's HGFs. Looking again at the 1998 cohort of start-ups, less than 40% of all the start-ups that achieved growth above 20% in a single year had another episode of high growth in that decade." Given that HGFs are unlikely to remain "high growth" in the longer term, it is important to note that other businesses in the wider business base will then be the future HGFs.

With this in mind, perhaps the HGF literature would benefit from future research examining those firms that have the potential to become high growth, but which have not yet managed to achieve HGF status. Issues such as leadership, value creation (particularly customer focus and customer engagement) and other dynamic capabilities would all benefit from empirical study in the context of "potential HGFs", even if these firms might be extremely difficult to identify (Freel, 1998). Investigating those firms achieving growth just under the OECD's threshold (perhaps in the 15-19% p.a. range) might provide a good starting point. It would also be useful to explore in depth whether public assistance and support might have a positive impact on these firms, helping them to achieve rapid growth. This could

[37] The OECD defines a high growth firm as "an enterprise with average annualised growth (in number of employees or turnover) greater than 20% per annum, over a three year period, with a minimum of 10 employees at the beginning of the growth period" (Eurostat-OECD, 2008: 61).

[38] Research by Scottish Enterprise in 2010 identified a stock of 825 HGFs in Scotland during the period 2005-2008. Despite the research noting that this HGF figure applied only to the selected time

provide further insight into how public sector policies and interventions can be designed to best target and support HGFs, or firms with high growth potential.

9.8 Conclusion

This chapter has brought together the findings discussed in this thesis, confirming the link between customer perceived value creation and rapid firm growth. It has discussed this thesis' contribution to the HGF literature and theory, as well as methodological implications and questions arising from this research. Finally, implications for managers and policy makers were addressed and a number of suggestions for future HGF research were proposed.

period, policy makers in Scottish Enterprise continue to quote the 825 figure and plan for interventions with this figure in mind.

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Appendices

Appendix 1. Review of methodologies and methods used in HGF research (excluding general business growth literature)

Name/Date	Timescale (longitudinal or cross sectional?)	Growth definition and measure	Data source (primary or secondary)	Factors examined	Qualitative vs. qualitative	Methods used	HGF & nHGF compared
Achtenhagen *et al*. (2010)	Longitudinal	(No definition specified; 3 year time period) Absolute employment growth Absolute turnover growth Employment growth	Secondary (Government database) and primary (questionnaire & interviews)	Manager characteristics Industry characteristics	Quantitative Qualitative	Regression Correlations	No
Almus (2002)	Cross sectional	(No definition specified; 5 years) Absolute employment growth	Secondary (commercial database)	Ownership Industry Human capital	Quantitative	Linear modelling	No
Barringer *et al*. (2005)	Cross sectional	3-year compound annual growth rate of 80% Absolute turnover growth	Secondary (narrative case studies)	Founder characteristics Business practices HRM practices	Quantitative	Content analysis	Yes
Brown & Mawson (2013)	Cross sectional	OECD definition Absolute turnover growth	Primary (interviews)	Pattern of growth Growth triggers	Qualitative	Case studies	No
Coad & Tamvada (2011)	Cross sectional	(No definition specified; 1 year) Gross output	Secondary (census data)	Ownership Firm characteristics Knowledge source	Quantitative	Regression	No
Coad (2010)	Cross sectional	Change of size over 3 years Absolute employment growth Absolut turnover growth	Secondary (Government database)	Pattern of growth	Quantitative	Regression	No
Delmar et al. (2003)	Longitudinal	Top 10% of firms (no time period specified) Relative employment growth Relative turnover growth	Secondary (Government database)	Pattern of growth	Quantitative	Regression (Cluster analysis)	No
Feeser & Willard (1990)	Cross sectional	Top 100 growth firms, 5 year period Absolute turnover growth	Secondary (commercial databases) and primary (questionnaire)	Founding strategies	Quantitative	Unspecified	Yes
Feindt et al. (2002)	Cross sectional	(No definition specified; no measures specified)	Secondary (Government database)	Critical success factors	Unspecified	Unspecified	Yes
Fischer & Reuber (2003)	Cross sectional	OECD definition Absolute turnover growth	Primary data (interviews etc.)	Support for HGFs	Qualitative (Grounded theory)	Interviews Questionnaire Focus group	No
Florin et al. (2003)	Cross sectional	(No definition specified; no measures specified)	Secondary (commercial database)	Human resources Social resources	Quantitative	Regression Correlations	No
Goedhuys & Sleuwaegen (2010)	Cross sectional	OECD definition Absolute employment growth	Secondary (World Bank database)	Entrepreneur characteristics Innovation Firm demographics	Quantitative	Regression	No
Hamilton (2012)	Longitudinal	(No definition specified; 13 year period)	Secondary (magazine's business	Pattern of growth	Unspecified	Unspecified	No

		Absolute employment growth	histories)				
Hoffman & Junge (2006)	Cross sectional	OECD definition Absolute turnover growth	Secondary (commercial databases)	Spatial distribution of HGFs	Quantitative	Correlations	No
Hölzl & Freisenbichler (2010)	Cross sectional	Top 10% of firms; no time period specified Absolute turnover growth	Secondary (CIS survey)	R&D Innovation	Quantitative	T-tests Matching	No
Hölzl (2009)	Cross sectional	Top 10% of firms; 3 year period Absolute turnover growth	Secondary (CIS survey)	R&D Innovation	Quantitative	T-tests Regression	No
Littunen & Virtanen (2009)	Longitudinal	(No definition specified; 8 years) Absolute turnover growth	Primary (interviews)	Management style	Quantitative	Regression	No
Mason & Brown (2010)	Cross sectional	OECD definition Absolute turnover growth	Primary (interviews)	Firm demographics Firm origins Business activities Environmental conditions	Qualitative	Case studies	No
Moreno & Casillas (2007)	Cross sectional	More than 100% growth over 3 years Absolute turnover growth	Secondary (database)	Firm demographics Resource availability	Quantitative	Discriminant analysis	Yes
Parker et al. (2010)	Longitudinal	30% growth p.a. over 4 years Absolute turnover growth	Secondary (commercial databases) and primary (interviews)	Management strategies External environment	Quantitative	Regression	No
Stam (2005)	Cross sectional	(No definition or time period specified) Employment growth	Secondary (Government database)	Spatial distribution of HGFs	Quantitative	Unspecified	No
Stenholm (2011)	Cross sectional	(No definition specified; 3 year period) Turnover growth	Secondary (Government database)	Innovative behaviour Growth intentions	Quantitative	Regression	No
Teruel & de Wit (2011)	Cross sectional	OECD definition Absolute turnover growth	Secondary (commercial databases)	Environmental conditions Business opportunities Ambitions	Quantitative	Regression	No
Zhang et al. (2008)	Cross sectional	(No definition specified; 3 year period) Turnover growth	Primary (questionnaire)	Entrepreneur attitudes Resources and capabilities Perceived environment Entrepreneurial strategy	Quantitative	Content analysis	Yes

Appendix 2. HGF Exploratory interview guide

General Information

1. Please tell me a little bit about what your company does.
    a. What is your main line of work/what industry do you work in?
    b. How many employees do you have?
    c. Of these employees, approximately how many work directly with customers?

2. What do you/your company think of your company's growth?
    a. Is growth a priority?
    b. Are you actively seeking growth or is it coming unsolicited? (*orientation; ambitions)*
    c. Given your period of recent growth, do you think your company has gone through any significant changes? Are these for the good or the bad?

3. What can other companies learn from your company's growth?

Customers – Building and maintaining relationships

4. Are you operating in a B2C or B2B environment? Or both?

5. How important do you consider your customers to be to your business?
    a. Do you think they drive your business decisions (*pull orientation*) or do they prefer to consume what you make/sell (*push orientation*)?
    b. Are your customers one time buyers or repeat?
    c. If one time buyers, is this your business model, or would you like to create more repeat customers?

6. How do you first target or attract customers?
    a. Do you target a certain sector/set of businesses?
    b. Do you make the initial contact or do businesses come to you?
    c. Do other companies direct customers to you?
    d. Is customer building systematic or spontaneous?
    e. Do you adopt a broad-brush (volume) or targeted marketing approach?

7. Once you are working with a customer, what do you do to build and maintain that relationship?
    a. How often do you make contact with customers? Is this a planned or ad hoc approach?
    b. Do you offer special "account management services"?
    c. Do you use any type of electronic system to manage relationships (e.g. CRM systems; ERP systems; databases)?

d. How do you communicate with customers? Telephone, newsletters, email, face to face, events etc.? Other forms of interaction like social and online media?
e. Do you vary your communications approach for different types of customers? If so, how do you decide how to interact?
f. How strong would you say your relationships with existing customers are?
g. Do you focus on building long term relationships?
h. Do you try to develop customer loyalty? If so, how?

Customers – Creating value

8. In terms of your product/service offering, what kind of influence do customers have on its creation and development?
    a. Do customers ever work with you to design product/service offerings?
    b. Do you proactively seek customers' views when developing products/services? If so, how do you do this? How formal/informal is this process?
    c. Are customers given the opportunity to give feedback?
        i. If so, how, and how is this feedback collated and used
    d. Do you use other ways other than direct research/feedback mechanisms to gather customer intelligence? E.g. customer journey analysis, web analytics, data mining etc.

9. What makes you unique from competitors?
    a. Do you undertake competitor analysis?
    b. Are you aware of your competitors' approach to their customers and does this influence your approach?

10. Do you ever "bundle" products with corresponding services (e.g. Installation, after sales support)?

11. Looking at other organisations - in your own and other sectors - what are they doing to successfully build business with customers?
    a. Why are/aren't you doing this?
    b. Why is it being done well elsewhere, but is not appropriate for your business?

Appendix 3. Final Questionnaire

Note that the formatting of this questionnaire has been altered to fit the formatting constraints of this thesis.

Investigating product and service development in Scottish firms

The University of Strathclyde and Scottish Enterprise have embarked on a collaborative research project to explore how Scottish businesses can reap competitive advantage through the development of their products and services. This questionnaire forms part of the larger project. Your responses will enable us to build a picture of how businesses undertake product and service development, from which we hope to identify "best practice" behaviours and processes. We would be most appreciative if you could take some time (approximately 15 minutes) to complete this questionnaire about your firm's current business practices. Information is being collected strictly for research and will not be used for commercial purposes. All responses will be treated as confidential.

- - -

1. Which industry/sector does your firm operate in?

2. Which geographic location(s) does your firm have a physical presence in?

Scotland only ☐
Scotland and wider UK ☐
Scotland and overseas ☐
Scotland, wider UK and overseas ☐

3. Which geographic market(s) does your firm sell to?

Scotland only ☐
Scotland and wider UK ☐
Scotland and overseas ☐
Scotland, wider UK and overseas ☐

4. How would you rate the predictability of the following?
1 = highly unpredictable, 4 = neither unpredictable nor predictable, 7 = highly predictable

	1	2	3	4	5	6	7
Business upswings and downswings							
Rate of product innovations in your industry							
Rate of innovation in business processes in your industry (e.g. adoption of new technologies, business planning tools etc.)							

5. How would you rate the pace of change for the following in your industry?
(1 = very slow, 4 = neither slow nor rapid, 7 = very rapid)

	1	2	3	4	5	6	7
Rate at which your products/services become outdated							
Rate of innovation in new products and services							
Rate of innovation of new operating processes							
Tastes and preferences of your customers							

6. Please rate your level of agreement with the following statements:
1 = strongly disagree, 4 = neither disagree nor agree, 7 = strongly agree

	1	2	3	4	5	6	7
Everyone in my organisation has a clear idea about what our position in the market should be.							
Everyone in my organisation has a clear idea about what is expected of them, making their contribution to the company as beneficial as possible.							
Everyone in my organisation knows and shares the firm's mission and goals.							
We know the type of products and services that our clients require.							
We know the type of resources, competencies, abilities and technologies our company requires to best serve our customers.							

7. The majority of your company's sales come from:

New customers ☐
Repeat customers ☐
Both new and repeat customers ☐

8. Please indicate what you consider to be your firm's primary offering to customers:

Physical products ☐
Services or other "intangible" offerings (e.g. help, advice) ☐
Combinations of physical products and services/intangible offerings ☐

9. From which type of offering is your company seeing the <u>greatest growth in sales</u>?

Fixed offerings. We provide our customers with a set product / service. ☐

Flexible offerings. We provide our customers with a core product / service that allows for some modifications. (*See 9a*) ☐

Bespoke offerings. We provide our customers with a product / service that is uniquely built and tailored for their individual requirements. (*See 9b*) ☐

9a. If your firm provides FLEXIBLE offerings, please describe your core product/service and its most common modifications.

9b. If your firm provides BESPOKE offerings, please briefly describe the process you go through to develop these products/services.

10. Please rate your level of agreement with the following statements:
1 = strongly disagree, 4 = neither disagree nor agree, 7 = strongly agree

	1	2	3	4	5	6	7
My company is focused on providing the best offering at the lowest cost.							
My company is focused on differentiating itself from competitors by providing a unique customer offering.							
My company's strategy is based on quality performance rather than price.							
My company's strategy cannot be described as offering products/services with the lowest price.							
My company is focused on identifying and then meeting the business needs of our customers, irrespective of cost.							
My company places greater emphasis on innovation than price.							
My company's strategy places importance on offering products/services with high performance.							

11. In the past three years, has your firm introduced any of the following:

New or improved corporate strategy ☐
New or improved advanced management techniques ☐
New or improved organisational structure ☐

New or improved marketing plan ☐

12. Please indicate which of the following you have undertaken in the past three years (please tick as many as are appropriate):

New products for your company ☐
Improved products for your company ☐
New products to the market ☐
Improved products to the market ☐
New processes for your company ☐
Improved processes for your company ☐
New processes to the market ☐
Improved processes to the market ☐
New services for your company ☐
Improved services for your company ☐
New services to the market ☐
Improved services to the market ☐

13. Thinking about how your company works and interacts with customers, please rate your level of agreement with the following statements:
1 = strongly disagree, 4 = neither disagree nor agree, 7 = strongly agree

Organisational capabilities

	1	2	3	4	5	6	7
My firm is capable of keeping a step ahead of competitors when developing a new product or incorporating a new service.							
We are capable of making fast changes in design and/or quickly introducing new products or services.							
The way my firm operates is characterized by the ability to provide the customer with a service more quickly than our competitors.							
We produce products/services that satisfy and/or exceed customer expectations.							
Customer focus is reflected in our business planning.							

Relationships with customers

	1	2	3	4	5	6	7
We anticipate and respond to customers' evolving needs and wants.							
We emphasize the investigation and resolution of formal and informal customer complaints.							
We follow-up with customers for quality/service feedback.							
Our customers have little input into the development of our product/service offerings.							
In developing a product/service offering, we listen to our customers' needs.							
We meet with our customers to discuss new product/service development issues and requirements.							

We study how our customers use our products/services.							
We involve our customers in product/service design.							

14. What proportion of your firm's current revenue derives from products/services that you have introduced within the past 3 years?

0-25% ☐
26-50% ☐
51-75% ☐
76-100% ☐

15. Please indicate how often you work in partnership with the following organisations to develop and/or deliver your firm's offering.
1 = never, 4 = neither never nor frequently, 7 = frequently

	1	2	3	4	5	6	7
Suppliers – within Scotland							
Suppliers – outside Scotland							
Competitors – within Scotland							
Competitors- outside Scotland							
Other businesses							
Family/friends							
Universities/Colleges							
Scottish Enterprise							
Scottish Development International (SDI)							
Scottish Manufacturing Advisory Service (SMAS)							
Co-operative Development Scotland (CDS)							
Business Gateway							
Lawyers/Accountants							
Chambers of Commerce							
Industry/Trade Associations							
Local Authorities							
External consultants							
Other							

If *Other*, please specify.

16. Please rate your level of agreement with the following statements:
1 = strongly disagree, 4 = neither disagree nor agree, 7 = strongly agree

	1	2	3	4	5	6	7
Relative to others in our industry, our firm has a creative and unique way of pricing our products / services.							
Our company frequently works with partners to best deliver our offering to customers.							
We find ways of selling our products/services that result in recurring revenue, rather than one-off transactions.							
Relative to others in our industry, our firm spends more on skills training and staff development.							
Our firm has all the in-house capabilities we need to successfully develop and deliver our product/service offerings.							
Our company has brought in employees with a specialised skill set to develop a specific product/service.							
We believe that partnering with our competitors gives us a tremendous competitive advantage.							
We find it very difficult to recruit staff with a strong customer/sales focus.							

Company Information (<u>to be kept confidential</u>)

17. Company name

18. How long has your company been trading?

1-4 years	☐	20-29 years	☐
5-9 years	☐	30-49 years	☐
10-14 years	☐	50-99 years	☐
15-19 years	☐	100+ years	☐

19. How many people are employed by your company?

0-9 ☐
10-49 ☐
50-299 ☐
300+ ☐

20. Approximately what percentage of your workforce is located in Scotland?

0-25% ☐
26-50% ☐

51-75% ☐
75-100% ☐

Thank you very much for taking the time to complete this questionnaire.

Please indicate if you would be interested in receiving a summary of the results of this research.

No ☐ Yes ☐

Email

Please indicate if you would like to be contacted about participating in later stages of this research project.

No ☐ Yes ☐

Email

Scottish Enterprise has set up an opinion panel of companies that they can contact regularly for feedback on their activities. Would you be interested in receiving more information on how you can become part of this panel?

No ☐ Yes ☐

Email

Any other comments:

Appendix 4. CIT interview discussion guide

1. Tell me a bit about your company and its history

1.1 Company age, main sector, size, structure 1.2 Key strengths – what is your USP	- flat or hierarchical? Easy to share info? - Low cost/ niche market / innovation / speed/ flexibility

2. Company development

2.1 Has growth always been a priority 2.2 What has company growth path looked like historically (*mapping exercise–flipchart?)* 2.3 Future growth (*on map)*	- Turnover/employee growth/profit - Probe for "triggers" (what happened in organisation/environment before, during, after growth periods) e.g. New products, new customer, new market opportunity - Has growth always been planned? - Any barriers to growth? - Any "growing pains" in the past (e.g. Lack of staff, capital investment, space, production capacity) - What resources have been critical? - What could have been done to help? - Any "lessons learned" from past growth - Who/what else do you learn from? How do lessons filter through the firm? - Future growth planned or left to chance? Fast or slow? Why? - Growth potential vs. ambition

3. Product offering

3.1 Most successful/popular type of offering 3.2 Majority of sales from new or existing products 3.3 Has company offering changed over time 3.4 USP for product offering *map new info if applicable	- Fixed/flexible/bespoke (current and past) - Change in what customers are wanting e.g. More customised products, co-creation of products (need for org. change?) - What drives NPD? Is there a formal plan? Techniques used? Who has responsibility/budget? - Existing products seeing incremental changes? - Probe customer insight, intelligence gathering (and use) to influence products - Any product "co-creation" with customers? - How and why? - Need to change other aspects of the firm? - Why choose this firm? - How to avoid competing on price/as a commodity? - Benefits from licensing/exclusivity/patents?

4. Customers

4.1 Main customers (existing, new?) 4.2 Building relationships with new/existing customers	- Approx. percentage of sales from existing? - Existing customers buying same product or different one - For new, how to source customer base (they don't know you, you don't know them) - Formal process or ad hoc

4.3 Customer insight	- Regular or spontaneous contact - Percentage of staff customer facing - Does Geography impact customer interactions or does technology (e.g. Skype, social media, twitter etc.) overcome any obstacles - How do you capture and store customer expectations / needs / Insights/ feedback? e.g. CRM, ERP - What type of info is collected? How detailed? - How is this fed back within company?
4.3 Customer satisfaction	- Used to direct product development / strategy development / business planning? - Do you test/measure satisfaction? - What metrics used to test relationships with customers e.g. Satisfaction, engagement, KPIs? - Have an opportunity for customer feedback? - Formal process for resolving any complaints? - How is this feedback shared throughout the company - Accredited under any quality/customer standard e.g. ISO, IIP, CSE?
*map new info if applicable	- When accredited and why go for it (e.g. Customer pressure, competitors, internal interest? - Any other formal management systems/self-assessment processes in place?

5. Final thoughts

5.1 What could other firms learn from you? 5.2 What assistance would help you better achieve you ambitions for the future?	- Probe for unique differences - Government, public sector (e.g. SE) etc.

Appendix 5. Company development summaries

HGF_1
The company was started in 1994. In 1999 another firm bought a controlling share of the company and it was rebranded, but for all intents and purposes everything remained the same. In 2000 more financing was raised from selling a minority share of equity to a European consortium (including SAP). This injection of capital into the business was invested in the development of a new technology platform for the company, as their current one needed updating and expanding (they ended up using the SAP platform). The company saw steady growth in UK market (Aberdeen region) through into 2005. During this time there was a change in the pre-qualification processes and health and safety assessments required for the offshore industry. Almost overnight the company's core service became a mandatory part of recruitment in the offshore industry, so the company saw significant growth from 2006 - 2009. Since then things have tapered off, as the UK market has become saturated. The company has seen recent growth from international operations, where they were "pulled" by international customers into new markets (e.g. Nigeria; Brazil; Middle East). Their next big growth market/opportunity is China, where the company is planning to double sales in the next 2 years.

HGF_2
This firm began as a family owned company and grew steadily until the 1990's. At this time there were tensions within the family, as family members talked about splitting the business (one half to stay in Scotland and one half to move down to England), but any productive discussion was tabled at the time. In the late 1990s (1999), the company won a major contract to supply and pack veg for Safeway and Safeway quickly became the company's only client. In 2004, Safeway was taken over by Morrisons. Morrisons had a vertical supply chain and didn't need veg packers, so the firm lost its contract. At this time, family members began to plan in earnest for the division of business, with the Scottish "part" focused on getting new customers - they were aiming high and looking at the big chain stores, but were conscious that they needed to have a change in focus to differentiate themselves and there was a determination never to have just one big customer again. The company invested significantly in R&D and consumer testing and developed "core" products for store branding as well as its own brand products. In 2005/2006 they won major contracts with Sainsbury's, Asda and Tesco and saw turnover skyrocket. The company formally split at beginning of 2009, but it was not a difficult transition given their previous planning. The company is currently taking a break from "active growth", but is positioning for growth in new markets (USA) and also diversifying horizontally into processed veg (e.g. oven chips) for growth.

HGF_3
The company was founded 1988 and saw quite strong growth (10-15%) during the 80's, 90's and early 2000's. It won two major contracts in 2004/2005 to implement IT systems in national airports and saw revenue skyrocket in 2005/2006 from £8 to £15 million, although the company grew marginally in size. The firm's rapid growth attracted the interest of another French IT company, who bought a majority share of the company in November 2006. This brought a very useful cash injection for NPD,

but also brought with it some uncertainty and a sense that the company's future was being externally controlled - HQ wanted to shift away from IT services (which was the company's key competence) towards just IT software. A number of senior UK management saw this as an opportunity to take control of the company and its future and in May 2009 (after 24 months of "torture") an MBO had been completed. The new management team has been building on IT service strengths, working closely with existing customers to better offerings and looking to gain new customers (and grow) internationally. They have recently won contracts in Dubai, China and the USA, and have set up sales offices to act as business development hubs. The company has also made a number of acquisitions to further growth. They consider their future to be "bright" and they are aiming to not only be a UK or European player, but to be a major force on the world marketplace.

HGF_4
The company was founded in 1993 from the merger of a USO from Dundee University and a USO from Oslo university, both of which had been working on a laboratory test for cardiovascular disease. The company initially saw good growth (and good profits) from sales of the test. They also saw capital raised by listing on the Oslo and London stock exchanges. This capital allowed for the acquisition of a Norwegian company in 1999 and another Scandinavian life sciences company in 2000, which contributed to consistent rapid growth into the early 2000s. In 2004, the firm divested some laboratories and manufacturing facilities in Norway to raise more capital, which was invested in acquiring distributors in Switzerland and Germany for a new test approaching readiness for the market. This new distribution network allowed for even more significant growth in 2007, 08 and 09 and new diabetes tests were marketed and sold into Europe. Future growth is anticipated to come from emerging markets (particularly Mexico, India and China) from new diabetes tests that can be administered in more rural clinics without the need for technical/medical expertise or specialist analysis skills. At the time of interview the company was fighting off a more hostile takeover by a US company; in November 2012 it was formally acquired.

HGF_5
Founded in 1973, the company has been manufacturing compressor units in Glasgow for nearly 40 years. In the past, business has been relatively stable, with periods of growth (corresponding to the "usual ups and downs" of the economy), but selling in the B2B sphere has meant relatively stable demand. In the 1990s, the company went on a "buying spree", acquiring 8 companies in 6 years and diversifying horizontally and vertically and using up some capital reserves to facilitate growth. Three new products offerings were developed as a result of this investment, which were brought to market in the early 2000s. Around this time, the company decided it wanted to expand further internationally and (after thinking about how to best go about this) set up local offices in Russia and India in 2007, which resulted in significant sales growth in 2007, 08 and 09 (helped by the products released a few years prior). The company has recently hit the £1billion turnover mark and expect to keep growing, albeit more slowly than during their rapid growth phase a few years ago.

HGF_6
The company started in 2002 out of a home bedroom, with an idea of how to reduce inefficiencies at water pumping stations. They started small and grew slowly, with the intention of getting ready to bid on government water framework contracts. The company grew steadily until 2005, when it became a preferred supplier to Scottish Water. At this point, turnover started to increase dramatically, with 2006 and 2007 seeing a fourfold increase in turnover and a corresponding increase in staff. The company have since bid for - and made their way on to - a number of water frameworks in the UK, thanks in large part to their success with Scottish Water. Their order book is relatively full for the next 5 years in the UK, but they are looking for further growth to come from Europe (Germany and then Holland), and then Australia/New Zealand, where the company has an established network of contacts.

HGF_7
The company was established in 1998 by an optometrist who developed the idea for a new market distribution model for contact lenses. It got a first mover advantage with the scheme and built up a customer base of almost 300,000 within the first two years of operation. By 2000, they took the same model over to Europe (Holland, Belgium, Austria) and saw customer numbers (and revenue) continue to grow. In 2004, the company raised capital from an equity sale to a business angels syndicate. This additional financing allowed for further growth in Sweden and Norway, but came with some negative changes to company culture, leading to a "company low point" end of 2004/early 2005. The bankruptcy of a major client did not help the situation. They realised that a change to the management structure was critical for the firm to get back on its desired trajectory, so a new MD was installed in late 2005 who made a lot of changes and streamlined operations. The company saw a turnaround with significant growth in 2006, 2007 and major growth in 2008, after winning a contract to supply order fulfilment services to Amazon. They recently won a major contract with Boots for fulfilment, so turnover growth continues.

HGF_8
The company started in 1925, building homes in Glasgow before and after the war (and repairing them during war time). There have been cyclical ups and downs, but generally the business was stable and successful into the 80s and 90s. During the early 2000s, the company embarked on a diversification strategy, supplementing their core business (house building) with complementary offerings (timber systems, property management), which resulted in significant revenue growth in 2005-2007. In March 2007, drawing on company capital reserves, the firm acquired a timber products manufacturer to further strengthen their timer systems line (and to see more growth in 2007/2008). The financial crisis has impacted the company (and other house builders), as prospective owners cannot easily access bank financing anymore. Turnover took a hit in 2010, so the company reviewed its operations in light of the economic climate. They decided to start offering their own home financing in early 2011, which should help moderate the impact of the recession.

HGF_9
The company was founded in 1988 by two partners, who identified the need for CAD PC software to be sold into oil & gas companies in Aberdeen. They won three

contracts in a row and went from 2 to 30 people "almost overnight". In 1992, one of their major clients was acquired by BP which meant that the company lost a major proportion of their revenue and quickly became almost insolvent, The early 1990s also saw a change in EU procurement regulations (they now had to openly advertise all contracts within the offshore industry) and the company saw an opportunity there. In 1993, they established the "Tenders Direct" tender notification offering, which was published to subscribers through the Aberdeen newspapers and by post. The growth of the internet in the later 1990s saw the offering move online and grow further from new users. In 2002, the company was invited to Luxembourg by the EC to help develop the EU procurement portal (which led to development of OJEC). In 2003, they won major contracts from the Irish and Norwegian governments to run their online procurement systems, which resulted in significant growth from 2004 to 2008. In 2008, the firm won a contract for services to the Scottish Government (which became PCS) and they are still seeing growth from that contract. The company is currently bidding on a contract in New Zealand and expect that will be the next source of growth.

HGF_10
The company started in 1978 to process scrap brass and, as part of this process, developed a machine to do continuous casting. They started to sell this machine within the UK and then recognised the potential of international markets. Their first export sale was to Malaysia in 1993. The company then moved into continuous casting of other metals (including gold, silver and copper magnesium). In 2002/2003 they made the decision to focus on vertical casting machines, rather than traditional horizontal casting, which led to further exports (China and India) and growth over the next few years (2005-2008). China became a major growth market for the company, as the government was investing heavily in high speed rail (which requires conductive wiring). The company saw growing demand and sales orders for CuMg machines, which they "pretty much had a monopoly" on in the international marketplace. The company also saw growth from some of their gold and silver processing machines and grew from 36 to 54 people. In 2008, the company had a strategic review and decided to change up the management team and structure, with the MD retiring and a new younger MD coming in. Recently demand has slowed and growth has flat lined, so they are using this "downtime" to develop new products. The firm anticipates growth over the next few years, with new contracts about to start in Brazil.

HGF_11
The company was founded in 1995 to do contract recruitment for the oil & gas sector in Aberdeen. They grew consistently through 98/99, but growth started to plateau in 2000/2001. In late 2001 the company had a strategic review and opted to drop most if its high turnover but low margin work (contract recruitment) in favour of more profitable work (training; mentoring programmes; HR consultancy). As a result, turnover took a "nosedive" over the next couple of years, but by 2003 the company was growing again, with customers upgrading from recruitment to higher value work. Significant rapid growth started in 2006. The company did notice a drop in business in early 2010, as the recession meant businesses were cutting back on recruitment and training budgets. They decided to look outside the UK for

opportunities and, in 2011, won a multi-million pound contract to deliver a business mentoring programme in Kenya, so that will be an area of growth in the short-medium term to supplement UK income until the recession starts to dissipate.

nHGF_1
The company was established in January 2003, by two sisters who wanted to leave the software industry in London and move back to Scotland. They decided to exploit their family love of baking and started with a particular offering (single serving cakes), but soon changed offering after noticing a gap in the market for "tray bake" cakes. In 2004, the company signed contracts with a number of cafes and garden centres in Scotland and had to decide whether or not to scale up to meet the growing demand. They secured bank financing to scale up equipment, but the company barely broke even that year. They also had trouble in 2005/2006, with a number of their products being reverse engineered by competitors (and even customers), so competition became much fiercer and the company lost nearly £250,000 of turnover. In 2006, the company had a strategic review to determine where the business was going and the decision was made to "stick to the knitting", as significant investment had already been made. They saw a bit more growth in 2007/2008 as a result of additional contracts, but growth steadied off in 2009. Their current goal is to grow the business down in England, as the Scottish market is relatively saturated.

nHGF_2
The company started in 2003, when the current MD bought a large building in Edinburgh with the intention of using it as a venue for training sessions, conferences etc. using his own training products. The business started at a loss in 2003 (given the very large overheads), but grew slowly over the next five years, with the goal to cover fixed costs and allow for a bit of profit. There was a significant effort in 2003/2004 on telesales, to identify and contact potential customers. The company needed to decide what level of service to offer (e.g. full service including catering, or only room/tech rental) and decided to focus on the basics. There have been revenue peaks and troughs in line with the time of year, but the company has seen relatively consistent performance year on year, relying on repeat customers or new inquiries. The Autumn of 2008 was particularly tough, as bookings for was usually a busy time never came in (they lost a number of repeat customers). This led to staff redundancies and cutbacks throughout the organisation. Turnover still remains flat, as the current recession means that fewer people are spending money on training (and the associated facilities). There are no thoughts of future growth - the company is taking things "one month at a time".

nHGF_3
The company was established in 1891, specialising in manufacturing hosiery for golfers. They have since diversified into a wide range of golf clothing, but turnover remained flat all through the 80s and 90s, despite having outfitted the UK Ryder Cup team since 1987. In 2000, the company underwent a management buy-out, with the intention of reconfiguring and updating the company and its operations. It was unable to buy the facilities and IP without also buying all the stock, so another UK textiles firm was brought into the mix to provide additional financing and, in 2002, the buy-out was completed. In 2003 the company revisited its product offering and

brought in a buyer to improve the product range. Since 2003, the company has grown slowly but steadily, both in the UK and through new exports to Australia and Canada, with a positive "blip" in revenue every 4 years due to the Ryder Cup. There is an organisational focus on "breaking even". In 2009, the firm bought the rights to sell the "Sunderland" brand in the UK, which has brought in further growth. America is a focus for future sales growth, with the company hoping to expand its brand presence there.

nHGF_4

The company started in 1995 as a partnership focused on small-scale insurance brokering. In 2002 there was a management buy-out, with the company becoming a limited liability company. After the MBO, the focus shifted away from life assurance/pensions etc. to commercial insurance and financial services for SMEs and new companies (they have worked with a lot of USOs from Glasgow-based universities). Growth was slow but steady over the next few years (particularly after the launch of a patent/IP insurance product in 2005), but in 2007 the company lost its biggest client, halving their turnover. This had knock-on effects in the company, with redundancies (halving staff) and other cutbacks (moving to cheaper premises in early 2008). Toward the end of 2008, turnover stabilised, but there was a strategic review and the decision was made to continue the cost-cutting exercise, holding off on any investment/business development in the short term. The focus remains on "keeping the business afloat".

nHGF_5

The company was started in 1987 as a spin out from a life-sciences company. They began as a contract manufacturer of chemical tools to make DNA and RNA for five clients (one took 90% of all output). In 2000 a strategic review took place and the decision was made to stop selling to their current intermediary clients (which was seen as restrictive) and to start selling directly to end-users. A number of products were developed in the early 2000s, contributing to moderate growth (some product lines were more successful than others). In 2006, the company licensed a set of products from a Danish firm, which led to good turnover growth of about 5-6% in 06/07. In the past the company had not really been affected by the economic environment (or recessions), but 09/10 were quite bad years, with a more significant drop in sales than anticipated due to reduced spending in R&D labs. Going forward, the company is focused on stability rather than growth.

nHGF_6

The company was started in 2003, selling coffee and coffee-making products online (in the B2B sphere). The founders of the company had been made redundant from another coffee company and identified an opportunity in online corporate coffee sales. The company started as a reseller of big coffee brands (e.g. Lavazza) and saw steady growth during start up. In 2006, they started to think about developing their own-brand products and, in 2007, introduced own-brand coffee as well as other sundries (e.g. milk pots, syrups etc.) to the online offering. In 2010, the company set up as a retailer on Amazon and has seen growth through that channel, although there is concern that it caters too much to the "home market" and takes capacity away from larger commercial orders. At the same time they also started selling internationally,

shipping orders to Sweden, Finland and Denmark. The company continues to grow steadily at around 10% p.a. (and expects to continue this growth). The directors are still not taking a wage from the company.

nHGF_7
The company was founded in 1994 as a contract research organisation (CRO) using Glasgow universities to undertake scientific research. After finding it challenging to work with universities (which have “different notions of urgent”), ties were severed in 1999 and the company moved all contract research in-house. This led to a period of steady growth until the mid 2000s, when the company started to feel the effects of the financial environment, with projects drying up or having their length considerably shortened (e.g. 3 months rather than 3 years). In 2008 the company’s turnover halved and they had to make some major spending cuts. They chose to disband their board of non-executive directors as well as to reduce employment, which left the company with less strategic focus and less in-house capability. Things began to pick up again at end of 2010 and the company is optimistic about growing their turnover and staff once more.

nHGF_8
The company started in 1905 and to this day is still a family run business that specialises in industrial heating and ventilation. Over the last 50 years it has worked on many projects (particularly for universities and hospitals) in Scotland as a subcontractor for heating and ventilation. In 1999 the current owner took over from his father and brought “new energy and a new approach” to the business. 2000/2001 saw the company start working on developing bio-mass heating systems to complement their other products. This is still a niche product and the company is not yet sure of its potential as a growth product/area. In 2002, the company added principal contracting (project management) services, after gaining experience in this area when another principal contractor folded and the company opted to take on its responsibilities. As a result of project management services, the company saw some growth during the mid 2000s, as they were involved on quite a few government contracts during this time. Since 2008 that work has dried up and it has become an “increasing struggle” to keep turnover stable. The company has found itself taking on more work at lower cost and is unsure about how the business will evolve over the next few years.

nHGF_9
The company started in 1989 when the current MD bought into a travel company as an angel investor, realised its major problems and ended up buying out the whole company and “starting from scratch”. The company provides corporate travel services to businesses in Scotland and, since 2000, has grown slowly, relying largely on existing customers (and referrals) for revenue. They have looked to get a stronger foothold in the Scottish tourism market for visitors to Scotland and the UK (via VisitScotland), but this has had limited success and no real impact on growth or performance. In 2006 the company moved offices, with the view to expand the number of staff. However, with the start of the economic downturn, the anticipated growth never happened. The company remains stable, but the MD is now thinking of retiring, so succession planning is the next priority.

nHGF_10
The company was established in 1950, providing first-aid kits to industry. A controlling share of the company was acquired in the 1980s, with the current owner acquiring the company in 1994. For the next few years the company's main focus remained on industrial health and safety kits, which was also the major source of company revenue. In 2000 the company moved premises to a larger state-of the-art manufacturing facility, with the intention of developing a number of new products. Significant R&D expenditure commenced (using capital from the new owner), with two new product lines released in 2002. R&D continued through to 2009, with a focus on medical devices to be sold into the NHS. In 2010 a new eyewash facility was launched with moderate success and a number of other products are currently in the final stages of product testing and should be put to market over the coming 5 years. Revenue is expected to continue to grow over the coming years, but the company will be prepared for sale once R&D investment has been recouped and there is additional profit.