

## **MASTER'S THESIS**

# Value Chain and the Internet in Companies Pursuing a Differentiation Strategy

Case Studies of Finnish Hotels

Li Shi, Jenni Makkula

MSc Programme in Electronic Commerce

Department of Business Administration and Social Sciences
Division of Industrial marketing and e-commerce

#### **ABSTRACT**

The Internet together with information technology sets new challenges, but also opens opportunities for companies to achieve competitive advantage. Therefore, the research problem of this thesis has been formulated as how can the value chain be described in a company pursuing a differentiation strategy under the influence of the Internet. The research problem is further developed into two research questions concerning how value chain and sources of differentiation can be described under the influence of Internet technology.

The purpose of this study has not been to generalize findings to all Finnish hotels, but to gain a deeper understanding of value chain and Internet technology in companies pursuing differentiation strategy. A qualitative research approach is used for this study. Two Finnish hotels have been chosen as our case study companies, and within these case companies, one small congress hotel and one national wide hotel chain have been selected. Personal interviews were conducted with the persons, possessing the best knowledge in developing company's strategy.

The findings of this study clearly indicate that the way the Internet has affected on the case hotels' value chain is unique and depends on many factors, like the scope, size and scale of business. The hotels have taken advantages of the potential of the Internet technology as an information centre, reservation medium, and operational tool. The information technology is permeating the case hotels' value chains practically at almost every activity, but still, the Internet technology is not applied by the hotels enough to exploit the full potential. In addition, the Internet technology has not been utilized by the hotels as the dominant source of differentiation for each activity within value chain. The hotels have used Internet technology neither to establish distinctive strategic positioning nor to reflect hotels' differentiation strategy. The most significant implications from this study can be indicated as the importance of the integration and the fit of the companies' over all competitive strategy and the value chain activities. When it comes to Internet technology, the companies should strategically make choice on the best suitable technological applications and creatively deliver values to fit and strengthen companies' competitive strategy.

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Many people have helped us during this process. We would especially like to express our gratitude to Mr. Lasse Lindevall from Sokos Hotels, and Mr. Jussi Lähde and Ms. Riikka Viitala from Vanajanlinna Ltd. We are grateful that they took time to help us by providing the valuable information needed to fulfill the purpose of this thesis.

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#### 1 INTRODUCTION

E-business¹ strategy (electronic business) is a new area that recently came to attention. However, Information strategy has attracted interest from the beginning of the 1980s. (Hooft and Stegwee, 2001) As information technologies (IT) developed, novel ways of business process redesign (BPR) emerged, creating turmoil in the industry (Phan, 2003). IT has made a tremendous impact on the business world. With the help of IT, business processes and operations that used to take days or weeks can now be done in a matter of seconds (Rodgers et al, 2002). Although electronic data interchange² (EDI) and electronic fund transfer (EFT) have been around since the early 1970s, they were limited in their effects to encompass a whole set of marketing factors³ because of their high cost and technological complexity (Bhatt and Emdad, 2001).

However, the rapid diffusion of the Internet<sup>4</sup> and World Wide Web has made conducting business over the Internet much more popular (Bhatt and Emdad, 2001). Lumpkin et al. (2002) consider that few technologies have impacted society as quickly as the Internet. The impact of the Internet on business is akin to previous innovations that transformed not just one business sector but every sector. Just as railroads, electric power, and the telephone brought disruption and opportunity to business transforming it as these innovations swept the world—the Internet is having a similar impact. (Rayport, 2001) These new media offer the advantages not only of low cost, but also provide the ease with which they can support different business activities (Bhatt and Emdad, 2001). Organizations today frequently integrate Internet technology<sup>5</sup> to redesign processes in ways that strengthen their competitive advantages. (Phan, 2003)

Furthermore, Porter (2001) claims that Internet technology provides better opportunities for companies to establish distinctive strategic positioning than did previous generations of information technology. Internet architecture, together with other improvements in software architecture and development tools, has turned IT into a far more powerful tool for strategy. The Internet per se will rarely be a competitive advantage. Internet architecture and standards also make it possible to build truly integrated and customized systems that reinforce the fit among activities. The value of integrating traditional and Internet methods creates potential advantages for established companies. Established companies will be most successful when they deploy Internet technology to reconfigure traditional activities. (Porter, 2001)

Porter continues (2001) that to achieve sustainable competitive advantage requires a firm possessing some barriers that make imitation of the strategy difficult. Strategy goes far beyond the pursuit of best practices. It involves the configuration of a tailored value chain.

<sup>2</sup> Electronic Data Interchange (EDI) is an ANSI\*12 standard format for exchanging business data developed by the Data Interchange Standards Association. Standard formats exist for most of the industry-standard business documents exchanged by two organizations to facilitate commerce, which include purchase orders, invoices, advanced shipping notices (ASN), and material receipt. (Rayport and Jaworski, 2002)

<sup>&</sup>lt;sup>1</sup> See section 1.1.2

<sup>&</sup>lt;sup>3</sup> Such as product, price, promotion, distribution, and laws, consumer behaviour, politics, level of technology etc. (Cateora, 1997)

<sup>&</sup>lt;sup>4</sup> Rayport and Jaworski (2001) define Internet is a web of hundreds of thousands of computer networks, linked together primarily by telephone lines that can carry data around the world in seconds. Once connected to the World Wide Web with browser software, one can quickly and easily access a vast wealth on information located on servers anywhere in the world, Internet as a relatively low-cost, easily accessible connection for all users.

<sup>&</sup>lt;sup>5</sup> In this study, we regard that Internet technology as one of the new information technologies, i.e. subset to the term information technology.

And he explains that to be defensible, moreover, the value chain must be highly integrated. When a company's activities fit together as a self-reinforcing system, any competitor wishing to imitate strategy must replicate the whole system rather than copy just one or two discrete product features or ways of performing particular activities. (Ibid.)

In that respect, the scope of this thesis is competitive advantages and Internet technology.

#### 1.1 Background

#### 1.1.1 Competitive Advantage

Porter (1998) states that competitive advantage is at the heart of a firm's performance in competitive markets. Competitive determines the appropriateness of a firm's activities that can contribute to its performance, such as innovations, a cohesive culture, or good implementation. Competitive advantage describes the way a firm can choose and implement a generic strategy<sup>6</sup> to achieve and sustain competitive advantage. There are two basic types of competitive advantage: cost leadership and differentiation. (Porter, 1998) Competitive advantage in either cost or differentiation is a function of a company's value chain<sup>7</sup> (Porter and Millar, 1985).

A company's cost position reflects the collective cost of performing all its value activities relative to rivals. Each value activity has cost drivers<sup>8</sup> that determine the potential sources of a cost advantage. Similarly, a company's ability to differentiate itself reflects the contribution of each value activity toward fulfilment of buyer needs. Many of a company's activities—not just its physical product or service—contribute to differentiation. (Porter and Millar, 1985) Porter, in his research 1998, found that firms view the potential sources of differentiation too narrowly. They see differentiation in terms of the physical product or marketing practices, rather than potentially arising anywhere in the value chain. (Ibid.)

#### 1.1.2 Competitive Advantage and Internet Technology

E-business and E-commerce have received much attention from entrepreneurs, executives, investors, and industry observers recently. Organizations today frequently integrate Internet technology to redesign processes in ways that strengthen their competitive advantages (Phan, 2003). E-business is defined by Chaffey in 2002 as the transformation of key business process through the use of Internet technologies. It is all electronically mediated information

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<sup>&</sup>lt;sup>6</sup> Generic strategy is for creating such a defendable position in the long run and outperforming competitors in an industry. The two basic types of competitive advantage combined with the scope of activities for which a firm seeks to achieve them lead to three generic strategies for achieving above-average performance in an industry: overall cost leadership, differentiation, and focus. (Porter, 1980)

<sup>&</sup>lt;sup>7</sup> Value Chain can be defined as a systematic way of examining all the activities a firm performs and how they interact for analysing the source of competitive advantage. The value chain disaggregates a firm into is strategically relevant activities in order to understand the behaviour of costs and the existing and potential sources of differentiation. (Porter, 1985)

<sup>&</sup>lt;sup>8</sup> Cost Drivers are the structural causes of the cost of an activity. Porter presents ten cost drivers, which are economies or diseconomies of scale, learning and spillovers, pattern of capacity utilization, linkages, interrelationships, integration, timing, discretionary policies, location and institutional factors (Porter, 1998)

exchanges, both within an organization and with external stakeholders supporting the range of business process. Rayport and Jaworski define the scope of e-commerce in 2002 as e-commerce is about the exchange of digitised information between parties, technology-enabled transactions, technology-mediated, and intra- and inter-organizational activities that support the exchange. They further explain that the use of Internet browsers in the World Wide Web is perhaps the best known of these technology-enabled customer interfaces. However, other interfaces—including ATMs, electronic data interchange (EDI) between business-to-business partners, and electronic banking by phone—also fall in the general category of e-commerce. Chaffey (2002) states that electronic commerce is a subset of electronic business.

Internet technology is changing the way many firms do business. The most profound changes are not being seen at dot-com<sup>9</sup> start-ups, but at incumbent firms that are being transformed into e-businesses. (Lumpkin et al., 2002) These changes are forcing them to craft new strategies to sustain their competitive advantages.

With the help of Internet technology, Porter (2001) states that business enterprise can gain a sustainable competitive advantage in two ways. One is operational effectiveness—doing the same things your competitors do but doing them better. Operational effectiveness advantages can take myriad forms, including better technologies, superior inputs, better-trained people, or a more effective management structure. The other way to achieve advantage is strategic positioning <sup>10</sup>—doing the same things differently from competitors, in a way that delivers a unique type of value to customers. This can mean offering a different set of features, a different array of services, or different logistical arrangements. According to Phan (2003), the key principles of strategic positioning are: goals that aim at long-term return on investment, distinctive value chains, trade-offs for uniqueness in the market, strategies that fit together, and continuity of corporate direction.

The Internet affects operational effectiveness and strategic positioning in very different ways. The Internet is arguably the most powerful tool available today for enhancing operational effectiveness. By easing and speeding the exchange of real-time information, it enables improvements throughout the entire value chain, across almost every company and industry. And because it is an open platform with common standards, companies can often tap into its benefits with much less investment than was required to capitalize on past generations of information technology. (Porter, 2001)

However, easy access to Internet technology presents new challenges to competitive advantages. In today's marketplace, corporations are looking for ways to differentiate themselves from their competition. Creating competitive advantages is vital to sustaining growth. (McLaughlin et al., 2003)

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<sup>&</sup>lt;sup>9</sup> Dot-com can be defined as business whose main trading presence is on the Internet. (Chaffey, 2002)

<sup>&</sup>lt;sup>10</sup> Differentiation and Strategic Positioning: Chaffey in his book (2002) regards these two terms as the same. Furthermore, Porter explains the concept of differentiation in his book (1985), as the firm has to be unique in its industry along some dimensions that are widely valued by buyers. Continually in his article 2001, he defines strategic positioning as doing thing differently from competitors, in a way that delivers a unique type of value to customers. According to the authors, in our study, we understand and apply these two terms as the same. Moreover, we will cite the original terms as they are in the theory when we review the literature of strategic positioning and differentiation. This same procedure concerns the terms operational effectiveness and cost leadership.

#### 1.1.3 Competitive Advantage and Value Chain

Competitive advantage cannot be understood by looking at a firm as a whole. It stems from the many discrete activities a firm performs in designing, producing, marketing, delivering, and supporting its product. Each of these activities can contribute to a firm's relative cost position and create a basis for differentiation (Porter, 1998). The value chain is an important concept to highlight the role of information technology in competition (Porter and Millar, 1985). A systematic way of examining all the activities a firm performs and how they interact is necessary for analysing the sources of competitive advantage. The value chain disaggregates a firm into its strategically relevant activities in order to understand the behaviour of costs and the existing and potential sources of differentiation. A firm gains competitive advantages by performing these strategically important activities more cheaply or better than its competitors. The extent of integration of the information technology into activities plays a key role in competitive advantage. (Porter and Millar, 1985)

Payne (1993) also claims that one technique for considering superior delivered value is the value chain. And the ultimate purpose of value chain analysis is to systematically identify appropriate means of differentiation for a firm so that it can provide superior delivered value to its customers.

Porter (2001) repeats that the basic tool for understanding the influence of information technology on companies is the value chain. A firm, as a collection of activities, is a collection of technologies. Technology is embodied in every value activity in a firm, and technological change can affect competition through its impact on virtually any activity (Porter, 1998).

Every firm's value chain is composed of nine generic categories of activities, which are linked together in characteristic ways. These activities are Inbound logistics, Operations, Outbound logistics, Marketing and sales, Service, Infrastructure, Human resource management, Technology development and Procurement. The generic chain is used to demonstrate how a value chain can be constructed for a particular firm, reflecting the specific activities it performs. Differences among competitor value chain are a key source of competitive advantage. (Porter, 1998) To diagnose competitive advantage, it is necessary to define a firm's value chain for competing in a particular industry. The value chain is a basic tool for diagnosing competitive advantage and finding ways to create and sustain it (Ibid.).

#### 1.2 Problem Area

Every firm that seeks to be successful in the future is striving for the implementation of Internet technology. It is a hot issue in the business world and is affecting every type of organization as they attempt to improve efficiency and stay ahead of their competitors (Rodgers et al, 2002). The problem is that the Internet applications of most organizations have not been very successful. There is still a deep lack of understanding as to how Internet technology can help to improve a company's standing. (Hartman et al., 2000)

Hartman et al. (2000) consider that as companies entered the information age, their mistake was to assume that IT by itself could drive sustainable competitive advantage. It doesn't work that way, even though some IT initiatives move companies forward and help to create value.

Relying on technology to generate competitive advantage is counterproductive for a number of reasons. Technology can be quickly and easily duplicated. There is no advantage having something that can be easily duplicated. (Ibid.)

Porter (2001) found that well-established and well-run companies have been thrown off track by the Internet. Forgetting what they stand for or what makes them unique, they have rushed to implement hot Internet applications and copy the offering of dot-com. Many companies succumb to the temptation to chase "easy" growth by adding hot features, products, or services without screening them or adapting them to their strategy (Porter, 1998). Industry leaders have compromised their existing competitive advantages by entering market segments to which they bring little that is distinctive (Porter, 2001). This have eroded the attractiveness of their industries and undermined their own competitive advantages (Ibid.).

Porter (2001) further claims that simply improving operational effectiveness does not provide a competitive advantage. Company only gains advantages if it is able to achieve and sustain higher levels of operational effectiveness than competitors. That is an exceedingly difficult proposition even in the best of circumstances. Once a company establishes a new best practice, its rivals tend to copy it quickly. Best practice competition eventually leads to competitive convergence, with many companies doing the same things in the same ways. Customers end up malting decisions based on price, undermining industry profitability.

If we look back to the Porter's article in 1996, he uncovered that, for at least the past decade, managers have been preoccupied with improving operational effectiveness. Through programs such as TQM (total quality management), time-based competition, and benchmarking, they have changed how they perform activities in order to eliminate inefficiencies, improve customer satisfaction, and achieve best practice. Constant improvement in operational effectiveness is necessary to achieve superior profitability. However, it is not usually sufficient. Few companies have competed successfully on the basis of operational effectiveness over an extended period, and staying ahead of rivals gets harder every day. The most obvious reason for that is the rapid diffusion of best practices. Competitors can quickly imitate management techniques, new technologies, input improvements, and superior ways of meeting customers' needs. (Porter, 1996)

The second reason that improved operational effectiveness is insufficient- competitive convergence is more subtle and insidious. The more benchmarking companies do, the more they look alike. The more rivals outsource activities to efficient third parties, often the same ones, the more generic those activities become. As rivals imitate one another's improvements in quality, cycle times, or supplier partnerships, strategies converge and competition becomes a series of races down identical paths that no one can win. Competition based on operational effectiveness alone is mutually destructive, leading to wars of attrition that can be arrested only by limiting competition. (Porter, 1996)

The advent of Internet technology presents new challenges to competitive advantage, because nearly all firms have access to this relatively inexpensive technology. (Lumpkin et al. (2002). Porter (2001) claims that, today, almost every company is developing similar type of Internet applications, often drawing on generic packages offered by third party developers. The resulting improvements in operational effectiveness will be broadly shared, as companies converge on the same applications with the same benefits. Therefore, Porter (2001) states that as it becomes harder to sustain operational advantages, strategic positioning becomes all the more important. If a company cannot be more operationally effective than its rivals, the only

way to generate higher levels of economic value is to gain a cost advantage or price premium by competing in a distinctive way. Porter (2001) found that, ironically, companies today define competition involving the Internet almost entirely in terms of operational effectiveness. Lumpkin et al. (2002) comment that companies who choose to compete in cyberspace must find ways to capture the potential while sustaining competitive advantage over rivals.

Competitors can quickly imitate management techniques, new technologies, input improvements, and superior ways of meeting customers' needs (Porter, 1998). In addition, Mougayar (1998) discusses that after companies have copied what their competition has done, they are both on an equal footing again, and just moving along. That was the case with the reengineering trends of the early 1990s and with other previous innovations, such as just-in-time inventory and (even before that) total quality management programs. The difference with the Internet is in the speed of implementation. Whereas it took perhaps up to three years for a reengineering program to come full circle and prove its benefits, now the entire processes can be reinvented around the Internet within months. (Ibid.)

A company can outperform rivals only if it can establish a difference that it can preserve. It must deliver greater value to customers<sup>11</sup> or create comparable value at a lower cost, or do both. (Porter, 1998) In today's marketplace, corporations are looking for ways to differentiate themselves from their competition. Creating competitive advantages is vital to sustaining growth. (McLaughlin et al., 2003)

Consequently, after companies have initiated and deployed Internet technology to their overall business, after their competitors have adapted and imitated new skills to their business, when their competitors and they both are on the equal footing again, then how the companies can continually achieve their competitive advantage and differentiate themselves from rivals with new technology. The problem area emerges, i.e. Internet and value chain and differentiation. However, this area is scant. Besides the importance of strategic positioning discussed above, for our research purpose, we believe that, in a single study, we should not attempt to conduct research on all fields of competitive advantage, such as cost leadership or operational effectiveness. That will lead our study too broad to be manageable within our thesis period. For all aforementioned the reasons, therefore, the problem area for this study can be formulated as:

Value Chain and the Internet in Companies Pursuing a Differentiation Strategy

Total customer value includes services value, product value, people value, and image value. And the total customer cost consists of monetary price, time cost, energy cost and psychic cost. (Payne, 1993)

<sup>11</sup> Value can be thought of in terms of the total value offered to a customer less the total cost to the customers.

#### 1.3 Disposition of the Thesis

This thesis consists of seven chapters (Figure 1.1). In this *chapter one*, a relatively broad description is given, providing the reader with a background and discussion of issues related to the problem area. The next *chapter two* presents the literature review with theories relevant for the problem area. *Chapter three* provides a conceptualisation and a frame of reference based on the literature review. Also the research problem and research questions will be stated here. In *chapter four* the methodology used for this chapter will be discussed. The *fifth chapter*, empirical data presentation, consists of a background to the companies and the data gathered from the interviews. In *chapter six* the empirical findings will be analysed against the conceptual framework, and the conclusions are finally given in *seventh chapter*, where also implications will be discussed.

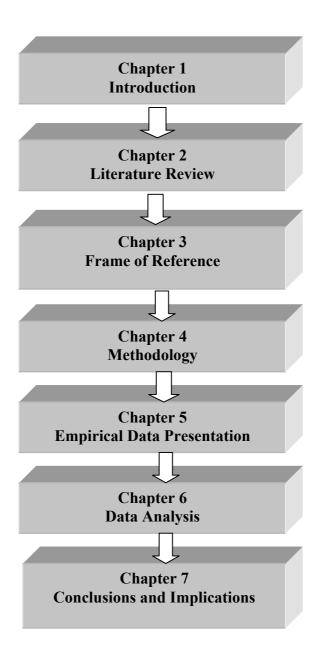


Figure 1.1 Disposition of the Thesis

#### 2 LITERATURE REVIEW

#### 2.1 Competitive Advantage

According to Porter (1998), competitive advantage describes the way a firm can choose and implement a generic strategy to achieve and sustain competitive advantage. It addresses the interplay between the types of competitive advantage—cost and differentiation—and the scope of a firm's activities. The basic tool for diagnosing competitive advantage and finding ways to enhance it is the value chain. (Ibid.)

Competitive advantage has helped to make strategy more concrete and actionable. A lowest-cost strategy involves one set of activity choices, and differentiation involves another. Competitive advantage is about how a firm actually puts the generic strategies into practice. (Porter, 1998)

Porter (1998) explains that cost leadership is based upon exploiting some aspect of internal organizational processes that can be executed at a cost significantly lower than the competition. There are various sources of this cost advantage. These include lower input costs, lower in-plant production costs and lower delivery costs brought about by the proximity of key markets. However, Porter (1998) stresses that focused and overall market cost leadership represent a 'low scale advantage' because it is frequently the case that eventually a company's advantage is eroded by rising costs. The generic alternative of differentiation is based upon offering superior performance. On the other hand, Porter (1998) states that this is 'higher scale advantage' because (1) the producer can usually command a premium price for output, and (2) competitors are less of a threat as to be successful they must be able to offer a higher performance product. The other attraction of differentiation is that there is a multitude of dimensions that can be exploited in seeking to establish a product or service superior to its competition.

Garvin (1987) proposes that in relation to quality there are eight dimensions that might be considered: features, actual performance, conformance to quality expectations specified by customers, durability, reliability, style and design. In addition to dimensions associated with the physical product, organizations can also exploit other aspects of the purchase and product use process by offering outstanding service in ease of ordering, delivery, installation, customer training, maintenance, repair and post-purchase product upgrade.

Chaston (2001) proposes that the core attributes of many products and services are often very similar, and the customer would be hard pressed to distinguish any real technical difference between the performance of products offered by the various suppliers in a market sector. Under these circumstances, one way to differentiate the company from its competition is to use promotion to create a 'perceived difference' in the mind of the consumer.

Chaston (2001) provides a route to competitive advantage in a market.

- 1. Conservative-transactional competitive advantage, achieved through offering a price/quality/value standard product combination superior to that of the competition and/or superior service through excellence in production and distribution logistics.
- 2. Conservative-relationship competitive advantage, achieved through offering a product /service combination that delivers a superior, customer-specific solution.
- 3. Entrepreneurial-transactional competitive advantage, achieved through offering a new product that delivers features and performance not available from standard goods producers.

4. Entrepreneurial-relationship competitive advantage, achieved through offering a new product developed in partnership with the customer, contributing to the customer's ability also to launch new, innovative products or services.

Porter explains that competitive advantage provides the architecture for describing and assessing strategy, linking it to company behaviour, and understanding the sources of competitive advantage (Porter, 1998). Competitive advantage starts with the premise that competitive advantage can arise from many sources, and show how all advantages can be connected to specific activities and the way that activities relate to each other, to supplier activities, and to customer activities. The fact is that most robust competitive positions often cumulate from any activities. Advantage resting on a few activities is easier to diagnose and often easier to imitate. (Ibid.)

#### 2.2 Information Technology and Competitive Advantage

Porter and Millar (1985) stated that the information revolution is sweeping through our economy. No company can escape its effects. Dramatic reduction in the cost of obtaining, process, and transmitting information are changing the way we do business. The technology is transforming the nature of products, processes, companies, industries, and even competition itself. Every company must understand the broad effects and implications of the new technology and how it can create substantial and sustainable competitive advantages.

Kalling (1999) explains that IT is central societal and economical feature, and has been a major driver of change in social and economical life for decades. People use it in explicit form when they browse the Internet or when they are at work, controlling the manufacturing process, writing texts or making calculations. They use it in implicit form when they drive cars or watch TV. It is a strong tool for controlling information, and for many of them, life and work in times when information technology was not electronic might be difficult to grasp. It is easy to see the rationale for firms to invest in and use IT applications and tools of different kinds. Compared to manual information management, IT has obvious advantages.

According to Phan (2003), as information technologies developed, novel ways of business process redesign (BPR) emerged. Organizations today frequently integrate Internet technology to redesign processes in ways that strengthen their competitive advantages. Porter (2001) states that the Internet's greatest impact has been to enable the reconfiguration of existing industries that had been constrained by high costs for communicating, gathering information, or accomplishing transactions. Davydov (2001) stresses that applying such a perspective to today's emerging Internet-based technologies is extremely important because it puts people on guard for unexpected consequences that must be addressed by thoughtful design and appropriate use. Many organizations are able to integrate activities of their value chain encompassing suppliers, customers, and distribution channels within an industry or across industries. Moreover, Hartman et al. (2000) state that, today, with the rate of technological change in the global economy, technology and information have become as critical as capital, research and development, marketing, and other previous drivers of success. Companies that thrive and survive in this global marketplace will be information based.

Hartman et al. (2000) consider that organizations can easily and frequently deploy applications without having to justify the cost of incremental investments in infrastructure for every value-added initiative. With standards, organizations find it easier, cheaper, and faster to deploy new applications. Each step is easier because an established platform already exists, duplication is minimized, and scalability is promoted. It is cheaper because standards often improve reusability of modules. And it is faster because standards allow a business to adapt to changing business needs even as new technologies and changes in business process are more easily integrated enterprise-

wide. Accordingly, Hartman et al. (2000) claim that the central argument now becomes how the companies achieve higher levels of competitive advantage with Internet technology. With the help of Internet technology, Porter (2001) provides that business enterprise can gain a sustainable competitive advantage by two ways. One is operational effectiveness, and another way to achieve advantage is strategic positioning. The Internet affects operational effectiveness and strategic positioning in very different ways. It makes it harder for companies to sustain operational advantages, but it opens new opportunities for achieving or strengthening a distinctive strategic positioning. The Internet is arguably the most powerful tool available today for enhancing operational effectiveness. But simply improving operational effectiveness does not provide a competitive advantage. Companies only gain advantages if they are able to achieve and sustain higher levels of operational effectiveness than competitors. That is an exceedingly difficult proposition even in the best of circumstances. Once a company establishes a new best practice, its rivals tend to copy it quickly. Best practice competition eventually leads to competitive convergence, with many companies doing the same things in the same ways. The nature of Internet applications makes it more difficult to sustain operational advantages than ever. In previous generations of information technology, application development was often complex, arduous, time consuming, and hugely expensive. These traits made it harder to gain an IT advantage, but they also made it difficult for competitors to imitate information systems. The openness of the Internet, combined with advances in software architecture, development tools, and modularity, makes it much easier for companies to design and implement applications. Many companies have forgotten what they stand for and rushed to implement hot Internet applications and copy the offerings of dot-coms. (Ibid.)

Porter and Millar (1985) define that an important concept that highlights the role of information technology in competition is the "value chain" To gain competitive advantage over its rivals, a company must either perform these activities at a lower cost or perform them in a way that leads to differentiation and a premium price.

According to Porter and Millar (1985), in any company, information technology has a powerful effect on competitive advantage in either cost or differentiation. The technology affects value activities themselves or allows companies to gain competitive advantage by exploiting changes in competitive scope.

#### • Lowering cost

Information technology can alter a company's costs in any part of the value chain. (Porter and Millar 1985)

#### • Enhancing differentiation

Porter and Millar (1985) go on to describe that the impact of information technology on differentiation strategies is equally dramatic. The role of a company and its product in the buyer's value chain is the key determinant of differentiation. The new information technology makes it possible to customize products. By bundling more information with the physical product package sold to the buyer, the new technology affects a company's ability to differentiate itself.

Porter further states (2001) that Internet actually provides a better technological platform than previous generations of IT--when it comes to reinforcing a distinctive strategy, tailoring activities, and enhancing it. Indeed, it worked against strategy in the past. Packaged software applications were hard to customize, and companies were often forced to change the way they conducted activities in order to conform to the "best practices" embedded in the software. It was also extremely difficult to connect discrete applications to one another. Internet architecture, together with other improvements in software architecture and development tools, has turned IT into a far more powerful tool for

strategy. It is much easier to customize packaged Internet applications to a company's unique strategic positioning. By providing a common IT delivery platform across the value chain, Internet architecture and standards also make it possible to build truly integrated and customized systems that reinforce the fit among activities in the value chain. (Porter, 2001)

#### • Changing competitive scope

The technology increases a company's ability to coordinate its activities regionally, nationally, and globally. (Ibid.)

Chaston suggests that the advent of Internet business has permitted companies to develop new and more effective days of responding to customer needs (Figure 2.1). Therefore, e-commerce marketers can significantly increase the number of competitive advantage options available to them by considering the opportunities offered by the dual options of (1) combing cost leadership with differentiation and (2) product customisations.

#### PRODUCT BENEFIT

		Single competitiv	Combined competitive advantage	
	Mass market	Cost Leadership	Differentiation	Value and superior performance
	Mass custo- mization	Customized cost leadership	Customized differentiation	Customized value and differentiation
	Niche market	Focused cost leadership	Focused differentiation	Focused value and focused differentiation
	Micro- Niche Market	Personalized focused cost leadership	Personalized focused differentiation	Personalized focused value and focused differentiation

Figure 2.1 An Expanded E-commerce Competitive Advantage Options Matrix (Chaston, 2001)

Porter considers (2001) that there is no doubt that real trade-offs can exist between Internet and traditional activities. Overall, however, the trade-offs are modest in most industries. While the Internet will replace certain elements of industry value chains, the complete cannibalization of the value chain will be exceedingly rare. Virtual activities do not eliminate the need for physical activities, but often amplify their importance. (Ibid.)

He further explains that most Internet applications have some short-comings in comparison with conventional methods. While Internet technology can do many useful things today and will surely improve in the future, it cannot do everything. Its limits include the following:

- Customers cannot physically examine, touch, and test products or get hands-on help in using or repairing them.
- Knowledge transfer is restricted to codified knowledge, sacrificing the spontaneity and judgment that can result from interaction with skilled personnel.
- The ability to learn about suppliers and customers (beyond their mere purchasing habits) is limited by the lack of face-to-face contact.
- The lack of human contact with the customer eliminates a powerful tool for encouraging purchases, trading off terms and conditions, providing advice and reassurance, and closing deals.
- Delays are involved in navigating sites and finding information and are introduced by the requirement for direct shipment.
- Extra logistical costs are required to assemble, pack, and move small shipments.
- Companies are unable to take advantage of low-cost, nontransactional functions performed by sales forces, distribution channels, and purchasing departments (such as performing limited service and maintenance functions at a customer site).
- The absence of physical facilities circumscribes some functions and reduces a means to reinforce image and establish performance.
- Attracting new customers is difficult given the sheer magnitude of the available information and buying options. (Porter, 2001)

Traditional activities, often modified in some way, can compensate for these limits, just as the shortcomings of traditional methods - such as lack of real-time information, high cost of face-to-face interaction, and high cost of producing physical versions of information - can be offset by Internet methods. Frequently, in fact, an Internet application and a traditional method benefit each other. The fit between company activities, a cornerstone of strategic positioning, is in this way strengthened by the deployment of Internet technology. (Porter, 2001)

As all companies come to embrace Internet technology, moreover, the Internet itself will be neutralized as a source of advantage. Basic Internet applications will become table stakes - companies will not be able to survive without them, but they will not gain any advantage from them. The more robust competitive advantages will arise instead from traditional strengths such as unique products, proprietary content, distinctive physical activities, superior product knowledge, and strong personal service and relationships. Internet technology may be able to fortify those advantages, by tying a company's activities together in a more distinctive system, but it is unlikely to supplant them. Internet technology provides better opportunities for companies to establish distinctive strategic positionings than did previous generations of information technology. (Porter, 2001)

#### 2.3 Value Chain

In the earlier section, we covered the literature of competitive advantage, and information technology and competitive advantage. Hereafter, we present overview of value chain, which is stated by Porter (1998) as the basic tool for diagnosing competitive advantage. Payne (1993) also claims that one technique for considering superior delivered value is the value chain. The ultimate purpose of value chain analysis is to systematically identify appropriate means of differentiation for a firm so that it can provide superior delivered value to its customers. Porter (2001) repeats that the value chain is the basic tool for understanding the influence of information technology on companies. It is the set of activities through which a product or service is created and delivered to customers. When a company competes in any industry, it performs a number of discrete but

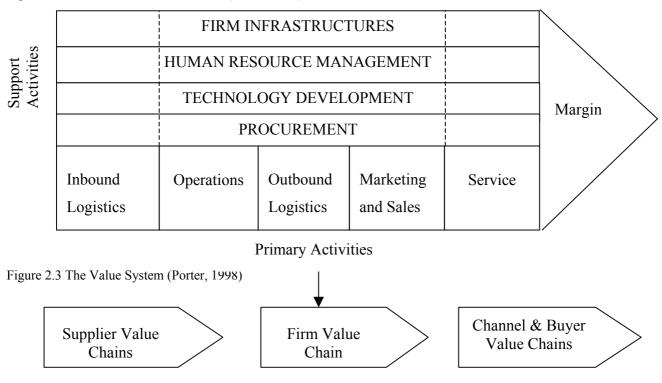
interconnected value-creating activities, such as operating a sales force, fabricating a component, or delivering products, and these activities have points of connection with the activities of suppliers, channels, and customers. The value chain is a framework for identifying all these activities and analyzing how they affect both a company's costs and the value delivered to buyers.

#### 2.3.1 Introduction to Value Chain

Porter in his book Competitive Advantage (1998) states that value chain (Figure 2.2) is the basic tool for diagnosing competitive advantage and finding ways to enhance it. The value chain disaggregates a firm into its relevant activities in order to understand the behaviour of costs and the existing and potential sources of differentiation. A firm gains competitive advantage by performing these important activities more cheaply or better than its competitors. (Porter, 1998) Since no two firms, even in the same industry, compete in exactly the same set of markets with exactly the same set of suppliers, the overall value chain for each firm is unique (Shank and Govindarajan, 1993).

The value chain is a part of a larger value system (Figure 2.3) that incorporates all value-added activities from raw materials to components and final assembly through buyer distribution channels (Lawton and Michaels, 2001). Suppliers have value chains (upstream value) that create and deliver the purchased inputs used in a firm's chain. Suppliers not only deliver a product but also can influence a firm's performance in many other ways. In addition, many products pass through the value chains of channels (channel value) on their way to the buyer. Channels perform additional activities that affect to the buyer, as well as influence the firm's own activities. A firm's product eventually becomes part of its buyer's value chain. (Porter, 1998) A firm can enhance its profitability - and competitive advantage - not only by understanding its own value chain – from design to distribution – but also by understanding how the firm's value activities fit into the supplier's and customer's value chains (Shank and Govindarajan, 1993).

Figure 2.2 Porter's Generic Value Chain (Porter, 1998)



Value chain analysis enables a firm to better understand which segments, distribution channels, price points and product differentiation will yield the greatest competitive advantage. It is a way of assessing competitive advantage by determining the strategic advantages and disadvantages of the full range of activities that shape the final offering to the end user. In other words, the firm is viewed as part of an overall chain of value-creating processes focused on the customer. (CMA Magazine, 1996).

Deise et al. (2000) have been re-evaluated the traditional models of the value chain with the advent of global electronic communications, and revised the form of the value chain (Figure 2.4). This value chain starts with the market research process, emphasizing the importance of real-time environment scanning made possible through electronic communications links with distributors and customers. For example, leading e-tailers on w monitor, on an hourly basis, how customers are responding to promotional offers on their website and review competitors' offers and then revise them accordingly. Similarly manufacturers have feedback forms and forums on their website that enable them to collect information from customers and channel partners that can feed through to new product development. As new product development occurs the marketing strategy will be refined and at the same time steps can be taken to obtain the resources and production processes necessary to create, store and distribute the new product. Through analysis of the value chain and looking at how electronic communications can be used to speed up the process, manufacturers have been able to significantly reduce time to market from conception of a new product idea through to launch on the market. (Chaffey, 2002).

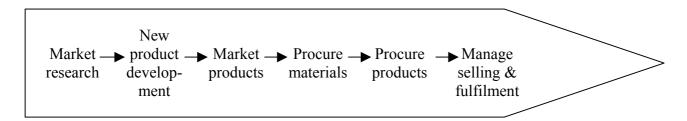


Figure 2.4. An adaptation of Revised Value Chain by Deise et al. (2000)

#### 2.3.2 Functions of the Value Chain

In his value chain model Porter (1998) represents that every value activity employs purchased inputs, human resources and some form of technology to perform its function. Each value activity also uses and creates information, such as buyer data and product failure statistics. Value activities can also create financial assets such as inventory and accounts receivable, or liabilities such as accounts payable. Porter distinguishes between primary activities and support activities, in which primary activities are directly concerned with the physical creation, sale and delivery of a product or service. There are five generic categories of primary activities, as shown in Figure 2.2.

- Inbound logistics: activities associated with receiving and warehousing, and disseminating inputs to the product, such as material handling, storing, inventory control, vehicle scheduling and returns to suppliers.
- Operations: activities associated with transforming inputs into finished products, such as machining, packaging, assembly, equipment maintenance, testing, printing and facility operations.

<sup>&</sup>lt;sup>12</sup> An e-business model that retail organizations use to transact online (Phillips, 2003)

- Outbound logistics: activities associated with collecting, storing and distributing of finished product to buyer, such as finished goods warehousing, material handling, delivery vehicle operation, order processing and scheduling.
- Marketing and sales: activities associated with providing a means by which buyers can purchase the product and facilitating and inducing them to do so, such as advertising, promotion, sales force, quoting, channel selection, channel relations and pricing.
- Service: activities associated with providing service to enhance or maintain the value of the product, such as installation, repair, training, parts supply, and product adjustment.

Each of these activities can be vital to competitive advantage depending on the industry. In any firm, however, all the primary activity categories will be present to some degree and play some role in competitive advantage.

Support activities support the primary activities and each other by other and therefore help to improve effectiveness or efficiency of primary activities. Support activities can be divided into four generic categories, also shown as Figure 2.2.

- Infrastructure: Infrastructure consists of a number of activities including general management, planning, finance, accounting, legal, governmental affairs, and quality management. Infrastructure usually supports the entire value chain and not individual activities. It is often viewed as "overhead", but can be a powerful source of competitive advantage, for example for telephone operating companies.
- Human Resource Management: Human Resource Management consists of activities involved in the recruiting, hiring, training, development, and compensation of all types of personnel. Human Resource Management supports from individual primary and support activities (e.g. hiring of engineers) to the entire value chain (e.g. labor negotiations). Human resource management affects competitive advantage in any firm, through its role in determining the skills and motivation of employees and the cost of hiring and training. In some industries, for example some accounting firms, it holds the key to competitive advantage.
- Technology Development: Technology development consists of a range of activities that can be broadly grouped into efforts to improve the product and the process. Technology development takes many forms from basic research and product design to media research, process equipment design, and servicing procedures. Every value activity embodies technology, whether it is know-how, procedures, or technology embodied in process equipment. Technology development is important to competitive advantage in all industries, holding the key in some, like steel industry.
- Procurement: refers to the function of purchasing inputs used in the firm's value chain, not to the purchased inputs themselves. Purchased inputs include raw material, supplies, and other consumable items as well as assets such as machinery, office equipment, and buildings. Procurement tends to be spread throughout the company, because purchased inputs are present in every value activity. A given procurement activity can normally be associated with a specific value activity or activities which it supports, though often a purchasing department serves many value activities and purchasing policies apply firmwide. The cost of procurement activities themselves usually represents a small if not insignificant portion of total costs, but often has a large impact on the firm's overall cost and differentiation.

The value chain displays total value, and consists of earlier described nine value activities and the margin. These value activities are the building blocks by which a firm creates a product valuable to its buyers. Margin is the difference between the total value and the collective cost of performing the value activities. The term "margin" implies that organizations realize a profit margin that depends on their ability to manage the linkages between all activities in the value chain. In other words, the organization is able to deliver a product / service for which the customer is willing to pay more than the sum of the costs of all activities in the value chain. (Porter, 1998)

#### 2.3.3 Linkages

Although value activities are the building blocks of competitive advantage, the value chain is not only a collection of independent activities but rather a collection of interdependent activities. Porter (1998) defines linkages as relationships between the way one value activity is performed and the cost or performance of another. Another words, value activities are related by linkages within the value chain. Linkages can lead to competitive advantage in two ways: optimisation and coordination. Linkages often reflect tradeoffs among the activities to achieve the same overall result, for example, a more costly product design may reduce service costs. A firm must optimise such linkages reflecting its strategy in order to achieve competitive advantage. Another way to competitive advantage in linkages is to coordinate the activities. The ability to coordinate linkages often reduces cost or enhances differentiation. (Ibid.)

Linkages are numerous, but the most obvious are those between support activities and primary activities. More subtle linkages are those between primary linkages. Linkages exist not only within a firm's value chain. There are also so called vertical linkages between a firm's value chain and the value chains of suppliers and channels. These linkages are similar to linkages within the firm's value chain. The way supplier or channel activities are performed affects the cost or performance of a firm's activities (and vice versa). The linkages between suppliers' and channels' value chains and a firm's value chain provide opportunities for the firm to enhance its competitive advantage. It is often possible to benefit both the firm and suppliers or channels by influencing the configuration of suppliers' or channels' value chains to jointly optimise the performance of activities or by improving coordination between a firm's and suppliers' or channels' chains. As with linkages within a firm's value chain, exploiting vertical linkages requires information and modern information systems are creating many new opportunities. Recent developments in information systems technology are creating new linkages and increasing the ability to achieve old ones (Porter, 1998).

Though linkages within the value chain are crucial to competitive advantage, they are often subtle and unrecognised. Exploiting linkages usually requires information or information flows that allow optimisation or coordination to take place. Thus, information systems are often vital to gaining competitive advantage from linkages. But given the difficulty of recognising and managing linkages, the ability to do so often yields a sustainable source of competitive advantage. (Porter, 1998)

#### 2.3.4 Impact of Information Technology on Value Chain

Information technology is changing the way companies operate (Porter and Millar, 1985). Rayport and Sviokla (1995) state that every business today competes in two worlds, in a physical world of resources that managers can see and touch and in a virtual world made of information. This latter world has given a rise to the world of electronic commerce, a new locus of value creation. Executives have to pay attention how their companies create value in both the physical and the virtual world. (Rayport and Sviokla, 1995)

Mougayar (1998) in his book presents three scenarios about what will happen to the old value chain when moving to digital world. One obvious scenario is that the old value chain gets smaller and therefore more efficient. This means that manufacturers can now reach customers by bypassing one or two layers of the old value chain. Another scenario is that the value chain is redefined. In several types, when old intermediaries get disintermediated. Newer types of intermediaries arise in several new areas and become an integral part of the new value chain. The third scenario is that the value chain becomes virtual. What goes inside the value chain is beyond the control of buyers and sellers, especially sellers.

An important concept that highlights the role of information technology in competition is the value chain (Porter and Millar, 1985). Information systems technology is particularly pervasive in the value chain, since every value activity involves creating, processing and the communication of information (Porter, 1998). As can be seen in the Figure 2.5, information technology not only affects the sales side of the organization but also has the potential to influence all primary and support value activities (Porter, 2001).

Figure 2.5 Virtual Value Chain (Porter, 2001)

#### Firm Infrastructure Web-based, distributed financial and ERP systems Online investor relations (e.g. information dissemination, broadcast conference calls) **Human Resource Management** Self-service personnel and benefits administration Web-based training Internet-based sharing and dissemination of company information Electronic time and expense reporting **Technology Development** Collaborative product design across locations and among multiple value-system participants Knowledge directories accessible from all parts of the organization Real-time access by R&D to online sales and service information Procurement Internet-enabled demand planning, real-time available-to-promise/capable-to promise and fulfilments Other linkage of purchase, inventory, and forecasting systems with suppliers Automated "requisition to pay" Direct and indirect procurement via marketplaces, exchanges, auctions and buyer-seller matching **Outbound Logistics Inbound Logistics Operations Marketing and Sales** After-Sales Services Real-time Integrated Real-time Online sales channels Online support of customer service integrated including Web sites representatives through e-mail information transaction of scheduling. exchange, orders whether and marketplaces response management, co-browse, scheduling, and initiated by an end chat, "call me now", voice-over IP, and shipping. Real-time inside and warehouse other uses of video streaming decision making in consumer, a salesoutside access to management and person, or a in-house plants, customer information, Customer self-service via Web sites planning and contract channel partner and intelligent service request product catalogs, processing including updates to billing advanced assemblers and dynamic pricing, Automated planning and inventory availability, components customer-specific and shipping profiles scheduling across suppliers agreements and online submission of Real-time field service access to the company and Real-time contract terms quotes, and order entry customer account review schematic its suppliers available-to-Customer and Online product review, parts availability and ordering, Dissemination promise and channel access to configurators work-order update, and service parts throughout the capable-to-promise product Customer-tailored management company of realinformation development and marketing via time inbound and available to the deliver status customer profiling in-progress salesforce and Collaborative · Push advertising inventory data channels integration with Tailored online access customer Real-time customer forecasting feed-back through systems Web surveys, opt-Integrated channel in/opt-out marketing,

and promotion

response tracking

17

management

including

information exchange, warranty claims, and contract management (versioning,

process control)

The special advantage of the Internet is the ability to link one activity with others and make real-time data created in one activity widely available, both within the company and with outside suppliers, channels, and customers. By incorporating a common, open set of communication protocols, Internet technology provides a standardized infrastructure, an intuitive browser interface for information access and delivery, bidirectional communication, and ease of connectivity - all at much lower cost than private networks and electronic data interchange, or EDI. (Porter, 2001)

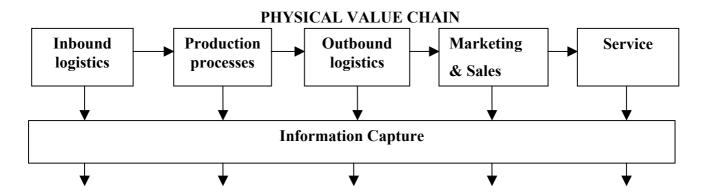
But for all its power, the Internet does not represent a break from the past; rather, it is the latest stage in the ongoing evolution of information technology. Indeed, the technological possibilities available today derive not just from the Internet architecture but also from complementary technological advances such as scanning, object-oriented programming, relational databases, and wireless communications. (Porter, 2001)

To see how these technological improvements will ultimately affect the value chain, some historical perspective is illuminating. The evolution of information technology in business can be thought of in terms of five overlapping stages, each of which evolved out of constraints presented by the previous generation. The earliest IT systems automated discrete transactions such as order entry and accounting. The next stage involved the fuller automation and functional enhancement of individual activities such as human resource management, sales force operations, and product design. The third stage, which is being accelerated by the Internet, involves cross-activity integration, such as linking sales activities with order processing. Multiple activities are being linked together through such tools as customer relationship management (CRM), supply chain management (SCM), and enterprise resource planning (ERP) systems. The fourth stage enables the integration of the value chain and entire value system, that is, the set of value chains in an entire industry, encompassing those of tiers of suppliers, channels, and customers. SCM and CRM start to merge, as end-to-end applications involving customers, channels, and suppliers link orders to, for example, manufacturing, procurement, and service delivery. Also product development is integrated, which has earlier been largely separate. Complex product models are exchanged among parties, and Internet procurement moves from standard commodities to engineered items. In the fifth stage, information technology is used not only to connect the various activities and players in the value system but to optimise its workings in real time. Choices are made based on information from multiple activities and corporate entities. Production decisions, for example, automatically factor in the capacity available at multiple facilities and the inventory available at multiple suppliers. While early fifth-stage applications involve relatively simple optimisation of sourcing, production, logistical, and servicing transactions, the deeper levels of optimisation involve the product design itself. For example, product design is optimised and customized based on input not only from factories and suppliers but also from customers. (Porter, 2001)

The power of the Internet in the value chain, however, must be kept in perspective. While Internet applications have an important influence on the cost and quality of activities, they are neither the only nor the dominant influence. Conventional factors such as scale, the skills of personnel, product and process technology, and investments in physical assets also play prominent roles. The Internet is transformational in some respects, but many traditional sources of competitive advantage remain intact. (Porter, 2001)

For managers this means that they must consciously focus on the principles that guide value creation and extraction across the two different worlds – and two different value chains (Rayport and Sviokla, 1995). In electronic commerce, businesses require to integrate two kinds of activities – ones that are embedded into the physical value chains and the others that are built through information into the virtual chain (Figure 2.6) (Bhatt and Emded, 2001). Rayport and Sviokla (1995) differentiate the earlier discussed physical value chain from virtual value chain by describing physical value chain as "composed of a linear sequence of activities with defined points of input and output", whereas a virtual value chain is "non-linear; a matrix of potential inputs and outputs that

can be accessed and distributed through a wide variety of channels". The Porter's value chain model was introduced earlier. The most obvious difference between traditional and e-business is that when analysing an e-business is that one or more parts of its value chain is online. Each stage of the virtual value chain offers new opportunities to use information in order to create a new product or service. In order to do this the processes must be put in place at each stage to gather the information, organize it, select the valuable information, synthesise it, and distribute it. (Ibid.)



When companies integrate the information they capture during stages of value chain – from inbound logistics and production through sales and marketing – they construct an information underlay of the business. This integrated information provides manager with the ability to "see" their value chain from end to end.

Figure 2.6 Building the Virtual Value Chain Model (Rayport and Sviokla 1995)

The value chain model treats information as a supporting element of the value-adding process, not a source of value itself (Rayport and Sviokla, 1995). In e-commerce, however, information is not viewed as a by-product of the strategic activities, performed around the physical value chain, but rather begins to play a strategic role in itself. A study conducted by Lawton and Michaels (2001) showed that the evolution of value chain, facilitated by ERP and Internet, has resulted in dramatic time and cost efficiencies and customer satisfaction levels for those companies willing and able to adapt. The virtual value chain is a highly flexible and extremely competitive structure, but will succeed only if information flows freely between all associates. (Lawton and Michaels, 2001) Therefore strategic activities in the virtual value chain are performed with and around information. (Bhatt and Emded, 2001) To create value with information, managers must look to the virtual world. Creating value in any stage of a virtual value chain consists of gathering, organizing, selecting, synthesizing and distributing of information. (Figure 2.7) (Rayport and Sviokla, 1995) Therefore it becomes imperative that businesses integrate virtual value chain activities with physical activities for offering customized products and services. While virtual value chain activities provide information access to customers, suppliers, and manufacturers and make a large part of the transactions transparent, physical value chain activities make it possible for them to be realized by fulfilling customer orders and assembling final products and services. (Bhatt and Emdad, 2001)

Support activities				
Inbound logistics	Operations	Outbound logistics	Marketing and Sales	Services
Information Gathering				
Information Organizing				
Information Selecting				
Information Synthesizing				
	Info	mation Distribut	ing	

Figure 2.7 Information in Value Chain (Adapted from Bhatt et al. 2001)

According to Rayport and Sviokla (1995), there are three stages to virtual value chain. First stage is visibility. In that stage the companies acquire an ability to "see" physical operations more effectively through information. At this stage, managers use large-scale information technology systems to coordinate activities in their physical value chains and in the process lay the foundation for a virtual value chain. In the second stage, mirroring capability companies substitute their physical activities with virtual ones, i.e. they begin to create a parallel value chain. The third, and the last, stage is using information to establish new customer relationships. At this stage managers draw on the flow of information in their virtual value chain to deliver value to customers in new ways. Each of these three stages represents considerable opportunity for companies. If managers want to pursue any of these opportunities, they need to put into place processes to gather the information, organize it for the customer, select what's valuable, package it, and distribute it.

The managers must continue to oversee a physical value chain, but they must also build and exploit a virtual value chain. To succeed in this new economic environment, management must understand the differences between value creation and extraction in the physical and virtual world: they must manage both effectively and in concert. (Rayport and Sviokla, 1995)

The greatest threat concerning the Internet to an established company lies in either failing to deploy the Internet or failing to deploy it strategically. Every company needs an aggressive program to deploy the Internet throughout its value chain, using the technology to reinforce traditional competitive advantages and complement existing ways of competing. The key is not to imitate rivals but to tailor Internet applications to a company's overall strategy in ways that extend its competitive advantages and make them more sustainable. The Internet, when used properly, can support greater strategic focus and a more tightly integrated activity system. (Porter, 2001)

#### 2.4 Differentiation

As discussed in chapter one, we focus our study on strategic positioning/differentiation of competitive advantage. Furthermore, we restate here again that, for this study, the concepts of strategic positioning and differentiation are regarded as the same, and we cite the original terms as they are in the theory. Before we begin an overview of strategic positioning literature, we first present the concept of strategic positioning.

#### 2.4.1 Definition of Strategic Positioning

Different may not be necessarily better, but better is always different. (Hartman et al., 2000) Strategic positioning by Porter (2001) is defined as doing things differently from competitors, in the way that delivers a unique type of value to customers. This can mean offering a different set of features, a different array of services, different logistical arrangements, or deliberately choosing a different set of activities to deliver a unique mix of value. (Porter, 1996) Positioning is not only about carving out a niche. A position emerging from any of the sources can be broad or narrow (Porter, 1996).

Strategic positions emerge from three distinct sources, which are not mutually exclusive and often overlap. First, positioning can be based on producing a subset of an industry's products or services. Porter calls this variety-based positioning because it is based on the choice of product or service varieties rather than customer segments. Variety-based positioning makes economic sense when a company can best produce particular products or services using distinctive sets of activities. (Porter, 1996)

A second basis for positioning is that of serving most or all the needs of a particular group of customers. Porter calls this needs-based positioning, which comes closer to traditional thinking about targeting a segment of customers. It arises when there are groups of customers with differing needs, and when a tailored set of activities can serve those needs best. Some groups of customers are more price sensitive than others, demand different product features, and need varying amounts of information, support, and services. (Porter, 1996)

The third basis for positioning is that of segmenting customers who are accessible in different ways. Although their needs are similar to those of other customers, the best configuration of activities to reach them is different. Porter calls this access-based positioning. Access can be a function of customer geography or customer scale - or of anything that requires a different set of activities to reach customers in the best way. (Porter, 1996)

Lumpkin defines that firms pursuing a differentiation strategy offer products and services that are viewed as unique and valued by customers. They achieve differentiation advantages when price premiums exceed the extra costs incurred in being unique. A differentiator will seek ways to distinguish itself from similar competitors to justify price premiums greater than the costs incurred by differentiating. (Lumpkin, 2002)

If there were only one ideal position, there would be no need for strategy. Companies would face a simple imperative - win the race to discover and pre-empt it. The essence of strategic positioning is to choose activities that are different from rivals. If the same set of activities were best to produce all varieties, meet all needs, and access all customers, companies could easily shift among them and operational effectiveness would determine performance. (Porter, 1996)

#### 2.4.2 Views of Strategic Positioning

Chaston (2000) argues that there are four options for strategic focus to position a company in the online marketplace. He says that these should build on existing strengths, but can use the online facilities to enhance the positioning as follows:

• Product performance excellence. Enhance by providing online product customization.

- Price performance excellence. Use the facilities of the Internet to offer favorable pricing to loyal customers or to reduce prices where demand is low.
- Transactional excellence. A company offers transactional excellence through combining pricing information with dynamic availability information on products listing number in stock, number on order and when expected.
- Relationship excellence. Personalization features to enable customers to review sales order history and place repeat orders.

These positioning options have much in common with Porter's competitive strategies of cost leadership, product differentiation and innovation.

Chaffey (2000) defines positioning as influencing the customer's perception of a product within a marketplace. Differential advantage describes that a desirable attribute of a product or offering that is not currently matched by competitor offerings.

Deise et al (2000) suggest that companies can position their products relative to competitors according to four main variables: product quality, service quality, price and fulfillment time. It is useful to review these as an equation of how they combine to influence customer perceptions of value or brand. (Deise, 2000; cited by Chaffey, 2002)

Plant (2000) also identifies four different positional e-strategic directions, which he refers to as technology leadership, service leadership, market leadership and brand leadership. The author acknowledges that these are not exclusive. (Plant, 2000; cited by Chaffey, 2002)

According to Chen (2001), a company can differentiate by enhancing product attributes in a way that adds value for the customer (Figure 2.8). It can achieve this differentiation through technology, brand usage, additional features, or special services. Through the best product option, companies create bonds with customers through the intrinsic superiority of their product or service. Important means for this purpose are introducing products rapidly and establishing a so-called dominant design. (Chen, 2001)

The customer solutions strategic option is based on a wider offering of products and services that satisfies most, if not all, the customer's needs. The focus here is on the customer, rather than the product. A company might offer a broad bundle of needs. The system lock-out strategic option has the widest possible scope. Instead of narrowly focusing on the product or the customer, the company considers all the players in the system that contributes to the creation of economic value. In this strategic position, bonding plays its most influential role. The company is particularly concerned with nurturing, attracting, and retaining so-called 'complementors' along with the normal industry participants. (Chen, 2001)

Chen (2001) explains that these options are not mutually exclusive but it is useful to differentiation the three alternatives in terms of their scope, scale, and bonding. Scope significantly increases as we move from the best product to system lock-in. At the extreme end of the best product position, where a company often opts for low cost, the scope is cut to a minimum. The scope expands to include product features as a company moves to differentiated best product position. It then expands beyond the product to include the customer's activities in the case of customer solutions. The company finally reaches the broadest possible scope as a system lock-in company when it includes complementors. Scale, typically measured as market share, is critical when evaluating a best product position while in the case of customer solutions, a company must consider its share of a customer's purchases. For a system lock-in position, complementor share is the most critical consideration. Ultimately, bonding deals with the forces that link the product or service with the customer. In the

best product option, this is done through the characteristics of the product itself. The customer solutions position achieves this through learning and customization. In the system lock-in position, the bonding mechanism is proprietary standard, which is critical in achieving profitability and sustainability. (Chen, 2001)

	Best product	<b>Customer solutions</b>	System lock-in	
Scope	Defeatured-fully featured	Broad product range	Nurturing complementors	
	Low cost	Bundling	Variety and number	
	Differentiated	Joint developmentOpen architectur		
		Outsourcing		
Scale	Product	Customer	System	
	Market share	Customer shareComplementor st		
Bonding	Link to product	roduct Link to customers Link to system		
	First to market		Competitor lock-out	
	Dominant design	Learning	Proprietary standards	
		Customization		

Figure 2.8 Characteristics of Three Options for Strategic Positioning. (Chen, 2001)

#### 2.4.3 Sources of Differentiation within the Value Chain

Porter (1998) states that differentiation grows out of the firm's value chain. Despite the importance of differentiation, its sources are often not well understood. Firms view the potential sources of differentiation too narrowly. They see differentiation in terms of the physical product or marketing practices, rather than potentially arising anywhere in the value chain. Successful differentiation strategy grows out of the coordinated actions of all parts of a firm, not just the marketing department. Virtually any value activity is a potential source of uniqueness. The procurement of raw material and other inputs can affect the performance of the end product and hence differentiation. Other successful differentiators create uniqueness through other primary and support activities. Technology development activities can lead to product designs that have unique product performance. Operations activities can affect on such forms of uniqueness as product appearance, conformance to specifications, and reliability. The outbound logistical system can shape the speed and consistency of deliveries. Marketing and sales activities also frequently have an impact on differentiation. Figure 2.9 illustrates how any activities in the value chain can potentially contribute to differentiation. Even if the physical product is a commodity, other activities can often lead to substantial differentiation. Similarly, indirect activities such as maintenance or scheduling can contribute to differentiation just as do direct activities such as assembly or order processing. (Ibid.)

A firm may also differentiate itself through the breadth of its activities, or its competitive scope. (Porter, 1998) A number of other differentiating factors can result from broad competitive scope:

- Ability to serve buyer needs anywhere
- Simplified maintenance for the buyer if spare parts and design philosophies are common for a wide line
- Single point at which the buyer can purchase
- Single point for customer service

• Superior compatibility among products

Most of these benefits require consistency or coordination among activities of a firm is to achieve them. (Ibid.)

According to Porter (1998), differentiation can also stem from downstream. A firm's channels can be a potent source of uniqueness, and may enhance its reputation, service, customer training, and many other activities. Selective distribution through well-chosen outlets has also proven to be an extremely important source of differentiation. Firms can enhance the role of channels in differentiation through actions such as the following:

- Channel selection to achieve consistency in facilities, capabilities, or image
- Establishing standards and policies for how channels must operate
- Provision of advertising and training materials for use by channels
- Providing funding so that channels can offer credit

Porter (1998) explains that firms confuse the concept of quality with that of differentiation. While differentiation encompasses quality, it is a much broader concept. Quality is typically associated with the physical product. Differentiation strategies attempt to create value for the buyer throughout the value chain. (Ibid.)

#### **Drivers of Uniqueness**

A firm's uniqueness in a value activity is determined by a series of basic drivers. Uniqueness drivers are underlying reasons why an activity is unique. Without identifying them, a firm cannot fully develop means of creating new forms of differentiation or diagnose how sustainable its existing differentiation is. (Porter, 1998) The principal uniqueness drivers are the following: (Ibid.)

- Policy choices: firm makes policy choices about what activities to perform and how to perform them. Such policy choices are perhaps the single most prevalent uniqueness driver. Some typical policy choices that lead to uniqueness include product features and performance offered, services provided, intensity of an activity adopted, technology employed in performing an activity, quality of inputs procured for an activity, procedures governing the actions of personnel in an activity, skill and experience level of personnel employed and training provided, and information employed to control an activity.
- Linkages: Uniqueness often stems from linkages within the value chain or with suppliers and channels that a firm exploits. Linkages can lead to uniqueness if the way one activity is performed affects the performance of the other. There are three types of linkages; linkages within the value chain, supplier linkages and channels linkages.
- Timing: Uniqueness may result from when a firm began performing an activity. Being the first to adopt a product image, for example, may pre-empt others from doing so and make the firm unique.
- Location: Uniqueness may stem from location. For example, a retail bank may have the most convenient branch and automatic teller machine locations.
- Interrelationships: The uniqueness of a value activity may stem from sharing it with sister business units. Sharing a sales force for both insurance and other financial products may allow the firm to offer the buyer better service.
- Learning and spillovers: The uniqueness of an activity can be the result of learning about how to perform it better. Achieving consistent quality in a manufacturing process may be

learning-driven, for example. The spillover of learning to competitors erodes its contribution to differentiation.

- Integration: A firm's level of integration may make it unique. Integration into new value activities can make a firm unique because the firm is better able to control the performance of the activities or coordinate them with other activities. Integration may also provide more activities to be sources of differentiation.
- Scale: Large scale can allow an activity to be performed in a unique way that is not possible at smaller volume. In some cases, however, scale can work against the uniqueness of an activity. Scale may, for example, reduce the flexibility of firms in some time-sensitive industries.
- Institutional factors: Institutional factors sometimes play a role in allowing a firm to be unique. Similarly, a good relationship with its union may allow a firm to establish unique job definitions for employees.

The drivers of uniqueness vary for each activity and may vary across industries for the same activity. The drivers interact to determine the extent to which an activity is unique. A firm must examine each of its areas of uniqueness to see what driver or drivers underlie it. This will be critical to the sustainability of differentiation because some uniqueness drivers provide more sustainability than others. Understanding what allows a firm to be unique will also ensure that a firm does not undermine the causes. Finally, the drivers of uniqueness may suggest new sources of differentiation. (Ibid.)

Differentiation can also be stemmed from the buyer value and cost of differentiation. Based on our research purpose, we only focus our study on differentiation within firm's own value chain, rather than extending our research scope to supplier value chain, and channel and buyer value chain. As stated earlier, in a single study, we should not attempt to conduct research on all fields. Therefore, differentiation and supplier value chain, and differentiation and buy value chain are not being discussed here.

FIRM INFRASTRU-	Top Management Support in Selling Facilities that Enhance the Firm's Image Superior Management Information System				
CTURE HUMAN RESOURCE MANAGEMENT	Superior Training of Personnel	Stable Workforce Policies; Quality of Work Life Program; Programs to Attract the Best Scientists and Engineers.		Sales Incentives to Retain Best Salespersons; Recruiting Better Qualified Sales and Service Personnel	Extensive Training of Service Technicians
TECHNOLOGY DEVELOPMENT	Superior Material Handling & Sorting Technology; Proprietary Quality Assurance Equipment	Unique Product Features; Rapid Model Introductions; Unique Production Process or Machines; Automated Inspection Procedures	Unique Vehicle Scheduling; Software; Special Purpose Vehicles or Containers	Applications Engineering Support; Superior Media Research; Most Rapid Quotations for Tailored Models	Advanced Servicing Techniques
PROCURE- MENT	Most Reliable Transportation for Inbound Deliveries	Highest Quality Raw Materials; Highest Quality Components	Best Located Warehouses; Transportation Suppliers that Minimize Damage	Most Desirable Media Placements; Product Position and Image	High Quality Replacement Parts
	Handling of Inputs that Minimizes Damage or Degradation; Timeliness of Supply to the Manufacturing Process	Tight Conformance to Specifications; Attractive Product Appearance; Responsiveness to Specification Changes; Low Defect Rates; Short Time to Manufacture	Rapid and Timely Delivery; Accurate and Responsive Order Processing; Handling that Minimizes Damage	High Advertising Level and Quality; High Sales Force Coverage and Quality; Personal Relationships with Channels or Buyers; Superior Technical Literature & Other Sales Aids; Most Extensive Promotion; Most Extensive Credit to Buyers or Channels	Rapid Installation; High Service Quality; Complete Field Stocking of Replacement Parts; Wide Service Coverage; Extensive Buyer Training

Figure 2.9 Representative Sources of Differentiation in the Value Chain

**OPERATIONS** 

#### 2.4.4 Routes to Differentiation

**INBOUND** 

**LOGISTICS** 

According to Porter (1998) a firm can enhance its differentiation in two basic ways. It may become more unique in performing its existing value activities or it may reconfigure its value chain in some way that enhances its uniqueness. Becoming more unique in its value activities requires that a firm manipulate the drivers of uniqueness described earlier. In both cases, a differentiator must simultaneously control the cost of differentiation so that it translates into superior performance. A number of approaches characterize successful differentiators:

**OUTBOUND** 

LOGISTICS

**MARKETING &** 

**SALES** 

**SERVICE** 

#### • Enhance the sources of uniqueness

Proliferate the sources of differentiation in the value chain. A firm can often increase its overall differentiation by exploiting sources of uniqueness in additional value activities. Every value activity should be scrutinized for new ways to enhance buyer value.

Make actual product use consistent with intended use. Since the way a buyer actually uses a product will determine its performance, differentiation can often suffer if a firm does not take steps to bring actual and intended use in line, like invest in understanding how the product is actually used by buyers, modify the product to make it easier to use correctly, design effective manuals and other instructions for use, rather than treating them as an afterthought, and provide training and education to buyers to improve actual use, either directly or via channels.

Employ signals of value to reinforce differentiation on use criteria. A firm cannot gain the fruits of differentiation without adequate attention to signaling criteria. The activities chosen to influence signaling criteria must be consistent with a firm's intended bases for differentiation. In addition, a differentiator must provide reassurance about the correctness of the buyer's choice after sale. Signaling is only necessary to the extent that it helps buyers perceive the firm's value, however, and no more.

Employ information bundled with the product to facilitate both use and signalling. Information and information systems are becoming increasingly important tools in differentiation, and bundling information with a product can often enhance differentiation. Effective descriptions of how a product works, how to use it, and how to service it can align intended use with actual use, as discussed above. Giving the product the capacity to generate information as it is used can improve the product's use as well as be valuable in its own right. Combining product with information systems can raise buyer value in other ways as well. Finally, bundling information with a product about how the product was made, how unique it is, or how it performs relative to substitutes is often an effective way of signalling its value.

#### • Make the cost of differentiation an advantage

Exploit all sources of differentiation that are not costly. Many activities can be made more unique at a little extra cost. A good case in point is the use of linkages to improve differentiation. A firm may be able to differentiate itself simply by coordinating better internally or with suppliers or channels. Similarly, changing the mix of product features may be less costly than simply adding features. Other high priority targets for enhancing differentiation are activities in which cost is also reduced in the process. Reducing product defects may also reduce service cost, for example.

Minimize the cost of differentiation by controlling cost drivers, particularly the cost of signaling. A firm can minimize the cost of differentiation by recognizing the impact of cost drivers. Firms should differentiate as efficiently as possible by paying careful attention to controlling the cost drivers of activities on which differentiation is based.

Emphasize forms of differentiation where the firm has a sustainable cost advantage in differentiating. The cost of differentiating in various ways will differ among competitors. A firm should differentiate in those ways where it has a cost advantage. A large-share firm will have a cost advantage in differentiating in scale-sensitive activities, such as advertising and R&D, while a diversified firm may have an advantage in differentiating itself in ways where the cost of doing so is reduced by interrelationships with sister business units.

Reduce cost in activities that do not affect buyer value. In addition to seeking a cost advantage in differentiating, a firm must also pay attention to lowering cost in activities unrelated to the chosen differentiation strategy.

#### • Change the rules to create uniqueness

Shift the decision maker to make a firm's uniqueness more valuable. The identity of the decision maker in part defines what is valuable to the buyer, as well as the appropriate signals of that value.

A firm may be able to increase its uniqueness or the perceived value of that uniqueness if it can alter the purchasing process in a way that elevates the role of decision makers who value more the firm's particular forms of uniqueness. Shifting the decision maker typically requires modifying a firm's value chain in ways such as deploying a new type of salesperson, involving technical people in the sale, changing advertising media and content, changing selling materials, and educating the buyer about new bases for the decision that requires a different decision maker

Discover unrecognised purchase criteria. Finding important purchase criteria that buyers (and competitors) have not recognized offers a major opportunity to achieve differentiation. It can allow a firm to pre-empt a new basis for differentiation and gain lasting benefits in image and reputation. Purchase criteria that are unrecognised are often use criteria, particularly those based on the indirect impacts a firm or its product has on the buyer's value chain. Many great differentiation strategies were not passive responses to buyer demands, but were based on new approaches to differentiation.

Pre-emptively respond to changing buyer or channel circumstances. Buyers and channels whose purchase criteria are changing provide another important opportunity for differentiation strategies. Change creates new bases for differentiation and can lead buyers to take a new look at products that have been routinely purchased from an established supplier. Differentiation that lowers the buyers' cost will often fare best during difficult times for the buyer industry or as buyers get more sophisticated. Similarly, differentiation based on quantifiable performance improvements for the buyer may command a more lasting price premium than that based on intangible performance advantages.

• Reconfigure the value chain to be unique in entirely new ways

The discovery of an entirely new value chain can unlock possibilities for differentiation. Opportunities to achieve dramatic levels of differentiation often results from reconfiguring the value chain. Conceiving of a new value chain is a creative process. Working backward from the buyer's value chain, a firm should probe for ways it might link with the buyer's value chain differently or restructure its own value activities to meet purchase criteria better. Common reconfigurations involve areas such as a new distribution channel or selling approach, forward integration to take over buyer functions or eliminate the channels, backward integration to control more determinants of product quality, and adoption of an entirely new process technology. (Porter, 1998)

#### 2.4.5 The Sustainability of Differentiation

The sustainability of differentiation depends on two things, its continued perceived value to buyers and the lack of imitation by competitors. There is an even-present risk that buyers' needs or perceptions will change, eliminating the value of a particular form of differentiation. Competitors may also imitate the firm's strategy or leapfrog the bases of differentiation a firm has chosen. (Porter, 1998)

The sustainability of a firm's differentiation vis-à-vis competitors depends on its sources. To be sustainable, differentiation must be based on sources where there are mobility barriers to competitors replicating them. The drivers of uniqueness differ in their sustainability while the cost of differentiation may also vary among competitor and affect sustainability. Differentiation will be more sustainable under the following conditions: (Porter, 1998)

The firm's sources of uniqueness involve barriers. Proprietary learning, linkages, interrelationships, and first-mover advantages tend to be more sustainable drivers of uniqueness than simply a policy choice to be unique in an activity as was discussed earlier. Signalling activities such as advertising

can also be sustainable because they involve barriers. However, differentiation based too heavily on signalling tends to be vulnerable to increasing buyer sophistication. (Porter, 1998)

The firm has a cost advantage in differentiating. A firm with a sustainable cost advantage in performing the activities that lead to differentiation will enjoy much greater sustainability. (Porter, 1998)

The sources of differentiation are multiple. The overall difficulty of imitating a differentiation strategy depends in part on how many sources of uniqueness a firm has. The sustainability of a differentiation is usually greatest if differentiation stems from multiple sources, rather than resting on a single factor such as product design. A single basis for differentiation provides a strong focal point for competitors. Differentiation that results from coordinated actions in many value activities will usually be more durable, since it requires wholesale changes in competitor behaviour to imitate. (Ibid.)

A firm creates switching cost at the same time it differentiates. Switching costs are fixed costs incurred by the buyer when it changes suppliers, which allow a firm to sustain a price premium even if its product is equal to hat of competitors. If differentiation at the same time creates switching cost, the sustainability of differentiation is increased. Switching costs, like differentiation itself, grow out of the way in which a product is used by the buyer, activities that make a firm unique and frequently raise the cost of switching since the buyer often tailors its activities to exploit the firm's uniqueness. (Ibid.)

#### 2.4.6 The Six Principles of Strategic Positioning

In his article (2001), Porter provides six principles of strategic positioning. He states that to establish and maintain a distinctive strategic positioning, a company needs to follow six fundamental principles. First, it must start with the right goal: superior long-term return on investment. Only by grounding strategy in sustained profitability will real economic value be generated. Economic value is created when customers are willing to pay a price for a product or service that exceeds the cost of producing it. When goals are defined in terms of volume or market share leadership, with profits assumed to follow, poor strategies often result. The same is true when strategies are set to respond to the perceived desires of investors. (Porter, 2001)

Second, a company's strategy must enable it to deliver a value proposition, or set of benefits, different from those that competitors offer. Strategy, then, is neither a quest for the universally best way of competing that delivers unique value in a particular set of uses or for a particular set of customers. (Porter, 2001)

Third, strategy needs to be reflected in a distinctive value chain. To establish a sustainable competitive advantage, a company must perform different activities than rivals or perform similar activities in different ways. A company must configure the way it conducts manufacturing, logistics, service delivery, marketing, human resource management, and so on differently from rivals and tailored to its unique value proposition. If a company focuses on adopting best practises, it will end up performing most activities similarly to competitors, making it harder to gain an advantage. (Porter, 2001)

Fourth, robust strategies involve trade-offs. A company must abandon or forgo some product features, services, or activities in order to be unique at others. Such trade-offs, in the product and in the value chain, are what make a company truly distinctive. When improvements in the product or in the value chain do not require trade-offs, they often become new best practices that are imitated

because competitors can do so with no sacrifice to their existing ways of competing. Trying to be all things to all customers almost guarantee that a company will lack any advantage. (Porter, 2001)

Fifth, strategy defines how all the elements of what a company does fit together. A strategy involves making choices throughout the value chain that are interdependent; all company's activities must be mutually reinforcing. A company's product design, for example, should reinforce its approach to the manufacturing process, and both should leverage the way it conducts after-sales service. Fit not only increases competitive advantage but also makes a strategy harder to imitate. Rivals can copy one activity or product feature fairly easily, but will have much more difficulty duplicating a whole system of competing. Without fit, discrete improvements in manufacturing, marketing, or distribution are quickly matched. (Porter, 2001)

Finally, strategy involves continuity of direction. A company must define a distinctive value proposition that it will stand for, even if that means forgoing certain opportunities. Without continuity of direction, it is difficult for companies to develop unique skills and assets or build strong reputations with customers. Frequent corporate reinvention, then, is usually a sign of poor strategic thinking and a route to mediocrity. Continuous improvement is a necessity, but it must always be guided by a strategic direction. (Porter, 2001)

#### 2.5 Sustainable Competitive Advantage

Having a strategy is a matter of discipline; it requires a strong focus on profitability rather than just growth, an ability to define a unique value proposition, and a willingness to make tough trade-offs in choosing what not to do. Strategy goes far beyond the pursuit of best practices. It involves the configuration of a tailored value chain—the series of activities required to produce and deliver a product or service—that enables a company to offer unique value. To be defensible, moreover, the value chain must be highly integrated. When a company's activities fit together as a self-reinforcing system, any competitor wishing to imitate a strategy must replicate the whole system rather than copy just one or two discrete product features or ways of performing particular activities. (Porter, 2001)

#### 2.5.1 Trade-offs

Choosing a unique position, however, is not enough to guarantee a sustainable advantage. A valuable position will attract imitation by incumbents, who are likely to copy it in one of two ways. (Porter, 1996) But a strategic position is not sustainable unless there are trade-offs with other positions. Trade-offs occurs when activities are incompatible. Simply put, a trade-off means that more of one thing necessitates less of another. (Porter, 1996)

Trade-offs arise for three reasons. The first is inconsistencies in image or reputation. A company known for delivering one kind of value may lack credibility and confuse customers - or even undermine its reputation - if it delivers another kind of value or attempts to deliver two inconsistent things at the same time. Second, and more important, trade-offs arise from activities themselves. Different positions (with their tailored activities) require different product configurations, different equipment, different employee behaviour, different skills, and different management systems. Many trade-offs reflect inflexibilities in machinery, people, or systems. Finally, trade-offs arise from limits on internal coordination and control. By clearly choosing to compete in one way and not another, senior management makes organizational priorities clear. Companies that try to be all things to all customers, in contrast, risk confusion in the trenches as employees attempt to make day-to-day operating decisions without a clear framework. (Porter, 1996)

Positioning trade-offs are pervasive in competition and essential to strategy. They create the need for choice and purposefully limit what a company offers. They deter straddling or repositioning, because competitors that engage in those approaches undermine their strategies and degrade the value of their existing activities. (Porter, 1996) In general, false trade-offs between cost and quality occur primarily when there is redundant or wasted effort, poor control or accuracy, or weak coordination. (Porter, 1996)

For the past decade, as managers have improved operational effectiveness greatly, they have internalised the idea that eliminating trade-offs is a good thing. But if there are no trade-offs companies will never achieve a sustainable advantage. They will have to run faster and faster just to stay in place. (Porter, 1996) Strategy is making trade-offs in competing. The essence of strategy is choosing what not to do. Without trade-offs, there would be no need for choice and thus no need for strategy. Any good idea could and would be quickly imitated. (Porter 1996)

# 2.5.2 Fit and Sustainable Competitive Advantage

#### **2.5.2.1 Fit Drivers**

Positioning choices determine not only which activities a company will perform and how it will configure individual activities but also how activities relate, fit, and reinforce to one another. While operational effectiveness is about achieving excellence in individual activities, or functions, strategy is about combining activities. (Porter, 1996)

Porter (1996) states that fit locks out imitators by creating a chain that is as strong as its strongest link. One activity's value to customers can be enhanced by a company's other activities. That is the way strategic fit creates competitive advantage and superior profitability. Porter (1996) provides three types of fit, and explains that they are not mutually exclusive. First-order fit is simple consistency between each activity (function) and the overall strategy. Consistency ensures that the competitive advantages of activities cumulate and do not erode or cancel themselves out. It makes the strategy easier to communicate to customers, employees, and shareholders, and improves implementation through single-mindedness in the corporation. Second-order fit occurs when activities are reinforcing. Third-order fit goes beyond activity reinforcement to what Porter calls optimisation of effort. Coordination and information exchange across activities to eliminate redundancy and minimize wasted effort are the most basic type of effort optimisation. (Porter, 1996)

In all three types of fit, the whole matters more than any individual part. Competitive advantage grows out of the entire system of activities. The fit among activities substantially reduces cost or increases differentiation. Beyond that, the competitive value of individual activities - or the associated skills, competencies, or resources - cannot be decoupled from the system or the strategy. Thus in competitive companies it can be misleading to explain success by specifying individual strengths, core competencies, or critical resources. (Porter, 1996)

# 2.5.2.2 Fit and Sustainability

Strategic fit among many activities is fundamental not only to competitive advantage but also to the sustainability of that advantage. It is harder for a rival to match an array of interlocked activities than it is merely to imitate a particular sales-force approach, match a process technology, or replicate a set of product features. Positions built on systems of activities are far more sustainable than those built on individual activities. (Porter, 1996) Existing companies that try to reposition or straddle will be forced to reconfigure many activities. And even new entrants, though they do not confront the trade-offs facing established rivals, still face formidable barriers to imitation. (Porter, 1996)

According to Porter (1996), the more a company's positioning rests on activity systems with secondand third-order fit, the more sustainable its advantage will be. Such systems, by their very nature, are usually difficult to untangle from outside the company and therefore hard to imitate. And even if rivals can identify the relevant interconnections, they will have difficulty replicating them. Achieving fit is difficult because it requires the integration of decisions, and actions across many independent subunits.

A competitor seeking to match an activity system gains little by imitating only some activities and not matching the whole. Performance does not improve; it can decline. (Porter, 1996) Finally, fit among a company's activities creates pressures and incentives to improve operational effectiveness, which makes imitation even harder. Fit means that poor performance in one activity will degrade the performance in others, so that weaknesses are exposed and more prone to get attention. Conversely, improvements in one activity will prone to get attention. Conversely, improvements in one activity will pay dividends in others. Companies with strong fit among their activities are rarely inviting targets. Their superiority in strategy and in execution only compounds their advantages and raises the hurdle for imitators. (Porter, 1996)

When activities complement one another, rivals will get little benefit from imitation unless they successfully match the whole system (Porter, 1996). The most viable positions are those whose activity systems are incompatible because of trade-offs. Strategic positioning sets the trade-off rules that define how individual activities will be configured and integrated. Seeing strategy in terms of activities systems only makes it clearer why organizational structure, systems, and processes need to be strategy specific. Tailoring organization to strategy, in turn, makes complementarities more achievable and contributes to sustainability. (Porter, 1996)

Conversely, frequent shifts in positioning are costly. Not only must a company reconfigure individual activities, but it must also realign entire systems. Some activities may never catch up to the vacillating strategy. The inevitable result of frequent shifts in strategy, or of failure to choose a distinct position in the first place, is "me-too" or hedged activity configurations, inconsistencies across functions, and organizational dissonance. (Porter, 1996)

Improving operational effectiveness is a necessary part of management, but it is not strategy. In confusing the two, managers have unintentionally backed into a way of thinking about competition that is driving many industries toward competitive convergence, which is in no one's best interest and is not inevitable. (Porter, 1996) A company's choice of a new position must be driven by the ability to find new trade-offs and leverage a new system of complementary activities into a sustainable advantage. (Porter, 1996)

# 3. FRAME OF REFERENCE

Thus far, in chapter one, we developed and concluded our research area to concern value chain and Internet in companies pursuing a differentiation strategy. Continually, the relevant literature related to the research area is systematically elaborated in chapter two. In the following chapter, we are discussing our research problem and developing the research questions for our study, and presenting the conceptualisation and frame of reference. The research area of the study is formulated as:

Value Chain and the Internet in Companies Pursuing a Differentiation Strategy

# 3.1 Research Problem

In respect of competitive advantage from Chapter Two, there are considerable various approaches and broad dimensions according to different scholars. Porter (1998) states that it is at the heart of a firm's performance in competitive markets, and in his article (2001) he provides two ways to achieve competitive advantage in Internet era, i.e. operational effectiveness and strategic positioning. McLaughlin et al. (2003) claim that, in today's marketplace, corporations are looking for the ways to differentiate themselves from their competitors. Hartman et al. (2000) consider that technology can be quickly and easily duplicated, therefore, distinction is becoming more important than ever. Chaston (2001) proposes using promotion to create a "perceived difference" in the mind of consumer. Garvin states in 1987 that, in relation to quality, there are eight dimensions that might be considered to gain competitive advantage. However, a lot of scholars have referred to Porter's competitive advantage strategy when they talk about competitive advantage. Hence, we will apply Porter's two ways' category of achieve competitive advantage for our study; namely, operational effectiveness and strategic positioning, and we chose strategic positioning to this study. We believe that most of dimensions are included in these two categories. Harman et al. consider in 2000 that technology can be quickly and easily duplicated. There is no advantage to having something that can be easily duplicated. Porter (2001) further claims that simply improving operational effectiveness does not provide a competitive advantage. Once a company establishes a new best practice, its rivals tend to copy it quickly. In study of Lumpkin et al. (2002), they also note that easy access to Internet technology presents new challenges to competitive advantage, because nearly all firms have access to this relatively inexpensive technology. The resulting improvements in operational effectiveness will be broadly shared, as companies converge on the same applications with the same benefits. Therefore, Porter states in 2001 that as it becomes harder to sustain operational advantages, strategic positioning becomes all the more important. Based on aforementioned discussion, the research problem can be concluded as:

How can the value chain be described in a company pursuing a differentiation strategy under the influence of the Internet?

# 3.1.1 Research Question One and Conceptual Framework

After deciding the research problem for this study, we can now develop our research questions. As Porter repeats in 2001, the basic tool for understanding the influence of information technology on companies is the value chain. The value chain helps to diagnose competitive advantage and finding

the ways to enhance it. Garvin proposes in 1987 that, in relation to quality, there are eight dimensions that might be considered to obtain competitive advantage: features, actual performance, conformance to quality expectations by customers, durability, reliability, style and design. To use promotion to create a "perceived difference" in the mind of consumer is claimed by Chaston in 2001. In addition, Chaston also provides expanded e-commerce competitive advantage options. We consider that the broad dimensions and sources of competitive advantage would make our study very complex and diverse, and too difficult to handle within the scope of our study. Researchers have provided the models on the basis of individual activities, such as product-oriented competitive quality-oriented. marketing-oriented competitive advantage, competitive advantage, or price-oriented competitive advantage. However, we believe that value chain is better-suited tool to systematically and logically describe the activities, in which firm's competitive advantages are stemmed from and sustained. In the value chain literature, we have found that, excluding few examples, there is basically one author and one value chain that is quoted and adapted by other authors. That value chain model is formulated by Michael E. Porter, and it was presented first time in 1985 (1st edition of the book Competitive Advantage). Hence, we will limit and formulate all the possible sources of competitive advantage to the nine activities of Porter's value chain, which is most commonly cited and applied by many scholars.

With basic value chain tool of diagnosing and enhancing competitive advantage, we now turn to how the Internet impacts on the value chain. This is an approach we find out how the Internet has affected on company's differentiation. As Rodgers et al. (2002) state, the business environment has recently changed radically, and that is the consequence of information technology. Rayport and Sviokla (1995) state that every business today competes in two worlds, namely, a physical and virtual world. Mougayar (1998) presents three scenarios of what happens to the old value chain when the Internet is advented, i.e. better efficiency, disintermediary and reintermediary, and value chain becoming virtual. Also Hooft and Stegwee (2001) address that the information technology not only affects the sales side of the organization but also has potential to influence all primary and support value activities. A study conducted by Lawton and Michaels (2001) shows that the virtual value chain is a highly flexible and extremely competitive structure, but will succeed only if information flows freely between all associates. In addition, Rayport and Sviokla (1995) claim that information is not viewed as a by-product of the strategic activities, performed around the physical value chain, but rather begins to play a strategic role in itself. Moreover, they state that creating value with information consists of gathering, organizing, selecting, synthesizing and distributing of information in any stage of a virtual value chain. On the basis of above discussion, we develop our first research question as follows:

How can the Value Chain Activities be described under the influence of the Internet?

Research Question One is about the value chain of the companies. This Research Question addresses on how Internet technology has impacted on their value chain activities, which are explained in Chapter Two. In order to answer Research Question One, we form our conceptual framework by combining previous literature. Based on Porter's value chain model (Figure 3.1), we have complemented it with the Rayport and Sviokla's information factor, which we consider to help us get better understanding of value chain and the Internet. We have also provided the conceptualisation about Porter's value chain's primary activities (Table 3.1) and support activities (Table 3.2).

Support	Internet ⇔ Firm Infrastructure							
Activities	Internet ⇔ Human Resource Management  Internet ⇔ Technology Development							
	Internet ⇔ Procurement							
Primary Activities	Internet		Internet	Internet				
Activities	Ţ.	Internet	į;	<b>Û</b>	Internet			
	Inbound	<b>Operations</b>	Outbound	Marketing	≎ Service			
	Logistics		Logistics	and Sales				
	Information Gathering							
	Information Organizing							
	Information Selecting							
	Information Synthesizing							
	Information Distributing							

Figure 3.1 Impact of Internet Technology on Generic Value Chain

Table 3.1 Primary Activities of Value Chain

Dimension	Concepts	Conceptualisation	Operationalisation
	Inbound Logistics	Activities associated with receiving and warehousing, and disseminating inputs to the product.	<ul> <li>Material handling</li> <li>Storing</li> <li>Inventory control</li> <li>Vehicle scheduling</li> <li>Returns to suppliers</li> </ul>
Primary Activities	Operations	Activities associated with transforming inputs into finished products.	- Machining - Packaging - Assembly - Equipment Maintenance - Testing - Printing - Facility Operations
	Outbound Logistics	Activities associated with collecting, storing and distributing of finished product to buyer.	<ul> <li>Finished Goods Warehousing</li> <li>Material Handling</li> <li>Delivery Vehicle Operation</li> <li>Order Processing</li> <li>Scheduling</li> </ul>
	Marketing and Sales	Activities associated with providing a means by which buyers can purchase the product and facilitating and inducing them to do so.	<ul> <li>- Advertising and Promotion</li> <li>- Sales Force</li> <li>- Quoting</li> <li>- Channel Selection</li> <li>- Channel Relations</li> <li>- Pricing</li> </ul>
	Service	Activities associated with providing service to enhance or maintain the value of the product.	<ul><li>Installation</li><li>Repair</li><li>Training</li><li>Parts Supply</li><li>Product Adjustment</li></ul>

Table 3.2 Support Activities of Value Chain

Dimension	Concepts	Conceptualisation	Operationalisation
Support Activities	Firm Infrastructure	Firm Infrastructure usually supports the entire value chain and not individual activities.	<ul> <li>General Management</li> <li>Planning</li> <li>Finance</li> <li>Accounting</li> <li>Legal</li> <li>Governmental Affairs</li> <li>Quality Management</li> </ul>
	Human Resource Management	Human Resource Management supports from individual primary and support activities to the entire value chain. Human resource management affects competitive advantage in any firm, through its role in determining the skills and motivation of employees and the cost of hiring and training.	<ul> <li>Recruiting</li> <li>Training and Development</li> <li>Compensation Of Personnel</li> </ul>
	Technology Development	Technology Development consists of a range of activities that can be broadly grouped into efforts to improve the product and the process. Technology development takes many forms from basic research and product design to media research, process equipment design, and servicing procedures. Every value activity embodies technology, whether it is know-how, procedures, or technology embodied in process equipment.	<ul> <li>Research</li> <li>Product Design</li> <li>Media Research</li> <li>Process Equipment Design</li> <li>Servicing Procedures</li> </ul>
	Procurement	Procurement refers to the function of purchasing inputs used in the firm's value chain, not to the purchased inputs themselves. Procurement tends to be spread throughout the company, because purchased inputs are present in every value activity. The cost of procurement activities themselves usually represents a small if not insignificant portion of total costs, but often has a large impact on the firm's overall cost and differentiation.	<ul> <li>Raw Material</li> <li>Supplies</li> <li>Machinery</li> <li>Office Equipment</li> <li>Buildings</li> </ul>

## 3.1.2 Research Question Two and Conceptual Framework

Mougayar in his article (1998) discusses that after companies have copied what their competitors have done, they are both on an equal footing again, Internet has speeded up this duplication process even further. Harman et al. (2000) consider that as companies entered the information age, their mistake was to assume that IT by itself could drive a sustainable competitive advantage. Technology can be quickly can easily duplicated. There is no advantage to having something that can be easily duplicated. Porter states both in 1996 and 2001 that simply improving operational effectiveness does not provide a competitive advantage. For at least the past decade, managers have been preoccupied with improving operational effectiveness. However, it is not usually sufficient. The most obvious reason for that is the rapid diffusion of best practices. Today, almost every company is developing similar types of Internet applications, and resulting improvements in operational effectiveness will be broadly shared. Therefore, strategic positioning becomes all the more important. In the study of Lumpkin et al. (2002), they note that easy access to Internet technology presents new challenges to competitive advantage, because nearly all firms have access to this relatively inexpensive technology. It becomes harder to sustain operational advantages. As we discussed earlier, in respect of strategic positioning, scholars have broad views of the ways to positioning. Especially, when it refers to Internet technology, the strategic positioning issue is rather diverse and activity-focused, such as branding, customer relationship building, and loyalty. We believe that these are all important issues for helping company to strengthen its advantage. However, a single study should not attempt to conduct research on all fields. We focus on discussing strategic positioning on generic strategy level, which is something that is deemed to be more manageable. Porter has stated the sources of differentiation, presenting that any activity in a value chain can contribute to differentiation. Accordingly, we formulate our second research question as below:

How can the sources of differentiation be described under the influence of the Internet?

This second research question is focused on sources of differentiation. In Chapter Two, we have covered the literature of differentiation, along with aforementioned discussion and based on that we have developed the following frame of reference showed in Figure 3.2. As our frame of reference for Research Question Two we have applied Porter's model of Sources of Differentiation.

FIRM	Top Management Support in Selling and Servicing					
INFRASTRUCTURE		that Enhance the Firm Management Information				
HUMAN RESOURCE MANAGEMENT	Superior Training of Personnel	Stable Workforce Policies; Quality of Work Life Program; Programs to Attract the Best Employees.		Sales Incentives to Retain Best Salespersons; Recruiting Better Qualified Sales and Service Personnel	Extensive Training of Service Technicians	
TECHNOLOGY DEVELOPMENT	Superior Material Handling & Sorting Technology; Proprietary Quality Assurance Equipment	Unique Product Features; Rapid Model Introductions; Unique Production Process; Automated Inspection Procedures	Unique Vehicle Scheduling; Software; Special Purpose Vehicles or Containers	Applications Engineering Support; Superior Media Research; Most Rapid Quotations for Tailored Models	Advanced Servicing Techniques	
PROCUREMENT	Most Reliable Transportation for Inbound Deliveries	Highest Quality Raw Materials; Highest Quality Components	Best Located Warehouses; Transportation Suppliers that Minimize Damage	Most Desirable Media Placements; Product Position and Image	High Quality Replacement Parts	
	Handling of Inputs that Minimizes Damage or Degradation; Timeliness of Supply to the operation Process; Inventory Control	Tight Conformance to Specifications; Attractive Product Appearance; Responsiveness to Specification Changes; Low Defect Rates; Short Time to operation	Rapid and Timely Product/Service Delivery; Accurate and Responsive Order Processing; Handling that Minimizes Damage	High Advertising Level and Quality; High Sales Force Coverage and Quality; Personal Relationships with Channels or Buyers; Superior Technical Literature & Other Sales Aids; Most Extensive Promotion; Most Extensive Credit to Buyers or Channels	Rapid Installation; High Service Quality; Complete Field Stocking of Replacement Parts; Wide Service Coverage; Extensive Buyer Training	
	INBOUND LOGISTICS	OPERATIONS	OUTBOUND LOGISTICS	MARKETING& SALES	SERVICE	

Figure 3.2 Sources of differentiation

# 3.2 Overall Conceptualisation of the Framework

In this Chapter Three, we have formulated the research problem and the research questions, and furthermore conceptualised the frame of reference for this study. This frame of reference is presented graphically in Figure 3.3, and it will allow us to answer to our research questions and research problem. The framework guides us to find out how the value chain activities can be described under the influence of the Internet, and how the sources of differentiation can be described under the influence of the Internet.

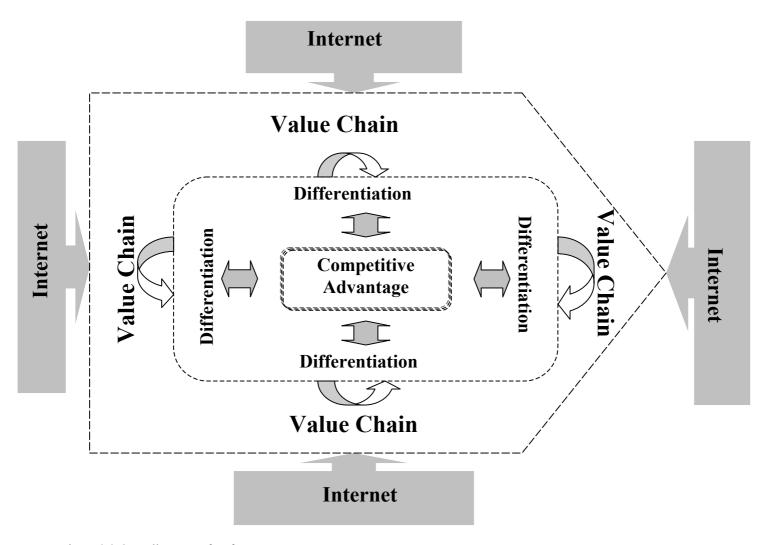


Figure 3.3 Overall Frame of Reference

# 4. METHODOLOGY

A method is a tool, a way to solve a problem and reach new knowledge (Holme and Solvang, 1997). Once we are comfortable proceeding with a specific focus, the next decision involves selecting overall methodological choices. The methodological choices reported in this study gave us guidelines for how we should gather needed information for our research and work with it. This increased the possibility to receive appropriate answers to our research questions and make valuable conclusions.

# 4.1 Research Purpose

According to Tull and Hawkins (1984), a number of researchers have found it useful to consider three general categories of research based on the type of information required. These three categories are exploratory, descriptive, and explanatory (causal) research. (Ibid.)

**Exploratory studies** aim for basic knowledge within the problem area. These studies are suitable when a problem is difficult to demarcate and when relevant theory is unclear. Exploratory studies are a valuable means of finding our "what is happening; to seek new insights; to ask questions and to assess phenomena in a new light." It is a particularly useful approach if the researcher wishes to clarify his/her understanding of a problem. (Saunders and Thornhill, 2000) Exploratory studies are done to better comprehend the nature of the problem since very few studies might have been conducted regarding the phenomena needed to be understood. Thus, exploratory studies are important for obtaining a good grasp of the phenomena of interest and for advancing knowledge through good theory building. (Sekaran, 1992)

**Descriptive research** is undertaken in order to ascertain and to be able to describe the characteristics of variables in a situation. For instance, describing a class in terms of percentage of age, sex composition, age groupings, number of business course taken. The goal of a descriptive study is to describe relevant aspect of the phenomena of interest to the researcher from an individual, organizational, industry, or other perspective. Descriptive studies that present data in a meaningful form thus help to (1) understand the characteristics of a group in a situation of interest, (2) aid in thinking systematically about aspects in a given situation, (3) offer ideas for further probing and research, and/or (4) help make certain simple decisions (such as how many and what kinds of individuals should be transferred from one department to another). (Sekaran, 1992) This may be an extension of, or a forerunner to, a piece of exploratory research. It is necessary to have a clear picture of the phenomena on which the researcher wishes to collect data prior to the collection of the data. (Saunders and Thornhill, 2000)

**Explanatory research** emphasizes on studying a situation or a problem in order to explain the relationships between variables. It is useful for studying relations between causes and symptoms. The researcher tries to identify the factors, which together cause a certain phenomena. (Saunders and Thornhill, 2000)

Our research purpose is exploratory and also descriptive. In fact, we want to gain a deeper understanding of how the value chain can be described in a company pursuing a differentiation strategy under the influence of the Internet. Moreover, as we stated earlier, the researches on this are scant.

# 4.2. Research Approach

Qualitative and quantitative methods, as two paradigms, are not simply different ways of doing the same thing. Instead, they have different strengths and logics and are often best used to address different questions and purposes (Maxwell, 1996). Both qualitative and quantitative approaches are aimed at creating a better understanding of the society and to comprehend how individuals, groups and institutions act and have an influence on each other. According to Yin (1994) the best approach to use for a study depends on the purpose of the study and the accompanying research questions.

A qualitative study is designed to be consistent with the assumptions of a qualitative paradigm. The qualitative study is defined as an inquiry process of understanding a social or human problem, based on building a complex, holistic picture, formed with words, reporting detailed views of informants, and conducted in a natural setting (Creswell, 1994). The qualitative studies tend to be more flexible, while the quantitative ones are more structured. For qualitative studies the research problem needs to be explored because little information exists on the topic. The variables are largely known, and the researcher wants to focus on the context that may shape the understanding of the phenomenon being studied. In many qualitative studies a theory base does not guide the study because those available are inadequate, incomplete, or simply missing. (Creswell, 1994)

A quantitative study, consistent with the quantitative paradigm, is an inquiry into a social or human problem, based on testing a theory composed of variables, measured with numbers, and analysed with statistical procedures, in order to determine whether the predictive generalizations of the theory hold true (Creswell, 1994). Quantitative research is most often used in studies with clearly stated hypotheses that can be tested. This deductive path makes a distinction between science and personal experience and tends to concentrate more on description, explanation, generalization, and abstraction. It focuses on well-defined, narrow studies. Quantitative research strives to use a consistent and logical approach toward what is being investigated and uses statistical inferences and mathematical techniques for processing the data (Foster, 1998).

The nature of the problem is an important factor to decide on better-suited approach. Based on our purpose and research questions, as well as the above discussion, the procedure we have chosen is of a qualitative nature, and we consider qualitative approach can help us gain a deeper understanding of how the value chain can be described in a company pursuing a differentiation strategy under the influence of the Internet.

# 4.3. Research Strategy

We now turn to the research strategies we may employ. As Yin states, there are a number of approaches for a researcher to conduct social science research. What matters is not the label that is attached to a particular strategy, but whether it is appropriate for our particular research questions and objectives (Saunders and Thornhill, 2000). Depending on the character of research questions, to which extent the researcher has control over actual behavioural events and to what degree the focus is on contemporary events, the researcher can choose between an experiment, a survey, history, an analysis of archival records and a case study.

*Experiment* is a classical form of research that owes much to the natural sciences, although it features strongly in much social science research, particularly psychology (Saunders and Thornhill, 2000). For our research purpose, this strategy is ruled out.

When investigating the past and there is no person alive to report what occurred, *a history investigation* could be conducted (Yin, 1989). History is also ruled out, as the lack of focus on contemporary events with this method of data collection is not how this study is designed.

When conducting *an archival analysis* there is no control over behavioural events. This strategy is favoured when the research goal is to describe the incidence or prevalence of a phenomenon as well as when the goal is to predict certain outcomes (Yin, 1994). Because this study is qualitative and does not answer these questions, we did not find this to be a suitable research strategy.

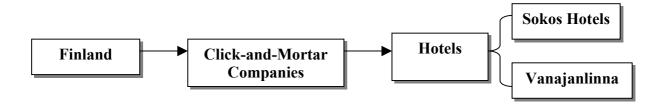
Survey research, the formality of the use of questionnaires, does not allow for us to go as deeply into the aspects of "why is happening." The data collected by the survey method may not be as wideranging as those collected by qualitative research methods, and we do not aim to answer who, where, how many, or how much questions. Furthermore, this type of study does not correspond to the qualitative way of research.

This leaves us one better-suited strategy for this research—case study. Yin (1994) states that a case study approach is best used as a method for gathering data when a "how" or "why" question is being asked about a contemporary set of events over which the researchers has little if any control. Yin continues that a case study approach helps investigators to refine their data collection plans with respect to both the contents of the data and the procedures to be followed (in collecting that data). As concluded by Yin, a qualitative, case study approach has a distinct advantage when a how or why question is being asked about a contemporary set of events over which the investigator has little or no control. We thought that adopting case studies would be the best way to conduct our research. Multiple-case choice. According to Yin (1989), a primary distinction in designing case studies is between single-and multiple-case designs. This means the need for a decision, prior to any data collection, on whether a single-case study or multiple cases are going to be used to address the research questions. When making a single case study the investigators have no possibilities to make comparisons or generalize. Multiple case studies on the other hand give the researchers the opportunity to compare. The evidence from multiple cases is often considered more compelling, and the overall study is therefore regarded as being more robust. For our research, we selected multiplecase study not only for adding to the confidence and validity of the findings, but also for finding out possible similarities and dissimilarities between cases.

# 4.4. Sample Selection

Yin (1989) states that each case must be carefully selected so that it either predicts similar results (literal replication) or produces contrary results but for predictable reasons (a theoretical replication). To answer our research problem, which is how the value chain can be described in a company pursuing a differentiation strategy under the influence of the Internet, we have drawn our cases according to the following frame. (Figure 4.1)

Figure 4.1 Sample frame



Here in chapter four we will narrow down the study based on three factors:

# • Country: *Finland*

According to the convenience principle of sample selection, the cases will be drawn within Finland. The reason why we are concentrating on hotels in Finland is that both the authors have lived in Finland, and therefore have a genuine interest in the business life there.

#### Industry

According to Lumpkin et al. 2002, Internet technology is changing the way many firms do business. The most profound changes are not being seen at dot-com<sup>13</sup> start-ups, but at incumbent firms that are being transformed into e-businesses. These changes are forcing them to craft new strategies to sustain their competitive advantages. Furthermore, Porter claims that established companies will be the most successful when they deploy Internet technology to reconfigure traditional activities. (Porter, 2001) Moreover, as matter of fact, we believe that click-and-mortar<sup>14</sup> companies are the most commonly presented in the real life, and they are also the targets for our research purpose.

# Type of Industry

We consider that Information technology is applied to business-to-business companies and banks since early 1980's. Many companies have used EDI as the interface to streamline their business process with their business partners. Internet has made conducting business over the Internet much more popular, since it is low cost and ease to apply. Besides these reasons, the strong impact on consumer interacting with companies is also the main reason for the popularity of Internet. Therefore, those companies, who have applied Internet technology in their value chain activities, and enhanced interface of interacting with their customers, are the potential samples for our study. As we have found that many manufacturing companies in Finland have monopoly situation in their own industry market, and there are only very few bigger players in the same industry category. However, by looking at hotels industry, in fact, there is more competition among hotels.

Payne speaks out in 1993 that, during the 1980s, the strategic relevance of positioning started to become recognized amongst leading service organizations. Service companies are now identifying their key market segments and then determining how they wish consumers to perceive both their company and its products and services. Positioning is of particular significance in the services sector as it places an intangible service within a more tangible frame of reference. He continuously states that one technique for considering superior delivered value is the value chain. The generic value chain was derived largely from a consideration of manufacturing companies. Although it has broad applicability to services it is more useful to develop value chains that specifically reflect the tasks within a particular service sector. Accordingly, we have modified our framework for our study in the earlier chapter.

Payne (1993) also provides that the value chain concept may be used in several ways by a service firms. And some of these ways the firm can use to gain a clear understanding of its own value chain and where it seeks to gain sources of differentiation or cost advantage to achieve superior delivered value to its customers. It can be also used to understand where it fits in the value chain of its suppliers and distributors, and to identify how competitors create value and how are their activities compared to others (competitive benchmarking). (Ibid.) Therefore, it verifies again that value chain is valid tool for our study.

<sup>&</sup>lt;sup>13</sup> Dot-com can be defined as business whose main trading presence is on the Internet. (Dave, 2002)

<sup>&</sup>lt;sup>14</sup> Chaffey (2002) defines clicks-and-mortar as a business combining an online and offline presence.

#### Hotels

Not only do we find the hotel industry to be very compelling and there are numerous of players in that field, but also many hotels have applied similar Internet technology, such as interface of supporting business activities. Furthermore, Anckar and Walden (2001) state that the travel industry appears exceptionally interesting in terms of the possibilities offered by e-commerce. Not only is it one of the rare industries where business-to-consumer Internet commerce is conducted on a large scale already today, it is also an industry with great traditions in the information technology (IT) sector. As a matter of fact, that is the industry we are looking for and can help us to find out how they differentiate themselves from competitors with Internet technology.

#### Hotel Characteristics:

- ➤ The hotel must be domestic and possessed by Finnish owner. The multinational hotel corporations will be ruled out as potential samples, because we would like to interview the higher level of management who is supposed to be able to answer our questions, and often the head office is located somewhere else than in Finland.
- The hotel is expected to fully perform the functions of value chain, and Internet technology has been applied to its business.
- > The hotels show some kind of differentiation.

A further question we encounter has to do with the number of cases deemed necessary or sufficient for our study. As Yin (1989) points out that because a sampling logic should not be used, the typical criteria regarding sample size are irrelevant. Instead, the researcher should think of this decision as a reflection of the number of case replications---both literal and theoretical---that he/she would like to have in the study. In addition, the purpose of our study is to get understanding of the research problem we proposed, the analytical generalization is not our intention for this study. Moreover, the practical issue must be taken into account—time limitation. Therefore, two cases totally will be drawn for this study.

## 4.5 Data Collection

Six sources of evidence can be the focus of data collection for case studies: documentation, archival records, interviews, direct observations, participant-observation, and physical artefacts. (Yin, 1989)

Direct observation occurs when a field visit is conducted during the case study. It could be as simple as casual data collection activities, or formal protocols to measure and record behaviours. This technique is useful for providing additional information about the topic being studied. The reliability is enhanced when more than one observer is involved in the task. (Ibid) This study does not focus on events in real time but instead asks case companies' views of how and why the value chain can be described in a company pursuing a differentiation strategy under the influence of the Internet. The time for such data collection is also deemed not possible for this study.

Participant-observation makes the researcher into an active participant in the events being studied. This often occurs in studies of neighbourhoods or groups. The technique provides some unusual opportunities for collecting data, but could face some major problems as well. The researcher could well alter the course of events as part of the group, which may not be helpful to the study. (Yin, 1989) For the same reason as mentioned in direct-observation, this method will be ruled out for this research.

*Physical artefacts* or cultural artefacts can be tools, instruments, or some other physical evidence that may be collected during the study as part of a field visit. The perspective of the researcher can be broadened as a result of the discovery. Physical artefacts have less potential relevance in the most typical kind of case study. (Yin, 1989) In our research, the cultural features are not involved in collecting this evidence.

Archival documents can be service records, organizational records, lists of names, survey data, and other such records. The investigator has to be careful in evaluating the accuracy of the records before using them. (Yin, 1989) As one of the resource evidences, we can utilize this method to collect case companies' data, and it helps us understand "what happened and what is happening."

Documents could be letters, memoranda, agendas, administrative documents, newspaper articles, or any document that is germane to the investigation. In the interest of triangulation of evidence the documents serve to corroborate the evidence from other sources. Documents are also useful for making inferences about events. (Yin, 1989) For the same reason as mentioned above, we adopt documents method as one of our data resources.

Interviews are the most important sources of case study information for our research. There are several forms of interviews that are possible: Open-ended, Focused, and Structured. In an open-ended interview, key respondents are asked to comment about certain events. They may propose solutions or provide insight into events. They may also corroborate evidence obtained from other sources. The focused interview is used in a situation where the respondent is interviewed for a short period of time, usually answering set questions. This technique is often used to confirm data collected from another source. The structured interview is similar to a survey, and is used to gather data in cases such as neighbourhood studies. The questions are detailed and developed in advance, much as they are in a survey. (Yin, 1989)

For this study, we deem that a focused interview is the best choice as the contents of our research is pre-determined. Yin (1989) states that a major purpose of such interview might be simply to corroborate certain facts that the researchers already think have been established. For another reason, we consider this method allows researchers to be following a certain set of questions derived from the case study protocol. It would certainly decrease the possibility of misunderstanding between interviewer and informants. Meanwhile, such a setting will also make researcher possible for additional questions and topics to be given during the course of the interview.

The interview guides for this should be developed under the guidance and feedback of several researchers in order to make sure the questions asked are not only proper, but also clearly stated and understandable. The selection of respondents is crucial. If the wrong persons are being interviewed, the research may turn out to be invalid or worthless. That is also why we position our sample selection criteria to build validity of research. The intention of the research was explained and the right person could be identified during the first contact with each company, in order to fulfil the purpose of this research it was of great importance to get in contact with a person at the company with the best knowledge of company's over all operation and experience of the Internet technology strategy. The interview will be done by personal interview with the permission of using tape recorder, and the techniques used for interview depends on the accessibility of the cases.

Moreover, Yin (1989) writes that no single source has a complete advantage over all the others. In fact, the various sources are highly complementary and a good case study will therefore want to use as many sources as possible. This can help to deal with the problems of establishing the construct validity and reliability of a case study. Above all discussion indicates that this study will therefore utilize the three remaining sources from which evidence can be collected. Meanwhile, it maximize the possibility of triangulation multiple sources of evidence.

# 4.6 Data Analysis

Yin (1989) states that data analysis consists of examining, categorizing, tabulating, or otherwise recombining the evidence, to address the initial propositions of a study. There are two general strategies that help an investigator to choose among different techniques and to complete the analytic phase of the research successfully, i.e. relying on theoretical propositions and developing a case description. The former is the first and more preferred strategy, and it follows the theoretical proposition that led to the case study. The original objectives and design of the case study presumably were based on such propositions, which in turn reflected a set of research questions, reviews of the literature, and new insights. Developing a case description is the second general analytic strategy. The strategy is less preferable than the use of theoretical propositions but serves as an alternative when theoretical propositions are absent. According to purpose of this study, the second strategy will not be applied for the method of data analysis. (Ibid.)

Within such a strategy, three dominant analytic techniques should be used: pattern-matching, explanation-building, and time-series analysis. Yin addresses in his book 1989 that, for a case-study analysis, one of the most desirable strategies is the use of a pattern-matching logic. Such logic compares an empirically based pattern with a predicted one. If the patterns coincide, the results can help a case study to strengthen its internal validity.

In writing about qualitative data analysis, Miles and Huberman (1994) define that analysis is consisting of three concurrent flows of activity: data reduction, data display, and conclusion drawing/verification.

#### Data Reduction

It refers to the process of Selecting, Focusing, Simplifying, Abstracting, and Transforming the data that appear in written-up field notes or transcriptions. As data collection proceeds, further episodes of data reduction occur (writing summaries, coding, teasing out themes, making clusters, making partitions, writing memos). Data reduction is a form of analysis that sharpens, sorts, focuses, discards, and organizes data in such a way that "final" conclusions can be drawn and verified.

## Data Display

Data display is the second major flow of analysis. Miles and Huberman (1994) explain that, generically, a display is an organized, compressed assembly of information that permits conclusion drawing and action. The better displays are a major avenue to valid qualitative analysis. The displays include many types of matrices, graphs, charts, and networks. Looking at displays helps us to understand what is happening and to do something—either analyse further or take action—based on that understanding.

## Conclusion Drawing and Verification

The third steam of analysis activity is conclusion drawing and verification. From the start of data collection, the qualitative analyst is beginning to decide what things mean—is noting regularities, patterns, explanations, possible configurations, causal flows, and propositions. The competent researcher holds these conclusions lightly, maintaining openness and scepticism. (Miles and Huberman, 1994)

We will in this study follow these three steps in order to analyse the empirical data. We will use the within-case analysis and the cross-case analysis as discussed by Miles and Huberman. The empirical data will be reduced through a within-case analysis where the cases will be compared against the

frame of reference. Further, the data will be displayed through a cross-case analysis where the cases will be compared against one another. We believe that aforementioned strategy and flows of data analysis will guide us through the empirical study for this research. Consequently, our conclusion can be drawn on basis of data analysis.

# 4.7 Quality Standards

For determining the trustworthiness and the quality of the gathered data, there are two factors to consider, reliability and validity. Due to the fact that a research design is supposed to represent a logical set of statements, the quality of the study can also be judged by four tests (Yin, 1994). According to Yin these tests for qualitative case study research are: construct validity, internal validity, external validity and reliability.

#### 4.7.1 Validity

Yin states that judgements of validity measure how valid the collected data is, and whether or not the methods used to gather data measure or explain the things what the researcher states to measure or explain. (Yin, 1994)

Yin defines construct validity as the establishment of correct operational measures for the concepts being studied. Yin presents three tactics in increasing construct validity. First one is to use multiple sources of evidence during the data collection. The second tactic is to establish a chain of evidence, which should also be done during the data collection. The last tactic is to construct a draft case study report, which is reviewed by the key informants. (Yin, 1994)

Internal validity is related to the establishment of a causal relationship whereby certain conditions are shown to lead to other conditions, as distinguished from fake relationships (applies for explanatory studies only). (Yin, 1994.) Since the purpose of our study is exploratory and descriptive, internal validity is not included for this study.

External validity is defined by Yin (1994) as it establishes the domain to which a study's findings can be generalized. To increase external validity, Yin emphasizes the importance of using replication logic in multiple-case studies. For this study we used two companies, which provides us with a better base of understanding than a single case study.

#### 4.7.2 Reliability

Reliability is, according to Yin (1994), concerned with how reliable and accurate the research methods and techniques for collecting data are. Reliability is a way of measuring how well a method provides a researcher with the same results, if the method was to be conducted again by another person but with the exact same conditions.

In order to reach a high degree of reliability, we put much effort on finding the right persons in the company for the interview. This way we can be sure that the information we get from the interviewee is as accurate as possible.

In the interview situation we recorded the discussion and the answers with a tape recorder in order to minimise the risk of failing in getting the right answers. Afterwards we also sent the printed version of the answers back to the persons interviewed so that they can later check that there have not been

any misunderstandings with their answers. In that connection we were also able to ask some additional questions, if needed. The information gathered from the interviews was handled and evaluated in as objective way as possible to ensure the reliability in that sector.

# 4.8 Summary

We have here in Chapter Four produced the methodology for this study. We have presented the methods we chose and justified them. Here in Chapter 4.8 we have formulated a graphical presentation of choices made in order to conduct this study (Figure 4.2)

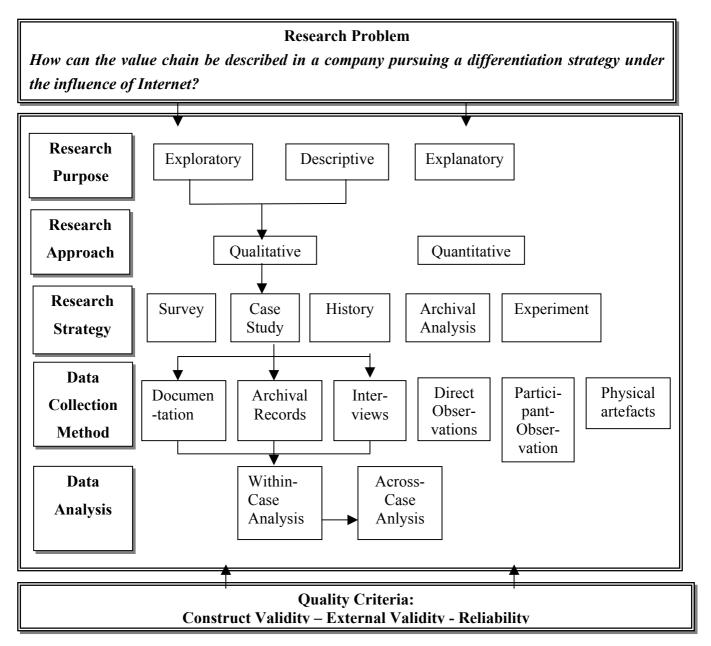


Figure 4.2 The Method for our Research

# 5 EMPIRICAL DATA PRESENTATION

In this Chapter Five we will first introduce our two case companies and thereafter present the empirical data gathered from these case companies. We will first shortly present the hotel industry in Finland. Presentation of both the case companies includes the general background information about that company and its products and markets. After that we will present the data collected from case companies according to our research questions. This data will be presented in three different parts; first we will present the company's current situation concerning the Internet applications. Then, with respect to our two research questions, we will present the data about information's affect on value chain, and the sources of differentiation.

# 5.1 Hotel Industry in Finland

In Finland there were 754 hotels and 380 other registrated accommodation companies in 2002. The number of hotels was the same in 2001, but has been slightly decreased from 794 hotels in 2000. The number of rooms in all the hotels in 2002 was 49,983, and the number of beds was 105,585. The occupancy rate of the hotels in 2002 was 48,2 percent, when in 2001 it was 49,4 percent, so it has also slightly decreased.

The biggest hotel chain in Finland in 2002 was the S Group with its 42 hotels (35 Sokos Hotels and 7 Radisson SAS hotels) and 7,544 rooms. The second biggest hotel chain was Restel with 37 hotels and 6,031 rooms, and the third biggest hotel chain was Scandic Hotels with 25 hotels and 4,143 rooms. Other big chains in Finland are Lomaliitto (27 hotels, 1,914 rooms), Finlandia Hotels (37 hotels, 1,911 rooms) and Best Western Hotels (14 hotels, 864 rooms). The smaller hotel chains and private hotels occupy the rest of the rooms.

The sales of the hotel industry including the restaurant sales in 2002 were 1,49 billion Euros<sup>15</sup> and without the restaurant sales it was 660 million Euros. From 2001 the sales of the hotel industry have not been changed. In 2002, from the customers in hotels in Finland, all together over 12 million customers, 71,6 percent were Finnish, and the remaining 28,4 percent were foreigners. The share of foreign customers has been increased by 1,5 percent from 2001, and the share of Finnish customers decreased by 2,3 percent.

# 5.2 Case Study One – Sokos Hotels

Our first case study is a hotel chain called Sokos Hotels. The interview was conducted with Mr. Lasse Lindevall, who is the vice president and in charge of sales and marketing in Hotel and Restaurant Division at SOK Corporation.

# 5.2.1 Background

Sokos Hotels is the biggest hotel chain in Finland, which is established in 1979, with its 35 hotels in 24 cities all around the country. In Sokos Hotels chain, there are approximately 5,500 rooms and staff over 3,000 persons. The chain has today also some international operations, Sokos Hotels has in September 2003 bought one hotel in Estonia, and the transition face under the common brand will be over at the beginning of 2004.

<sup>&</sup>lt;sup>15</sup> 30.12.2002 Euro was quoted as 9,1558 Swedish crowns.

Sokos Hotels chain is a part of the Finnish S Group. S Group consists of the cooperative societies and SOK with their subsidiaries and local cooperatives all over Finland. Group businesses include food and groceries, specialty goods, department stores, hotels and restaurants, hardware and agriculture, automobiles and service stations. The purpose of the S Group is to provide benefits for committed customer-owners. In the hotel and restaurant division they have all in all 42 hotels, which 7 are Radisson SAS hotels, and the rest is a Sokos Hotel chain. They also have about 300 restaurants from what about 50 % are so called chain restaurants, they belong to the chain, and the rest are individual. Main business of the S Group is the supermarkets and hypermarkets. The total turnover of the S Group was 7 billion Euros in 2002.

In addition to accommodation Sokos Hotels offers a range of restaurant services in connection to their hotels. The turnover was 440 million Euros in 2002 in the hotel and restaurant division. The occupancy of the chain in year 2002 was 59,7% while the occupancy of the whole branch in Finland was 48,2%. The hotel and restaurant business reported operating profit of 11,6 million Euros.

#### Markets

The structure of Sokos Hotels hospitality sales is changing, with leisure accommodation services on the increase whereas business travel is flat. The S Group's market share of the hospitality trade is 22 per cent. As their products Sokos Hotels has so called leisure time packages. Also 14 hotels in the Sokos Hotels chain, operating under Conference brand, offer conference services and also tailor free time activities for conference groups.

The geographical market of the Sokos Hotel chain is the whole Finland and nowadays also Estonia. As to customers, Sokos Hotels has both the leisure and business travellers. It is, however, slightly changing. The business travelling and business meetings sector is diminishing and the leisure sector is growing so the customer base consists more or less from both types, approximately 60 percent being business travellers and 40 percent leisure travellers.

The main competitors of the company come both from the private sector and the large-scale chains. In large-scale chains Sokos Hotels has mainly two major players in Finland. The first chain is Restel Ltd, which operates in a hotel and restaurant sector, and then Scandic Hilton, which operates in hotel sector. So the main competitors are Restel Ltd, Scandic Hilton and privately owned hotels.

#### Vision

The competition within the S Group's markets will increase in the near future. For this challenge S Group has renewed its strategies, and the main strategic stress points are cost efficiency, customer-based model in operations and support functions, goal-oriented management, and flexible and versatile service offerings. The S Group's vision is to add and offer more advantages and benefits to the customer owners, i.e. the people, who own the company, like customers, employees and shareholders.

## 5.2.2 Data regarding the Research Questions

#### 5.2.2.1 Information and Internet Technology Application

Sokos Hotels has applied huge amount of technology on its multi-channel sales. For front-end operation, they have applied IT application on their check-in and check-out functions to streamline the operation process. From company perspective, this information will be consolidated automatically linking to their back-end management, such as accounting. By looking at booking system, the company have had for about 20 years the GDS, which is a global distribution system and

offers a global distribution channel for tourism products and services. The travel agent clerks can book hotel, and bookings come to hotels via so-called switches. These bookings are channelled via these switches, that switch and channel the information to the right type, going to the hotel's CRS, the hotel's own booking system and from there it goes to the hotel. There are 5 or 6 GDSs in the world; Amadeus is the most commonly used in the Nordic countries.

In early 90s, as the companies have rapidly embraced Internet technology, Sokos Hotels set up its earliest website production while its competitors started. The website has been improved as time goes on, and it becomes real developed e-brochure lately. Around five years ago, the company applied online reservation system. More and more, Internet has been playing a part. To date, the Internet has evolved its compatibility not only being a type of brochure (e-brochure) for the company putting information on, but also bringing the traffic for the company. Customers can make booking over the Internet, and that booking goes to the same switch again into the hotel sector's reservation system and to the hotel. The Internet application has moved further from brochure-ware to customer interactivity and transaction enabler phase.

As a company, the first and foremost purpose of applying Internet technology is to sell product (bring traffic) and get customers to buy the product/services. Inside-out and outside in, Internet is mostly used for purposes of sales and marketing. However, to some extent, web-based technology exists almost in all the business activities, except the physical service performance. Mr. Lindevall notices that Internet application within the company has increased its ability gradually, from being an information channel for the people and the staff, to being used a bit on the reporting and accounting, up to now, when most of the companies order products to hotels and restaurants electronically, it has applied to the company's logistics as Web-based EDI. For the back-end operation, S Group and Sokos Hotels have applied Intranet and Extranet to its business operation. It shares partly with other companies' Extranets, and uses its own Intranet within the company to enable employees to share information by using e-mail, web publishing, accounting and logistics management.

#### **Internet and Threats and Benefits**

E-business adoption has benefited company in the ways of improving efficiency and driving down the costs. Internet application has helped people overcome the barriers of time and place. Now, customers can make online reservation anytime and anywhere now. As to the company, especially, the cost of distribution has decreased. There is always cost involved in distribution and selling the product. The Internet offers cheaper way to distribute, and that is one considerable benefit. Notwithstanding, one concern arises how to control over immense information. Mr. Lindevall considers that whatever information can be obtained through the Internet or Intranet, it is just the question of channelling information and what to do with this amount of information. The input is so huge of all this, and the output facilitates the top management level. He questions if all the information can be read and processed. Mr. Lindevall reminisces that, in the old days, no mobile phone was available, so the only way to sell something was to mail customers a brochure, write a letter or meet the person. Nowadays the touch points to customers are so many; accordingly, it becomes a bit harder to manage all the channels and places with the latest and right company's information, such as prices, services and so on. Hence, he considers that, to be in more control, having it little smaller is better than having it big and no control. Moreover, concerning the competition, Sokos Hotels and its competitors in Finland are more or less on the same level in light of Mr. Lindevall. Most of Sokos Hotels' competitors provide e-brochure and online booking function. Facing its counterparts, Sokos Hotels is working very much on this area, and trying to build it further and gain a leap there.

# **Strategic Vision of Internet Operations**

Sokos Hotels' main strategy is to offer products and services over the Internet to the people whom hotels already know what they are looking for and where they are, and the people know where hotels are. The company's marketspace will become one of the main channels for distributing sales to the targeted customers.

#### 5.2.2.2 Value Chain and Internet

#### **Generic Value Chain**

Sokos Hotels' value chain is similar to Porter's value chain. From broader point of view, S Group has a strong emphasis on inbound logistics. Naturally, the knowledge comes from the supermarket side, where it is all about logistics. The goods end up on the shelves almost automatically, the same as to the restaurants and hotels when buying products. It is very tightly managed. By looking at hotel sector, the activities of service and the production are the main points because they are the products the customers come for. The product is not the paper or the food, but how the customers are served. Accordingly, the emphasis varies depending on products. However, in a way the value chain is the same as generic value chain. Sokos Hotels owns few companies that handle the logistics of the goods to the restaurant and hotels. Regarding to operation, Sokos Hotels considers itself being very good in cost management so that it doesn't lose the advantage from logistical chain. Marketing and sales is about customer owners. Right now the S Group has 1,2 million households in Finland, which is about 2.5 million Finns who are within the Green Card customer owners. Customers can use this Green Card in all of S Group owned business areas, as well as its partners. And the bonuses vary from cooperation to cooperation. Naturally, the advantages come through being a larger company. And on the basis of the knowledge and experiences, the company focuses not only on this competitive advantage, but also the advantages from service side; namely, offering people affordable products and services.

## Value Chain, Information Handling and Internet

#### Firm Infrastructure

Sokos Hotels has utilized management system program mainly on the activities of financing and accounting. As to legal and governmental affairs, the company commonly utilizes the service offered by electronical means, such as electronic forms of taxation. As decision making, general management teams rely on its traditional way with the help of information technology. E-mail, World Wide Web and the Internet provide the sources of information. The company has to control and pick out the most important information. As a result, the means of information collection has changed largely over past 10 years.

## Human Resource Management

Sokos Hotels has developed technology application to its HRM for years, which creates ubiquitous inward communications. This model is using the net as a collaborative platform in order to improve employee satisfaction and company operation, as an internal self-training tool for its employees, and as an information provider for employees by presenting the company, benefits and HR issues. Examples of that are internal online questionnaire, such as how the employees feel the certain things inside the company, how people operate in various parts of company, and how the staff can fill in the reports in his/her restaurant.

# **Technology Development**

Sokos Hotels has outsourced its software from third party, such as hotel management system. Hence, most the development has been done by cooperating with the third party. For the process design, Mr. Lindevall sees that process is much more than drawing a chart, and then see how it looks; it is more or less interaction between people, discussion and yellow notes on the wall.

#### **Procurement**

Procurement activities have been handled via extranets. The suppliers' selection is centralized, and the buying power is contracted into few suppliers with good quality. The suppliers are either S Group's companies or partners. Therefore, for example, to the hotel in Jyväskylä, it has already been decided on which supplier can be used. They just type into the contract that has been made for them already. For the hardware, like beds, they might have a contract, but it is very much case by case. But for food and drinks, those are contracted and have a limited amount of suppliers.

# **Inbound Logistics**

Logistics is managed considerably via electronic devices, like the Internet, Extranet and Intranet. Mr. Lindevall describes that the hotel systems where customers check in and check out is the similar way that in the restaurant systems that handle inventory, then the reporting might be tied up with sort of Intranet reporting tool. As for inventory management system, it is handled via software and hardware that is based on the hotel or the restaurant. About the city-based central inventories, Mr. Lindevall explains that this activity is developing all the time. Up to now, hotels and restaurants have pretty much their own inventories and control of the inventory. Therefore, it is unnecessary to have the same inventory management system for all, and these systems might vary because development in this area is so rapid. Looking at 35 hotels in Finland, they are on different product life curve, for example, some hotels have something that is older, some hotel has already bought something new, and in the middle they are using something else. It is all the time evolving, and the purchase of different systems does not happen at the same time for all.

#### **Operations**

Sokos Hotels business is really much labour intensive compared to supermarkets, which is very logistic intensive as Mr. Lindevall notes. In hotel and restaurant sector, there is a long process to produce the product. From checking in the hotel, that's where the process starts and when customers check out that is where the process ends. And in between there are a lot of things that happen, such as people contacting, food serving, and room cleaning. As Sokos Hotels, the core product is room and accommodation, and another product is conference and restaurants. Mr. Lindevall further explains that hotel product offering is like going to a hairdresser, the product is made there. The same as the food is made in the restaurant, and room is cleaned. As a result, product itself in the hotel and restaurant business does not have so much to do with the Internet technology.

# **Outbound Logistic**

Naturally, the core product of Sokos Hotels cannot be delivered, and customers have to come the hotel. Although the booking can be done via the Internet, customers have to be in the place to receive the product. The reservation system handles information automatically to the related department. Some service providers, nowadays, have offered customer with a booking code via the Internet, and the customer just punches in the code when he/she arrives at the hotel. However, Mr. Lindevall is not very convinced that this is the right way for this type of product. He still believes that interaction between people is more and more appreciated again. Earlier people had a sort of

hype, when customer checked out via TV, and there was no need to see the people on the reception. But now appreciation of personal service is coming back again.

# Marketing and Sales

Marketing and sales are the main activities of Internet application for Sokos Hotels. Using new technology, web is not only being an information media, but also a marketspace allowing transactions to be done. Thus, information and advertising are naturally the core utilities of the Internet. E-Sales, which is generated via online reservation, has increased rapidly. In airlines and ferry companies, the best ones are sharing 15-20% of its overall reservation via online booking. Concerning the hotel industry, the best ones in the world where taking around 4-5 % about 3-4 years ago. Today it is, however, completely different, it has grown tremendously.

In Sokos Hotels, the hotel management system has been used for 20 years. The advent of the Internet has not changed the information gathering in marketing and sales, and doesn't bring anything new to it. From a sales and marketing point of view, the quality of information from the Internet is very questionable. But the Intranet solutions can be used to channel information that has been flowing back and forth always. Intranet solutions can be built to channel whatever information, in gathering and organizing, selecting etc. The information is already there, thus the Intranets are only a tool to channel. Internet, Intranet or extranet application is making this process quicker. And the company can select information and slice and dice it.

There are unlimited forms of advertising to Sokos Hotels. The company divides it into reactive and proactive. Now, combined with traditional advertising, the company can do all on the Internet. Besides advertising on its own homepage, its partners and intermediaries also advertise for the hotels. For example, they might package the trip to Helsinki where Sokos Hotels might be just a part. Thus the company does not control that advertising. Next year, the hotel is working more proactively over the Internet, but not just randomly over the Internet. In light of Mr. Lindevall, this year and next year, the company will have considerable changes on its website. The company is working very much on this and the focus is on two main parts, on information, and on making transactions and bookings, i.e. sales. Accordingly, promotion goes hand in hand with advertising. To date, company has organized special promotions only for its e-channel.

Sales force is not in any way tied up to the Internet. The tools for sales force to contact the customer has not been affected by the Internet much. DUMMY systems are the only applications they use within the house. There are sales force automation systems that are built through the web, and the main point to do this is because companies have the sales force around the world and they communicate through the Web about customers. But again, Sokos Hotels being a domestic company has less interest of using that. So DUMMY can be explained that company unplugs and puts it in the system at one place where people can use it.

The application of online reservation system, as other channel for customers, does not cause disintermediation or channel conflict. However, it helps bypass some intermediaties. The longest chain of intermediaties that one sales process can pass compared to online booking, the latter is much shorter because it is done by customer himself and booking comes to the switch to the hotel directly. Nevertheless, the company still operates all the channels, and won't neglect one solely. As channel strategy, company handles different segments and different customers. All the customers can be handled in the same way. The customers cannot be forced to go to the Internet, to travel agency, or call to the hotels. Therefore, a number of options for its customers are provided.

Customer information is shared among Sokos Hotels through a more secure and quicker system. Once the customer profile has consolidated at one hotel, his information can be seen and updated when he goes to other Sokos Hotels. Without a doubt, Internet application supports the relationship

between the customer and the seller. However, it is only one part, which cannot drive all customer relationships via e-mail. Mr. Lindevall sees that, in hotel industry, some sort of personal interactions are required. And he questions the appreciation from customers if hotel or restaurant has no waiters, and customer just punches some code to the table and the food comes, interactions have disappeared. Although this could consider as different type of market segment, he doubts the suitability to this business.

To date, pricing varies from to whom hotels sell, when to sell, what to sell, through which channel hotels sell. It has changed from what it was 5-10 years ago, when the hotels had only one fixed price. And Internet technology accelerates this change in Sokos Hotels even quicker. Sokos Hotels found that the reaction speed in pricing is very good in the Internet. For instance, if hotels noticed that there are 180 free rooms in one of Sokos Hotels in Helsinki for tonight, in this marketspace, company can advertise it quickly. Definitely, it was impossible about 10 years ago to make an advertisement to the paper within one hour. As a result, the company also applies the last minute pricing, and this way, customers can buy a lot of different services in terms of price. From hotel's point of view, the rooms offered through online and offline are regarded as different products, and there might be a certain room in a certain campaign at the certain time. Accordingly, pricing differs between online and offline. In addition, company also sells in GDS (global distribution system), like almost all the chains do, which is ROH (run of house). It means that customer books the room and gets a fixed price, but the type of the room is decided at the front desk when he-arrives.

#### Service

Sokos Hotels perceives that service means not only quality but also creativity. The value adding should initiate from understanding customers' want, and then confirm the needs by researching. That is also about product development. The company has feedback systems over the Internet, however, up to now, most of the feedback and questionnaires are done via phone interviews and by slip note from customers when they check out. According to Mr. Lindevall, in all of this service marketing, it is not a question of using the Internet or Intranet. The question is that seeing to where add value by using it, to where cut the extra work hours out, or to where make sure that the quality of the information is better. As a matter of fact, the Internet has not affected largely on how the Sokos Hotels or restaurants create services. It has been mainly as a tool to be in contact with a customer. Mr. Lindevall sees that it all starts from customer's need. The company figures out how the service can be offered by skipping Internet, and then puts whatever means in between.

## Linkages between Activities

The technology has helped company's activities working together. It streamlines the flow of information. Few years ago, the company had to look papers here and there, and now, they are able to consolidate a lot of data and slice and dice it, and look it from different ankles. To date, the whole hotel chain shares the information. For example, in the service, product X can be seen running out, and the system can make order. It helps the company being more effective and having smoother processes. The information flow has always been there, but it is just one tool of assisting business operation.

For a working process, there are so many links in different links. The main point would be people working face to face, not through technology. Employees could do it through the technology, but it is more likely through all means, such as meetings, technology, information places, sending information; the company cannot rely on one system only. Hence, the person working in hotel business will find on the net that they have a new product, and they can start selling it. But most likely, the company has to tell the person about the new product, and the person has to taste and feel the product. If there are hundreds or thousands of products, like in service sector, it is not as simple anymore.

#### 5.2.2.3 Differentiation

## **Competitive Advantages**

What the company considers to be the most important competitive advantage is the customer owners. The S Group consists of the people owned cooperatives. The people buy the company bonus card, with what they get bonus from every company inside this S Group. The Sokos Hotels sees itself differing from other counterparts in the type of business, the type of customers, and customer relationships to its marketing programs, such as Green Card. They consider that they are in a different way present all over Finland, and they know their customer better. Sokos Hotels has 1,2 million households, which is half of the Finnish population, so in a way company has information what their lifecycle is, and how they consume different products.

Another competitive advantage of Sokos Hotels is the brand image. At this moment, the company believes there is not another hotel that can offer as wide variety of services throughout the customer lifecycle as they do in Finland. Sokos Hotels' brand plays essential role. It has evolved over years, and it is clearly the number one at the brand ranking in Finland among the hotels. Therefore, they are the most popular, and they build upon that brand image in their marketing saying that they are a popular, common and very secure option for the Finnish travellers.

#### **Internet and Differentiation**

From Mr. Lindevall's point of view, the Internet has not changed the differentiation in any way because of the nature of product itself. Hotel is labour intensive business, and interaction with people is required. Online booking is just small part in a hotel chain. When it comes to the competitors, they are more or less on the same level. Thus, it has not changed so far.

Mr. Lindevall emphasises that the Internet is like other channels. The huge advantage will not come through the Internet; however, it has to do with the products, company's reputation, and brand. The Internet could be regarded as a pipe, where company pushes its products through. If everything else is in order, then it is just a pipe among the others. It cannot go very wrong when the company operates this e-channel. Whatsoever, the company has to go all the way back to those core competences such as product development.

Internet, Extranet, Intranet, and other programs the hotels apply are different from company to company. The differences of utilising this kind of technology have not made or broken the profit for the company and the competitors yet. In effect, the volume going through the Internet is still so low. The large volume brings advantages if the company handles it correctly, that is why company has not got big advantages through the small sales of online booking yet. The company focuses on the areas where there are big volumes and flows of transaction, and there is no reason in spending limited resources (time, money, etc.) in the area where there is small volume. Company has to keep its sales and business operation at the first place, and then comes the question of the Internet. If sales are always poor, even if the company has the most efficient and evolutionary Internet strategy, it becomes useless.

Mr. Lindevall believes that Sokos Hotels does all the areas better than its competitors, and emphasises on all activities of the value chain. For the new technology application, such as the Internet, he explains that the company is at the beginning of developing this, and is now very much on the basic. In the future, company's customer owners will be able not only to get information quicker, but also to get information via various services and channels, such as mobile phones, digital TV etc. Customers can select the way to contact the company.

#### **Internet and Value Chain Activities**

#### Firm Infrastructure

Although in firm infrastructure the superior management information system has been affected by the Internet, and also by mobile technology, the differentiating in this activity is not Vanajanlinna's purpose.

# Human Resource Management

The development of this activity is steady. The utilization is slow, but steady. Hence, there would not be any huge leading edge for the company, as well as for the competitors. As a result, HRM will not be regarded as the main source of differentiation for Sokos Hotels. However, by looking at people, Sokos Hotels believes this is a crucial element for them. The company differentiates starting with recruiting, training, company values, company culture, and leadership of the company. The company has its own training school called Jollas Institute, which is for all staff.

#### Procurement

Sokos Hotels is developing in this area heavily at this moment. The procurement and logistics bring large advantages to the company. The group insists to offer affordable prices for its customers. Accordingly, this activity differs from company's competitors.

## **Inbound Logistic**

S Group and Sokos Hotels have emphasized on constantly improving the efficiency of this activity. Volume and inventory go hand in hand. In big volumes, it is more important to have control over the inventory, because the company can really make big mistakes if inventory could not be controlled well. Thus far, the Internet has not affected much on this activity for the differentiation.

## **Operations**

This is the area that is least affected at the moment. Again the reason for this is that the product is service and done person to person, not like buying a Dell computer, where lot of support and sales can be done via the Internet, Mr. Lindevall states. He explains that most of competitors have more or less the same type of hotel room; chair, bed, TV, and shower, and customers go to the restaurant and order steak and red wine. So what make Sokos Hotels different is not based on this activity strongly.

# Marketing and Sales

The sales and marketing are the main differentiation sources for Sokos Hotels. Sokos Hotels is, according to surveys, the most popular hotel chain in Finland. For foreigners, Sokos corporation has Radisson SAS chain in Finland as an international chain. The target group of company is mostly domestic customers.

#### Service

Mr. Lindevall states that the main point in hotel and restaurant sector is that 99 per cent of what hotels do is people and 1 per cent is technology. Most of competitors have more or less the same type of hotel room; chair, bed, TV, and shower. Customers go to the restaurant and order steak and red wine. The most common variation in hotel services is a type of room. Customer can vary the type of room and also vary the added services to the room, such as breakfast in bed, late checking out, welcome drink, or an access to the nightclub, and a free pay-TV. Mr. Lindevall stresses that

company has to focus on all the activities of the value chain, but compared to supermarkets, whose main emphasis, 80-90 %, is on logistics, in hotel business, 80-90 % is on service. These are in a way the same, operations and service. So what make Sokos Hotels different are the people and the service. That is the crucial element where the company can differentiate itself. The people for Sokos Hotels means the owner, the staff, and the customers. The company must keep all these three in mind. If one were neglected, then company would be in trouble. If the staff is not happy, the customers will be disappointed, and then the owner is unhappy. Therefore, the operation differentiation is the key element in service industry. Everything falls down to interactions.

As for variety services, it is not only the hotel and restaurant sector, but also its supermarkets and car sales. Mr. Lindevall explains that doing best is not a value, company has to look at the price / quality ratio, and that is a value. Sokos Hotels doesn't want to have the best service that will cost more than it earns. The company insists having a good price / quality ratio. A lot of value is not created in the Internet; the value is created somewhere else. Online booking offers value, but the value is not created within the Internet. It is the same as the calling, sending e-mail, or shouting, it is just a tool. By looking at the S Group as a whole, it offers whole lot of services. There is a chain of customer relations throughout when customer buys a car, goes to the supermarket, or goes to the hotel.

# 5.3 Case Study Two – Vanajanlinna Ltd.

Our second case study is Vanajanlinna Ltd. The information in this case study was collected through the interviews with the Development Director Jussi Lähde and Sales Assistant Riikka Viitala.

## 5.3.1 Background

Vanajalinna's history begins in 1918, and the castle was designed by Sigurd Frosterus. Construction began in 1919 and was completed in 1924. The Vanajanlinna had been built from the best available materials—oak, marble and granite. The building reflects architectural currents at the beginning of the 1920s, with touches of Baroque and Renaissance as well as more modest Nordic adaptations of these. A corporate acquisition was carried out in the early 1998 and transferred the ownership of the Vanajanlinna Ltd. from Hämeenlinna City to Mr. Mika Walkamo and Mr. Pekka Vihma. The buildings and lands are still in the ownership of Hämeenlinna town, but the business is in individual ownership. Vanajanlinna has different kinds of dining and conference rooms, which have adaptable facilities with up-to-date conference technology, and a total of 150 beds, which range from high-standard rooms to luxurious suites. Vanajanlinna Ltd. consists of the castle Vanajanlinna, the smaller estate called Forester's Estate, and in the beginning of 2004, Vanajanlinna Ltd. will bought, if no barriers occur, the Schauman castle in a city called Jyväskylä in the middle-Finland, and it is planned to be operating by the end of 2004. Vanajanlinna Ltd. is also building a full-sized golf course for its quests, and it is expected to be in full function in 2005.

The turnover of Vanajanlinna Ltd. in 2002 was about 4,1 million Euros. Their turnover has increased five times bigger from the first year 1998, and it is still increasing every year. In Vanajanlinna Ltd. there are about 50 employees regularly, and during the busy season, there are about 100 employees. Vanajanlinna has conference and course rooms for up to 200 people. They also offer different program services for leisure-time during the conferences and courses.

#### Markets

Nowadays Vanajanlinna offers a framework for conferences and training courses, as well as for company promotions and family celebrations like weddings. Today, over 95 per cent of the customers of Vanajanlinna are different firms and corporations, who arrange meetings, seminars, conferences, and company parties, and less then 5 per cent of the turnover comes from private customers, which arrange different kind of celebrations, weddings and birthday parties.

At this moment, Vanajanlinna is mainly concentrating on Finnish markets, and Finnish companies are its main target segment. However, the multinational companies bring always people from abroad to attend to the meetings and seminars. In fact, the actual visiting customer base is quite international. The countries the customers come most often, besides Finland, are Sweden, Norway and Germany.

The main competitors of Vanajanlinna are the similar conference and congress hotels, the most important ones being the old mansions Haikon Kartano and Hirvihaaran Kartano. Every modern conference and congress hotels are also considered to be its competitors, like Aulanko in Hämeenlinna, All the major conference and congress hotels in Helsinki, like Kalastajatorppa, are its competitors as well.

#### Vision

The slogan of Vanajanlinna is "Only the best is good enough". The vision of Vanajanlinna is to offer a unique framework for conferences and training courses, as well as for company promotions and family celebrations. Today, twenty per cent of their overnight visitors come from abroad. For the future, Vanajanlinna has a vision of becoming more international company and developing a culture diverse working teams.

#### 5.3.2 Data regarding the Research Questions

## 5.3.2.1 Information and Internet Technology Application

Before Vanajanlinna started to apply the Internet, most of its operations were done through the phone or regular mailing. Today Vanajanlinna has two separate reservation programs; one for hotel rooms and one for congress rooms, but in the future these will be replaced by one program suitable for both functions. These programs Vanajanlinna has today are, however, not yet Internet-based, but also that will change and the company will adapt to Internet-based program. Vanajanlinna has started to apply the Internet into its activities rather lately because, the first years, the scope of activities in the company was so limited that the company didn't have a need for any Internet application.

Still today, Vanajanlinna has not applied online booking function on their website, and booking is always handled through phone. Vanajanlinna has, however, once tried the online booking on their website, but that experiment didn't work out because of the customers' dissatisfaction with the differences of online and offline pricing. The main customer segment using online booking is leisure travellers, from company's point of view the use of online booking would be minimal, because Vanajanlinna's customers are mainly companies, and only 5 per cent are leisure travellers. Also its business customers' needs are so special and different that there has to be a direct, person-to-person communication when making the reservation. Booking online would be complicated because of the varied activities and different package possibilities. Nowadays, as Mr. Lähde claims, many hotels are avoiding or even trying to get rid of personal contact between the sellers and the customers by online booking. Vanajanlinna, however, thinks online booking is not the best choice for its form of

business activities, i.e. variety of additional services and different packages to choose from. If booking in their case would be done without any personal contact, they would lose the possibility for these additional sales. Therefore the company doesn't see any need for online booking. In addition, Vanajanlinna's image of being a high quality congress hotel for companies, and the company's intention to maintain that created image doesn't bolster the role of online booking in the future. Vanajanlinna explains that their target customer segment and the image of the company do not support online booking function. The problem with this new coming golf course is that the accommodation can be sold with just one phone call, but selling a golf course for one day could mean 300 phone calls. Therefore, in the future, this problem would be solved by giving to certain group of shareholders of the golf club a possibility for golf course online booking.

There are certain parts where the Internet is very essential in Vanajanlinna's activities, the most important being marketing and sales. The website is a very important form of advertising. Technological development uses the Internet in benchmark checking, and procurement uses it in the form of Extranets. (The more precise applications will be described in chapter 5.3.2.2.) The character of Vanajanlinna's website is mainly informative, with no online booking, and also Mr. Lähde sees the benefits of the Internet for Vanajanlinna mainly as a tool to inform. As to the content of website, the pictures of the hotel rooms and congress rooms, the menus of the restaurant, the map and the activity sector are presented on the website. This helps both the customers by giving customers more information about the company before and after the buying decision, and the employees of Vanajanlinna by receiving less questions and giving them an opportunity to guide the customers by using the website as a help tool, for improving the efficiency of sales persons.

The main purpose of Vanajanlinna for having Internet applications is internal operations. The communication between different departments is handled electronically, some purchases are handled online by using supplier's extranets, and the reception desk uses the Internet daily in order to find certain information for its customers. According to Ms. Viitala, the Internet is very important for Vanajanlinna, especially e-mail being one of the most important utilities.

#### **Internet and Threats and Benefits**

Vanajanlinna considers that product selling today is handled via personal contact with the help of the Internet, not either or. The Internet offers companies various benefits. It increases the efficiency of operations, like the use of e-mails when Vanajanlinna is diminishing the use of paper copies. Another important benefit is that company can analyse its competitors with less effort than before. The Internet has made this benchmarking easier for companies of all sizes, and also Vanajanlinna has some benchmark websites that it goes through weekly to get new ideas or just to see what its competitors offer.

Mr. Lähde considers that the way of using the Internet is important. Threats are quite similar with and without the Internet in hotel business. If the company is not working hard and doesn't care about its clients; even with or without the Internet, the threats are the same. Anyhow, he considers that the biggest treat of the Internet to any hotel and restaurant operation is to promise too much over the Internet. The Internet as a media is very promising, and for a company, it is easy to promise too much with website pictures and text. Vanajanlinna tries to avoid this problem by inviting the customers to see their premises before the reservation, so the customers have also first hand experience to support their decision. Another threat is that the company tries to replace personal contact with the Internet or any kind of electronic media. In Vanajanlinna's business, where relationships are long lasting, and every customer relationship is very important, the company has to focus on its target group and take personal care of it, not relying only on the Internet, but with the help of it.

# **Strategic Visions of Internet Operations**

Vanajanlinna is currently going through strong enlarging phase. The company is investing heavily in the future because they believe it will pay back. The company will soon be active in three major facilities; golf course, Schauman castle, and the process of rethinking its systems, like building one database for security matters, and concentrating the booking of all premises, and placing the whole client history into one place. The ideal use of the Internet for Vanajanlinna is to use it to help them to be more personal with customers. One vision of Vanajanlinna is that they want to become more international company. Today 20 per cent of their overnight visitors come from abroad. This is a strategic vision of the company, not the strategic vision for the Internet, but here Vanajanlinna will check the benefits of the actions based on the Internet. The Internet could here be the tool to help them in conducting this strategy.

In the future, Vanajanlinna is aiming to reach the individuals who have already been here as a business client, and to deepen these customerships through individual travelling, in order to get more business customers, too. For that purpose Vanajanlinna hopes the Internet can be of some use, but also knows that this kind of sales deepening has to be done carefully, respecting the customer.

#### 5.3.2.2 Value Chain and Internet

#### **Generic Value Chain**

Vanajanlinna performs the value chain 9 activities indeed; however, they illustrate another chart of value chain according to their business emphasis. Basically, the most visible activities in their value chain are marketing and sales and service, and the links between these activities, as well as operations to some point.

Vanajanlinna describes their value chain as a wheel, constantly ongoing (see Figure 5.1). It goes from promise to production to customer. They use this wheel to analyse their own actions. Mr. Lähde stresses that the problem, in the normal process of how people use time and energy, is cut from promise to production and back to promise, and not to customer. This is the usual wheel of the Finnish companies, lot of promises and lot of production, but analysing is poor. In the value chain wheel, there are lot of circles, like strategic planning inside, and daily basis work at the outer circle. The important question is how well discussion between these circles works. For example, marketing department is selling what they really can offer, the production department knows what has been promised to the customer so that it can be fulfilled, and then feedback is reported to the company management, so they know what is happening. This is the development part where Vanajanlinna formulates its products again; they get feedback, and see if something is lacking. Those people who are working with daily routines have the most precious information, but how the company is breathing inside, and how to get that information throughout the organization, communication is really important.

# Feedback Strategic Decision Production Daily Routines Experience

Figure 5.1 Vanajanlinna Value Chain Wheel

# Value Chain, Information Handling and the Internet

At this point, Vanajanlinna is not applying the Internet very widely throughout its activities. The lack of computers in each department naturally affects on lack of Internet applications. There are certain parts where the Internet is very essential in their value chain. The activities Vanajanlinna applies the Internet are mainly to get information and to communicate with suppliers. From their activities, the Internet has had most effect on marketing and sales. At this point, Vanajanlinna still uses the paper copies in daily routines, but they also use e-mail and Internet applications on the side, and the e-mail is the most important usability of Internet application at the moment.

The big problem in information handling, according to Mr. Lähde, is that they use a lot of e-mail in communicating all kinds of things, and that is very common to a small Finnish company. The capability to get all the potential the Internet has to offer is not so effective. In dividing information they consider themselves efficient, but getting information and getting experience inside, they are not that efficient.

#### Firm Infrastructure

The Internet is used widely in activities concerning firm infrastructure. The real benefits Vanajanlinna gets from accounting, legal, and governmental activities. Finnish jurisdiction is widely available on the Internet, laws can be checked on the Internet, and different forms can be filled up and sent over the Internet. Governmental issues, like taxation issues, can also be found online. The important point here is to know whether the source of information is trustworthy. Also the communication among superior management has been affected by the Internet, in form of e-mails. The management is travelling quite much, and Internet technology has therefore facilitated their communication.

# Human Resource Management

The use of the Internet in human resource management is quite insignificant. Vanajanlinna has some training and development online, and also some benchmarking, but the size of the company makes it still possible to conduct these functions without the help of the Internet.

# **Technology Development**

Vanajanlinna uses the Internet to benchmark checking of their competitors, and this affects also in their product design in the form of product packaging, pricing and renaming different products. The sales' jargon develops all the time. IT technology generally reserves some effort, because the company is in the phase of obtaining new systems. There are lot of problems with software adjustability, and the Internet offers information that can be of help in this problem. With servicing procedures, the use of the Internet is minor; Vanajanlinna has some procedures like the minibar consumption, which is informed to the invoicing department by the cleaners via television.

#### Procurement

On procurement activity only the kitchen supplies are ordered via the Internet. The kitchen has an access to the Extranet of Vanajanlinna's suppliers, and the supplier provides them with a system that informs about the missing items. For more unusual purchases that are not possible to order from the Internet yet, such as furniture, the hotel has a special supplier who is familiar with its unique style. Office supplies are delivered once a week by contract, and in urgent situations the additional order can be made by phone. The reason why this is not handled online is that Vanajanlinna claims that it would make the process slower.

# **Inbound Logistics**

The Internet is not applied much in inbound logistics because of the small size of the company. The activities are still so limited that activities concerning inbound logistics, like storing and inventory control are easier to conduct without Internet applications. The kitchen uses some storing activities over the management program, but that is not Internet based.

#### **Operations**

Operations functions are done mostly manually over the phone and no Internet is applied here.

# **Outbound Logistics**

Vanajanlinna uses hotel management program where they can see available rooms and restaurant tables, and it is not Internet-based yet.

## Marketing and Sales

Website is a very important form of marketing for Vanajanlinna, at the moment the advertising is done mainly on the website. Currently, they have few online campaigns, and their experience on that area is not yet so strong. Special occasions, like the Christmas Party, are advertised on their website, but the tickets are still booked via phone because the company wants to retain the personal contacts. The problem with online advertising is, according to Mr. Lähde, that the media charge the same price for every company, independent of the nature of their product. The Internet, as an advertising channel, is very efficient when company has a product that never runs out of stock. But in

Vanajanlinna's case, hotel only has a limited amount of rooms to sell, and in that case the economical benefit might not exceed the costs of the campaign.

The Internet is important to Vanajanlinna from promoting point of view. There are lot of articles about the company at different journals collected on their websites, and that brings them more visibility and credibility and helps them in awareness and image building.

On sales process, Vanajanlinna is using the Internet on the side of the traditional selling. The website is a very efficient platform in presenting the company and its premises, which are hard to describe without any help tools. Pricing, channel selection and channel relations activities have not been affected by the Internet. Vanajanlinna has numerous different companies that organise the activities for its customers. However, because of the complexity and inequality of the products, usually these specified activities are agreed directly between the suppliers and the customers by phone.

## Service

Service is very much conducted by humans also, and it is not handled over the Internet. There are certain things that affect on this, like the speed of service ordered via phone or via the Internet. It is again a question of size. For example, Vanajanlinna helps their groups to book buses, that is a part of their service, but for that they don't use the Internet because of the special features and requirements of the groups. Vanajanlinna is today developing also its feedback system. The Internet is used to search new development and enable to react to the competitors' development on the service sector.

# **Linkages between Activities**

Mr. Lähde claims that, in Vanajanlinna's case, the Internet actually has not affected on integration between the activities, but the human decision making can affect, and the Internet can support the human decision making. Vanajanlinna is currently looking for technical support for its decision making. Mr. Lähde believes that the Internet could help in deciding what programs they will apply. The help in this situation doesn't come directly from the Internet, but it supports their decisions.

#### 5.3.2.3 Differentiation

# **Competitive Advantages**

Vanajanlinna considers that they have three major competitive advantages. The first one is the location of the hotel. Vanajanlinna is located only one hour driving from the capital, Helsinki. Also some other big cities like Tampere, Lahti and Turku are just one hour away. Vanajanlinna hotel is located away from the city, on the shore of the lake, and in the middle of the nature. The second competitive advantage is the atmosphere, which is however, not so important in some cases. A lot of their groups come there time after time, so after many times the old atmosphere is not giving so much as for the first time. That is why the hotel has to offer something else. However, the atmosphere is still considered to be very important advantage. The quality of the service is considered to be their third competitive advantage. The groups can book different activities, and these activities are becoming more important for the hotel. Therefore Vanajanlinna has a variety of companies working with them in this activity sector. The premium price Vanajanlinna offers to its customers is different from other congress hotels, but they do not compete with price, but with quality.

#### **Internet and Differentiation**

Vanajanlinna emphasizes most on sales and marketing, because that is the most important thing where they believe they can have something of their own and different from their competitors. The staff is another thing where Vanajanlinna differentiates. Staff training is a very important issue, and Mr. Lähde considers that Vanajanlinna can differentiate here because when it comes to cooperational partners, like suppliers, everybody has the same resources. However, the Internet is not used very strongly in training the staff. The premise is the third thing where Vanajanlinna feels it can differentiate. The Internet can be of considerable help in having a hotel with a good reputation. Vanajanlinna, for example, keeps a map on its website to guide people there, because its reputation creates certain expectations of the quality and the content of the website.

Finland is a small market and quite distant place. In order to compete in this monotonous market, Vanajanlinna is differentiating in training and service activitities by offering better service, better experience, and knowing their customers better. Mr. Lähde claims that the hotel knows its customers more personally, what customers do and what their companies do. Vanajanlinna uses more time in describing to its staff the customers and their businesses. The differentiation in the Porter's nine activities is described below.

#### **Internet and Value Chain Activities**

#### Firm Infrastructure

Although in firm infrastructure the superior management information system has been affected by the Internet, and also by mobile technology, the differentiation in this activity is not Vanajanlinna's purpose.

# Human Resource Management

Vanajanlinna procures information about training and development from the Internet. All the major training companies are Vanajanlinna's customers, and are often consulted by Vanajanlinna about staff training issues, so the hotel doesn't have to go and look for information so much from other places. However, other activities in Human Resource Management are quite hard in Vanajanlinna's hotel business to differentiate with.

# Technology Development

Vanajanlinna believes that in choosing the right software, it can differentiate from competitors. The company is at the point where it is reconsidering its hotel software systems, and for that systems choosing process it is using the Internet a lot. The software that they want to have would give the hotel a possibility to differentiate, and it would be modified just for its special purposes. Vanajanlinna tries to be better then competitors, like when the customer is coming, he can book everything at the same time at one phone call. Vanajanlinna aims to turn reservations into short and effective phone calls. Since shorthanded in the sales department, just a little shorter phone calls offer the company a huge benefit.

The big problem in technology development question is that there is no company code of doing things, and persons in management team have different styles in doing things. Although company's management is quite young, 35-45 years, most are not trained well enough to take the full benefit from the Internet.

## Procurement

In procurement activities, despite the above software systems purchasing, Vanajanlinna doesn't feel it can differentiate here, because its competitors have the same possibilities as they do, like the same suppliers.

# **Inbound Logistics**

Mr. Lähde claims that for Vanajanlinna it is not possible to differentiate in inbound logistics. There are lot of things where it is very hard to be better than the competitors. Vanajanlinna believes it can be better than most, but still it has competitors that are really good at processes in inbound logistics. Vanajanlinna has good relationships with some of its competitors, and they might train each other's staff. These companies share the same problems, so they are willing to share the same solutions. Mr. Lähde stresses that everybody that is good in this business has most of inbound logistics activities at the same level.

## Marketing and Sales

Vanajanlinna can differentiate in marketing and sales, because it is not a question of technology, it is a question of creativity and how quick is their decision making. Mr. Lähde believes that the differentiation comes from the mental structure of company, also. Their product kind of limits itself because of the way they can market it. They can't have anything aggressive, because their style doesn't allow anything heavy in marketing. Of course there are companies that are doing differently from Vanajanlinna, but in fact, Vanajanlinna is not trying to do things differently, but in a way that is most suitable for their product. As Mr. Lähde mentions, it is not a value itself to be different, when it comes to marketing. When differentiating in marketing and sales activities the Internet helps in getting more and quicker information on what the others are doing.

## Service

Service is one of the activities where Vanajanlinna differentiates. By better and quicker feedback system, they can get new ideas, and therefore improve their service. The Internet can help here by creating a better and quicker feedback channel. Nowadays there are feedback systems that forward the feedback directly to the responsible, but Vanajanlinna doesn't want that, because they feel that everything is everybody's responsibility and everything they do is team work.

Also knowing the customer, and therefore being able to serve him/her better, is one thing where Vanajanlinna differentiates, and here the Internet can be of big help in storing the customer data. There are, however, limitations in Finnish law about what information companies are allowed to gather from the customer, and hotels can't trade the information with each other. The new golf company will be its own company, and although the customer base will be partly same as Vanajanlinna has, it has to gather its information about its customers itself.

# 6 DATA ANALYSIS

In this Chapter Six we will conduct within-case analysis and compare the empirical data of Sokos Hotels and Vanajanlinna hotel with the conceptualised theories and frame of reference in Chapter Three, thereafter we will perform a cross-case analysis where we will compare the findings between the two different cases. (Figure 6.1)

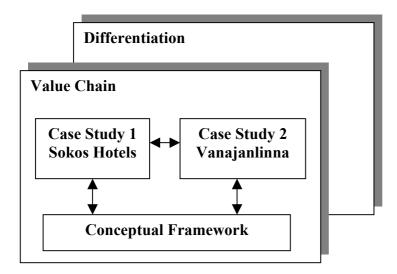


Figure 6.1 Analysis Model

# 6.1 Within Cases Analysis

In the first section, we will analyse the empirical data collected from interviews for each case study. The empirical data will be compared to the theories presented in the frame of reference, in order to discover similarities or dissimilarities. Each research question will be analysed separately compared with the two case hotels

# 6.1.1 Within Cases Analysis on Research Question One: Value Chain Activities and Internet

In Chapter Three we have formulated our first research question as *How can the value chain activities be described under the influence of the Internet?* 

#### 6.1.1.1 Case One – Sokos Hotels

Sokos Hotels have benefited from e-business adoption in the ways of driving down the costs and improving efficiency. This is in accordance with the statement of Bhatt and Emdad (2001) that this new medium offers the advantages of not only low cost, but also provide the ease with which they can support different business activities. Sokos Hotels' online booking function has driven down the costs by decreasing the distribution costs. Whenever selling the product there is always cost involved, and the Internet offers Sokos Hotels a cheaper way to distribute their product. Even though the percentage of the online bookers in Sokos Hotels' customers is still small, it is growing rapidly. They also believe, that the company should not force the customer to use only one channel when doing the reservation, but to offer them many choices. As Porter (2001) states, traditional activities, often modified in some way, can compensate for limits of the Internet, just as the shortcomings of traditional methods - such as lack of real-time information, high cost of face-to-face interaction, and high cost of producing physical versions of information - can be offset by Internet

methods. Porter continues that, in fact, an Internet application and a traditional method benefit each other.

As Chaston (2001) states, the advent of Internet business has permitted companies to develop new and more effective ways of responding to customer needs. Sokos Hotels Internet application has helped people to overcome the barriers of the time and the place by offering them an opportunity to make online booking anytime and anywhere. Applicable to the statement of Rodgers et al (2002), with the help of information technology, business processes and operations that used to take days or weeks can now be done in a matter of seconds. This means shorter processes both for customers buying the product, and for Sokos Hotels selling the product. Still, online booking function is common Internet application, and as Sokos Hotels admit, its competitors are more or less at the same level as they are. This verifies to the statement of Porter (1998) that competitors can quickly imitate new technologies and get to the equal footing with them.

As a threat of the information technology Sokos Hotels sees the lack of ability to handle all the information flows. Today there are many touch points to customers, like own website and all the other websites that tell about Sokos Hotels. Managing all the information up-to-date in all the touch points is a huge task to Sokos Hotels and requires control over them. As Lawton and Michaels (2001) present, the virtual value chain will only succeed if information flows freely between all the associates, in this case between every touch point.

## Linkages

Sokos Hotels state that the IT has helped the company's activities work together, i.e. made linkages between activities easier and smoother. This is fully in accordance with Porter (2001) that the special advantage of the Internet is the ability to link one activity with others and make real-time data created in one activity widely available, both within the company and with outside suppliers, channels, and customers.

## **Strategic Vision**

The strategic vision of Sokos Hotels is to offer products over the Internet and make their marketspace one of their main channels for distributing sales. When introducing a new channel, there is a risk of intermediation and cannibalisation. Sokos Hotels state, that in their case, it is not strikingly big. This is also noted by Porter (2001), as the risk of channel conflict also appears to have been overstated. He explains that as on-line sales have become more common, traditional channels that were initially sceptical of the Internet have embraced it.

## **Information Technology's Effect on Value Chain**

As can be seen in Sokos Hotels' virtual value chain (Figure 6.2) information technology has affected in almost every activity presented in value chain theory. This verifies to the theory of Porter (2001) that information technology has a potential to influence all primary and support value activities. Porter also states in 1998, that since every value activity creates and uses information, information technology is particularly pervasive in the value chain. A firm is a collection of technologies. Technology is embodied in every value activity, and therefore technological change can affect competition through its impact to virtually any activity.

# Firm Infrastructure

As Rayport and Sviokla (1995) present, creating value at any stage of virtual value chain consists of gathering, organising, selecting, synthesising and distributing of information. In firm infrastructure activity, Sokos Hotels' information technology has affected on general management as a

communication tool between management team, on financing and accounting as offering management system program, and on legal and governmental issues by offering the electrical services, such as different electrical forms. This can also be applied to Porter (2001), who states that the Internet's greatest impact has been to enable the reconfiguration of existing industries that had been constrained by high costs for communicating, gathering information, or accomplishing transactions. The benefits IT offers to Sokos Hotels here is the facilitating communication, and therefore the savings for example in management time; and more effective information distribution and gathering tool.

# Human Resource Management

Another important issue concerning the quality of service is training. Sokos Hotels have developed an application to its human resource management, and this is using net as a platform. It is both a self-training tool and an information provider for employees. Also internal questionnaires are conducted via that channel. IT provides here the possibility to learning and training regardless of time and place. This is beneficial for Sokos Hotels as their workforce is dispersed all over Finland.

# **Technology Development**

Sokos Hotels have outsourced its software from a third party operator, and therefore most of their technology development is done by cooperating with that third party. Also product design is an important part of technology development, and information technology is used in this area in online feedback systems. Here the IT seems to offer benefit of quicker and smoother information gathering tool.

#### Procurement

The material procurement process has been affected by information technology. The most of Sokos Hotels' purchases are made via suppliers' extranets, and this information is then moved real-time to supplier. In this activity, IT helps Sokos Hotels to conduct an order in a more centralized way, and links other activities, therefore quicker and more efficiently. This decreases the costs of the whole procurement process. IT also helps in linking all the procurement units in S Group via extranets.

# Inbound Logistic

The inventory management systems in the Sokos Hotels are developing all the time. In the future company's all inventory might be handled via Intranet reporting tool. Porter (2001) in his theory of five stages of Internet states, that information technology will be used not only to connect the various activities and players in the value system, but also to optimise its workings in real time. Choices will be made based on information from multiple activities and corporate entities. The chain-wide online inventory system will in the future be one of these sources of information.

# **Outbound Logistic**

What comes to order processing, Sokos Hotels apply online booking facility in their outbound logistics activity. This is in accordance with Porter (2001) when he claims that Internet architecture, together with other improvements in software architecture and development tools, has turned IT into a far more powerful tool for strategy. As mentioned in Sokos Hotels' strategic visions earlier, they aim to create online booking into one of its main distribution channels, and IT is the only tool for fulfilling this specific strategy.

## Marketing and Sales

For Sokos Hotels marketing and sales is the activity, where they apply the Internet most. The website for them is an information media and marketspace, the core utilities being information and advertising. One benefit of IT in this activity to Sokos Hotels is Intranet solutions to channel information and making that process quicker. Sokos Hotels advertises and promotes online, and compared to traditional advertising, the IT offers the possibility to do all that in one marketspace. IT has also changed the advertising more dynamic. When there is a temporary lack of customers in some hotel, the Internet allows a quick response to that by dynamic advertising and prising.

#### Service

The value chain activity, which is the most important to Sokos Hotels, is service. It is a service company, and naturally the quality of the service is what counts to that kind of company. Their product is the way they serve their customers. The service is considered pretty much as human labour, and therefore Sokos Hotels claims that the Internet has not affected largely on how they create services, but it has been mainly as a tool to be in contact with the customers. This contradicts to what Porter (2001) and Rayport and Sviokla (1995) state about the Internet strategy issues. Sokos Hotels claims that value adding to service should initiate from customers' need, and for that purpose they also have feedback system on the Internet. That received feedback can be used to product development. Although feedback system was not introduced by information technology and has existed longer, this is partly applicable to Rayport and Sviokla (1995) that virtual value chain offers new opportunities to use information in order to create a new product or service. Chaffey (2002) also states that manufacturers have feedback forms and forums on their website that enable them to collect information from customers and channel partners that can feed through to new product development.

## Firm Infrastructure

Online investor relations, web-based financial and accounting systems

## **Human Resource Management**

- Web-based training and development
- Internet-based sharing and dissemination of company information

# **Technology Development**

Real-time access by R&D to online sales and service information

#### **Procurement**

- Linkage of purchase and inventory system with suppliers
- Technology-enabled demand planning and real-time fulfillments.

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Inbound	Operations	Outbound	Marketing and Sales	Service
Logistics		Logistics	<ul> <li>Online sales channels</li> </ul>	<ul> <li>Online support of</li> </ul>
<ul><li>Real-time</li></ul>		<ul><li>Real-time</li></ul>	including website and	customer service
integrated		transactions of	makretspace.	representative through
scheduling		orders	<ul> <li>Real-time customer</li> </ul>	e-mail.
and inventory			information, web-	<ul> <li>Web-based training,</li> </ul>
management			based advertising and	real-time customer
and planning			promotion, channel	feedback
			selection, dynamic	
			pricing, website	

Figure 6.2 Virtual Value Chain of Sokos Hotels

## 6.1.1.2 Case Two – Vanajanlinna Hotel

The first benefit of information technology for Vanajanlinna is considered to be the increase of efficiency in operation. This is also in accordance with Bhatt and Emdad (2001) who state that new media provide, among other things, the ease with which they can support different business activities.

The second benefit is that with the help of information technology the company can now analyse its competitors with less effort than before. The Internet has made benchmarking easier for companies of all sizes. According to Porter (1996), through programs like benchmarking companies have changed how they perform activities in order to eliminate inefficiencies, improve customer satisfaction and achieve best practises. As Vanajanlinna states, they do a lot of benchmarking and in some activities they even share the problems and the solutions with their competitors by cooperating. This leads us to the Porter's statement (2001) that the more benchmarking companies do, the more they look alike.

As threats Vanajanlinna sees that they are quite similar with and without the Internet. If the company is not working hard and doesn't care about its customers, with or without the Internet, the threats are the same. This verifies to the Porter's statement (2001) that conventional factors such as scale, the skills of personnel, product and process technology, and investments in physical assets still play prominent roles. The Internet is transformational in some respects, but many traditional sources of competitive advantage remain intact.

One threat of information technology Vanajanlinna raises up is promising too much over the Internet. This threat is also presented as shortcomings of the Internet by Porter (2001), as customers cannot physically examine, touch, and test products. This threat Vanajanlinna is trying to overcome by inviting customers to see the place and feel the atmosphere themselves. Another threat is replacing personal contact with technological appliances. Vanajanlinna doesn't see it suitable for their company's image. Also according to Phan (2003), one of the key principles of strategic positioning is that strategies fit together. As Vanajanlinna continues, online booking doesn't fit to their overall strategy. Porter (2001) states that virtual activities do not eliminate the need for physical activities, but often amplify their importance. Internet applications are not stand-alone technologies but they must be integrated into the overall value chain. Also, as Vanajanlinna claims, they have to have human contact when selling the product, because otherwise they would lose the possibility to additional sales, and because their products are varied packages and therefore hard to sell without personal contact. This is partly applicable to Porter's statement (2001) that the lack of human contact with the customer eliminates a powerful tool for encouraging purchases, trading off terms and conditions, providing advice and reassurance, and closing deals.

## Linkages

Vanajanlinna states that the Internet cannot directly affect on linkages between the activities, but through the right decisions it can affect. Here the right decisions concern the accurate consideration of the future IT systems. This is in accordance to what Porter (2001) states about the linkages, that these new IT systems can offer the special advantage of the ability to link one activity with others and make real-time data created in one activity widely available, both within the company and with outside suppliers, channels, and customers. For Vanajanlinna, IT has affected on the linkages between the activities naturally most by offering improved communication possibilities between different activities.

## **Strategic Vision**

The company's strategic visions are about their extension. They are investing in many projects, one of them being the purchase of new compatible IT systems. This is in accordance with Porter (2001) that, by providing a common IT delivery platform across the value chain, Internet architecture and standards also make it possible to build truly integrated and customized systems that reinforce the fit among activities in the value chain. In other words, Vanajanlinna is concentrating on creating a common IT delivery platform with the purchase of new compatible IT systems and making standards inside it.

# **Information Technology's Effect on Value Chain**

In Vanajanlinna's value chain the information technology is less visible than in case of Sokos Hotels. (Figure 6.3) The three primary activities, inbound and outbound logistics and operations, are not applying information technology at the moment. There are, however, plans for the future purchases concerning IT applications.

#### Firm Infrastructure

The use of information technology in firm infrastructure activities is mostly informative. Vanajanlinna uses the Internet to browse the issues concerning accounting, legal and governmental activities. The communication between management, who travel much, has also been facilitated by IT.

## Human Resource Management

The use of information technology in human resource management is insignificant in Vanajanlinna's case. They do have some training and development online, but mainly these functions are done without information technology, because the size of the company makes it possible to conduct these functions without it. Even though Vanajanlinna is a relatively small company, the costs of IT purchases are not mentioned as a reason for not acquiring certain applications, because as Lumpkin et al. (2002) state, nearly all firms have access to this relatively inexpensive technology.

#### Technology Development

Vanajanlinna is using the Internet for benchmarking competitors. They also consult with their competitors about the most common problems, and try to find the solutions together. This is to improve their product design, research and development, and servicing procedures. It could be said that this procedure is in accordance with Porter's theory (2001) that best practice competition eventually leads to competitive convergence, with many companies doing the same things in the same ways. Porter also states that this leads to customers malting decisions based on price, undermining industry profitability, but in Vanajanlinna's case, this is not verified. In their case, the solutions are not shared in the area of their competitive advantages, so that might be the reason for not falling into price comparison. The benefit IT provides here for Vanajanlinna is easier benchmarking, and therefore improved products, R&D, and servicing procedures.

## Procurement

In Vanajanlinna the procurement process has remained the same, when it comes to steps, but the way this process is carried out, has been changed by the information technology. The kitchen now orders the supply via extranets of their suppliers, when it earlier was done through phone calls. This makes the procurement process more centralized and faster. As Porter and Millar (1985) stated the

technology is transforming the nature of processes, making them quicker. In this case the information technology has not affected the amount of intermediaries, because the relationship has been directly from the supplier to the buyer also before the IT.

# Marketing and Sales

The most essential part of Vanajanlinna's value chain for information technology is marketing and sales. The marketing is done mainly on their website. Also some online promotion campaigns have been planned. On sales process, the Internet is used on the side of the traditional sales process. As Porter (2001) states, an Internet application and a traditional method benefit each other. Vanajanlinna sales department can't give up the personal contact, but as an additional instrument, they guide their customers to their website to see pictures of certain conference rooms or the map of the area, and by combining the traditional and modern sales method complement the shortcomings of both of these. Vanajanlinna also uses information technology in storing its customer data. As Kalling (1999) states, compared to manual information management, IT has obvious advantages. The benefits Vanajanlinna gets from IT here is another channel to market and promote and a tool to distribute information to customers

#### Service

As Vanajanlinna sees, the service is conducted by humans, and therefore it can not be handled over the Internet. However, there are certain things that affect on service, like the speed, and these kind of things can be improved with Internet. Therefore the function to book online affects on their service activities, too. They also use the online feedback function on their website, and by that the information technology can improve their service. This is partly applicable to the theory of Rayport and Sviokla (1995) that virtual value chain offers new opportunities to use information in order to create a new product or service. Also Chaffey (2002) states that companies today have feedback forms and forums on their website that enable them to collect information from customers.

Vanajanlinna has a very strict concept about the information technology applications that are compatible to its overall strategy. They must be sure that the new policy fits the image and style of the hotel. This verifies to Porter's theory (2001) that strategy goes far beyond the pursuit of best practices. It involves the configuration of a tailored value chain. He explains that in order to be defensible, moreover, the value chain must be highly integrated. When a company's activities fit together as a self-reinforcing system, any competitor wishing to imitate strategy must replicate the whole system rather than copy just one or two discrete product features or ways of performing particular activities. This theory also in a way compensates the above theory of best practises (Porter, 2001).

Firm Infrastructure								
Web based I	manetal and accoun	iting systems						
Human Resource	e Management							
<ul> <li>Online traini</li> </ul>	ing and developmen	t						
Technology Dev	elopment							
<ul> <li>Online produ</li> </ul>	uct design, Online R	&D, knowledge di	rectories					
Procurement								
<ul> <li>Linkage of p</li> </ul>	ourchase systems wi	th suppliers						
Inbound	Inbound Operations Outbound Marketing and Service							
Logistics		Logistics	Sales					
			Website, real-time	Real-time customer				
customer feedback								
information, online								
			advertising and					
			promotion					
Inbound		Outbound	Sales  Website, real-time customer information, online advertising and	Real-time customer				

Figure 6.3 Virtual Value Chain of Vanajanlinna

## 6.1.2 Within Case Analysis on Research Question Two: Sources of Differentiation and Internet

Continuing with our within-case analysis in this section, we will compare the way that each hotel uses the different activities in the value chain to differentiate themselves and the way Internet technology affects on them. Our frame of reference for this study illustrated the sources of differentiation in the value chain. We will start going within each hotel and compare them individually with theories on the basis of each value chain activity. Thereafter, we will perform them by each value chain activity.

# **Competitive Advantages**

What Sokos Hotels considers to be the most important competitive advantage is the customer owners. S Group has 1,2 million households, which is half of the Finnish population. At this moment, the company believes there is not another hotel in Finland that can offer as wide variety of services throughout the customer lifecycle as they do. This is applicable to what Porter (1998) states about broad competitive scope, and he suggests that one of differentiation factors is the ability to serve buyers' need anywhere. It seems that Sokos Hotels as one business unit of S Group has benefited considerably from S Group brand and reputation, broad business scope, and customer's lock-in position (bonus card). In addition, Sokos Hotels sees itself differing from other counterparts in the type of business, the type of customers, and customer relationships to its marketing programs, such as Green Card, and they are in a different way present all over Finland. They also know their customer better; however, it appears above advantage is still derived from its interrelationships. According to what Porter (1998) points about uniqueness drivers such as policy choices, timing, location, interrelationships, and scale, all these are applicable to S Group and to what Sokos Hotels have performed.

As another competitive advantage, brand image of Sokos Hotels plays essential role. It has evolved over years, and it is clearly the number one at the brand ranking in Finland among the hotels. This verifies again to what Porter (1998) stresses about interrelationships uniqueness that the uniqueness

of a value activity may stem from sharing it with sister business units. And Plant (2000) and Chen (2001) state to be one of the positioning elements.

In sum, it is moderate to outline the derivation of above competitive advantages of Sokos Hotels. S Group as one of the biggest chain in Finland brings considerable benefits to its sister business units, more precisely; they benefit to each other. As a hotel alone, it hardly has the capability to extend its business scope as broad as it is now. All S Group business units cooperate together, share interrelationship, consolidate brand and reputation, and enhance its performance, strengthen its overall competitive advantage. Naturally, this is one of important competitive advantages to Sokos Hotels.

Vanajanlinna considers that they have three major competitive advantages. The first one is the location of the hotel. This is in accordance with what Porter (1998) suggested on location, that the uniqueness may stem from location, such as the convenience of location. Vanajanlinna is located only one hour driving from the capital, Helsinki. Also some other big cities are just one hour away. Vanajanlinna hotel is located away from the city, on the shore of the lake, and in the middle of the nature. The second competitive advantage is the building/atmosphere, which provides Vanajanlinna with uniqueness among its competitors. This verifies to what Porter (1998) states on the theory of uniqueness, as well as positioning issue by Chen (2001). The hotel considers that the quality of the service is its third competitive advantage. The groups can book different activities, and these activities are becoming more important for the hotel. Therefore Vanajanlinna has a variety of companies working with them in this activity sector. Chen (2001) suggests the way of enhancing product, and this is applicable to above performance. In addition, this also concurs with Porter's theory in 1998.

Vanajanlinna holds three most important elements of competitive advantage, i.e. location, premise, and quality of service. However, it appears that the uniqueness of premise style/atmosphere is crucial and it attracts the customers to come over and over again. Although, it might happen that the building might have less attraction to the regular customers, according to the sales report, it has been increasing yearly. Moreover, besides the building, quality of service is also one competitive advantage for the company. It is reasonable to imagine the willingness of the customers, which is to drive one hour away from bigger cities only for a standardized hotel chain that they can find anywhere in the cities.

#### **General View of Internet and Differentiation**

Sokos Hotels believes that hotel is labour intensive business, and interaction with people is largely required, as well as the physical performance, which follows partly the shortcomings of Internet technology in comparison with conventional methods stated by Porter (2001). As a result, Internet application has not changed the differentiation in any way because of the Sokos Hotels' core product itself. To some extent, this might contradict to those who advocate that the Internet changes everything, rendering all the old rules about the companies and competition obsolete, and also partly does not concur with Hartman et al's study in 2000.

As for the feature of online booking, it is still small part in a Sokos Hotels chain. When it comes to the competitors, Sokos Hotels sees that they are more or less on the same level. Furthermore, Internet, Extranet, Intranet, and other softwares the hotels apply are different from company to company. The differences of utilising this kind of technology have not made or broken the profit for the company and the competitors yet, and therefore this verifies the studies by Mougayar (1998), Hartman et al. (2000), Porter (2001), and Lumpkin et al. (2002), which state today that nearly all the firms have access to this relatively inexpensive technology, and develop similar type of Internet applications. After copied their competitors' best practice, they are both on the equal footing again, and just moving along. Moreover, Sokos Hotels regards the Internet as one of its channels, and

believes that the huge competitive advantage will not come through the Internet; however, it has to do with the products, company's reputation, and brand, and this point is largely in accordance with the suggestions of Plant (2000) and Chen (2001).

Sokos Hotels believes that they do all the activities in the value chain better than its competitors, and emphasises on all activities of the value chain. For the new technology application, in the future, company's customer owners will be able not only to get information quicker, but also to get information via various services and channels, such as mobile phones, digital TV etc. Internet is just one of the technological tools helping Sokos Hotels to fulfil its strategy so far.

On the basis of above general view of Internet and differentiation, it, to large extent, supports researchers views about the issue of operational effectiveness and Internet. Firstly, from Sokos Hotels' case, Internet here hardly can be seen as dominant value creator yet for its core competitive advantages i.e. core product, brand, and reputation, not to mention being the main sources of differentiation. However, it is clear that Sokos Hotels has insisted on its core advantages, where they are standing for. Secondly, the utilizations of Internet in front-end are focused on information distribution, online booking, and e-brochure, and these features are applied by most of hotels in Finland. In other words, front-end Internet application has not caused most hotels being so different thus far. Thirdly, Internet plays role as company's strategy supporter in Sokos Hotels, namely being a tool. Competitive strategy has not been created by Internet technology.

Vanajanlinna emphasizes most on sales and marketing, because they believe they can have something of their own and differ from their competitors. Today, most of the competitors have the same resources when it comes to co-operational partners, like suppliers in Finland. This verifies the again to what Porter (2001), Hartman et al. (2000) and Lumpkin et al. (2002) claim about the importance of competitive advantage issue. As another thing, Vanajanlinna differentiates on human resource, and staff knows its customers more personally and better. But the Internet is not used very strongly in training the staff. The premise is the third thing where Vanajanlinna feels it can differentiate. The Internet can be of considerable help in having a hotel with a good reputation. Accordingly, product, human resources/service and location are the sources that Vanajanlinna stresses on, but none of them has been strongly influenced by the Internet application on the differentiation building or consolidation. Vanajanlinna case indicates that the Internet has not been considered as main tool for differentiation purpose yet, however it can be great assistant of performing some activities, improving the efficiency, and decreasing the administration cost. All this verifies to what Porter (2001) and Lumpkin et al. (2002) state and discuss about differentiation and Internet issue.

In the next section, we will analyse how the hotel emphasizes on each activity as the possible source of differentiation, and how the Internet has affected on the sources for being different from the competitors. As can be seen at the end of this part, we present figure for each case company and illustrate their sources of differentiation. (Figures 6.4 and 6.5)

#### Firm Infrastructure

Although Sokos Hotels did not stress on this activity as a main source of differentiation, according to their market performance for decades, their own typical policy choices on product features, performance offered, and service provided etc. have showed their uniqueness of policy choices on this activity. This is according to the theory by Porter (1998), in which he explains that firm makes choices about what activities to perform and how to perform them. As decision making, general management teams rely on its traditional way with the help of information. E-mail, World Wide Web and the Internet provide the sources of information. It appears that the IT capabilities play a role as business strategy supporter, i.e. company formulates business strategy and sees how

capabilities of IT can support it. However, here, it hardly can be seen how business strategy can be created through IT.

In Vanajanlinna case, the superior management information system has been affected by the Internet, and however also by mobile technology. Again, IT has been seen as a media to provide the ease with which company can support its management activity. And this activity is less important of being a source of differentiation for the company.

# Human Resource Management

Sokos Hotels has developed technology application to its HRM for years, which creates a collaborative platform for improving employee satisfaction and company operation, such as online training and online questionnaire. As yet, company sees that this would not be any huge leading edge for the company, as well as for the competitors. This verifies again to what Porter (2001) states about operational efficiency issue. Companies simply improve operational effectiveness that does not provide a competitive advantage, and eventually it leads to competitive convergence. As for the people, however, Sokos Hotels sees it is the crucial element where the company can differentiate itself, and the company does it, starting with recruiting, training, company values, company culture, and leadership of the company. The company has its own training school called Jollas Institute. Although, from company's perspective, HRM will not be regarded as the main source of differentiation, the people are the unique source for Sokos Hotels on this activity.

Vanajanlinna understands that its HRM is quite hard to differentiate with because of the scope and size of business operation, but the people is considered to be the important resource for the company, since they have to know their customers better. Once again, Internet here plays as a tool to procure information.

# **Technology Development**

Sokos Hotels has outsourced its software from third party, such as hotel management system. Hence, most the development has been done by cooperating with the third party. In Porter's (2001) study, he states that nearly every company is developing similar types of Internet applications, often drawing on generic packages offered by third party developers. The resulting improvements in operational effectiveness will be broadly shared, as companies converge on the same applications with the same benefits. This is totally applying to the case of Sokos Hotels. The hotel considers that, on this activity compared to the competitors, they are more or less on the same level, since the software applications they use are similar. As a result, Sokos Hotels did not stress this activity as its main source of differentiation. Moreover, since they have developed sophisticated IT management system for last decades, the Internet, as new technology, has not been magnificently changed this.

Vanajanlinna believes that choosing the right software will give the hotel a possibility to differentiate, and it has to be modified just for its special purposes. Although, currently, the hotel management system in Vanajanlinna is similar to others, as completion of new hotel and golf course, the coming system will help Vanajanlinna differ from its counterparts. Vanajanlinna case indicates an approach to Internet application, and the company sees Internet application can create business competitive strategy, but the company should do it differently from competitors, in a way that delivers a unique type of value to customers.

## Procurement

Procurement activities have been handled via extranets in Sokos Hotels for years. It is developing in this area heavily at this moment. In fact, the procurement and logistics bring great advantages to S Group, as well as Sokos Hotels, although most of competitors have more or less the same type of

room, furniture, and facilities. The advantages Sokos Hotels states here stem from operational effectiveness in terms of procurement, logistic management system, and management team etc. However, the products themselves are not differed much from its counterparts. Sokos Hotels, therefore, emphasizes on this activity as one of important differentiation sources. It is partly in accordance with the discussion on operation effectiveness, and to certain extent verifies to the theory about the advantages of fit and integration in value chain activities by Porter (2001). Porter further explains that fit not only increases the competitive advantage but also makes a strategy harder to imitate. Rivals can copy one activity or product feature fairly easily, but will have many difficulties duplicating a whole system of competing.

In procurement activities, Vanajanlinna only purchases kitchen products via suppliers extranet. And for more unusual purchases, such as furniture, hotel has its exclusive supplier who knows its unique requirement on the style. Thus far, it seems that IT application in Vanajanlinna's back-end activities, such as procurement, has been affected by the scope of the business operation, size of business, and product itself.

# Inbound Logistic

S Group and Sokos Hotels as a whole have been working hard on this activity for decades, and have emphasized constantly on improving the efficiency. In return, it has brought the considerable benefit to the company. As a matter of fact, IT has streamlined S Group and Sokos Hotels' logistic management, and yielded strong competitive advantage here. As yet, the Internet has not affected much on this activity for the differentiation.

With respect to Vanajanlinna, the hotel sees itself not possible to differentiate in this activity since the scope and capability of its business operation, and its competitors that are really good at processes in inbound logistics. Interestingly, Vanajanlinna found that almost all the hotels that are good in this business have most of inbound logistics activities at the same level. This verifies again totally what the study by Porter (2001) discusses about simply improving operational effectiveness does not provide a competitive advantage. On the other hand, it also emerges a question of whether company pursues uniqueness alone, but, at the meantime, neglects improvements in generic level, such as speed, cost and flexibility.

# **Operations**

This is the area that is least affected at the moment in Sokos Hotels. Again the reason for this is that the product is service and done person to person. This is also in accordance with one of the limitations of Internet application given by Porter (2001), in which Porter points that the lack of human contact with the customer eliminates a powerful tool for encouraging purchases, trading off terms and conditions, providing advice and reassurance, and closing deals. The hotel does not consider being different from its competitor on this activity. Vanajanlinna experiences the same that many operational activities require largely personal interaction in hotel.

## Marketing and Sales

The marketing and sales are the main differentiation sources for Sokos Hotels. Sokos Hotels is, according to surveys, the most popular hotel chain in Finland. As mentioned earlier, the people buy the company bonus card, with what they get bonus from every company inside this S Group. This verifies once again to the theory what Porter (1998) states about broad competitive scope issue, and Plant (2000) and Chen (2001) claim about the positional issue.

Marketing and sales are the main activities of Internet application for Sokos Hotels, and it has functioned on the tasks such as e-brochure, online advertising, online promotion, information

collecting, communication tool, and online booking. In Sokos Hotels, the hotel management system has been used for 20 years. As yet, the company considers that Internet doesn't bring anything new to it. This partly follows the findings from Porter (2001). In addition, Internet enables online booking as a new Sokos Hotels channel. Although the sales via e-channel is limited, the company wants to provide it as one of options for the customers, since most of hotels have online booking features as well. As for the customer relationship building, Internet application supports the relationship management in the way of communication via e-mail. However, in hotel industry, some sort of personal interactions are required. This is in accordance with again the shortcomings of Internet stated by Porter (2001). With respect to the pricing, it has not been found the signal that Porter (2001) points out, which is, with more competitors selling largely undifferentiated products, the basis for competition shifts even more toward price. Indeed, the Internet provides Sokos Hotels the opportunities to be able to vary its pricing strategy. On the basis of above discussion, Sokos Hotels pictures that most of its Internet application features in marketing and sales have broadly shared, such as online booking, email communication, e-brochure, and the style of online promotion. It seems that many hotels have deployed "me-too" strategy concerning the Internet application on this activity in light of Sokos Hotels.

Vanajanlinna believes that they can differentiate in marketing and sales, because it is not a question of technology, it is a question of creativity and how quick is their decision making. This view matches what scholars have stated on the Internet phenomena and application. To Vanajanlinna, the Internet is a valuable main tool for advertising, because of limited sources and capability. When differentiating in marketing and sales activities, the Internet helps in getting more, quicker, and updated information on what the others are doing. It seems that online advertising and information gathering are the major utilizations of the Internet. Clearly, Vanajanlinna is excluded from those companies that forget what they stand for and rush into hot Internet application.

#### Service

Sokos Hotels perceives that service means not only quality but also creativity. That is also about product development. They consider that, in all of this service marketing, it is not a question of using the Internet or Intranet. The question is seeing where to add value by using IT. As a matter of fact, the Internet has not affected largely on how the Sokos Hotels or restaurants create services. It has been mainly as a tool to be in contact with a customer. Although Sokos Hotels believes that value adding is crucial for hotel business, they have not been convinced and have limited approach on how the Internet could create innovative key values. Accordingly, this partly contradicts the theories by Porter (2001), Phan (2003), and Chaston (2001). Porter (2001) claims that the key question is not whether to deploy Internet technology; indeed, the companies have no choice if they want to stay competitive—but how to deploy it. Internet technology provides better opportunities for companies to establish distinctive strategic positioning than previous generations of information technology. Besides emphasising on the people, Sokos Hotels distincts as well on various service from its counterparts. The company insists that doing best is not a value, but having a good price / quality ratio is. But again, they consider a lot of value is not created in the Internet, and online booking offers the same value as calling, sending e-mail, even shouting etc. Therefore, it is partly in accordance with the findings Mougayar (1998) and Porter (2001) give. By looking at the S Group as a whole, they see that there is a chain of customer relations throughout when customer buys a car, goes to the supermarket, or goes to the hotel. The theories about the competitive scope and activities breadth by Porter (1998) and Chen (2001) are all applicable to Sokos Hotels.

Vanajanlinna differentiates itself on service activities by knowing customers better and providing various service activities. The Internet has helped on getting quicker feedback and new ideas, and therefore improving their service. In addition, knowing the customer, and therefore being able to serve him/her better, is one thing where Vanajanlinna differentiates, and here the Internet can be of big help in storing the customer data. It appears that Vanajanlinna has benefited by using the

Internet on its value adding procedure, however, it has not led the company delivering unique and distinctive value, since these utilizations are broadly used by other hotels as well. This verifies partly what Rayport and Sviokla (1995) state about the information and value chain issue.

FIRM INFRASTRUCTURE	Facilities that Enhance the Firm's Image						
HUMAN RESOURCE MANAGEMENT		Better Qualified Service Personnel					
TECHNOLOGY							
DEVELOPMENT			i				
PROCUREMENT		Unique Product Features		Product Position and Image			
		Uniqueness of Hotel; Strategic Location	Accurate and Responsive Order Processing	Personal Relationships with Customers; Broad Range of Sales Activities	High Service Quality		
	INBOUND LOGISTICS	OPERATIONS	OUTBOUND LOGISTICS	MARKETING & SALES	SERVICE		

Figure 6.4 Vanajanlinna's Sources of Differentiation in the Value Chain

Figure 6.5 Sokos Hotels' Sources of Differentiation in the Value Chain

FIRM INFRASTRUCTURE	Uniqueness of Police Choices Facilities that Enhance the Firm's Image					
INFKASIKUCIUKE			Aanagement Information	· ·		
HUMAN RESOURCE MANAGEMENT	Better Training of Personnel			Recruiting Better Qualified Sales and Service Personnel		
TECHNOLOGY DEVELOPMENT	Superior Material Handling & Sorting Technology			Applications Engineering Support		
PROCUREMENT	Reliable Transportation for Inbound Deliveries		Best Located Warehouses; Transportation Suppliers	Product Position and Image		
	Timeliness of Supply to the operation Process; Inventory Control	Broad Product Range; Breadth of Location	Accurate and Responsive Order Processing	High Sales Force Coverage and Quality; Personal Relationships with Customers; Most Extensive Credit to Customers	High Service Quality; Wide Service Coverage	
	INBOUND LOGISTICS	OPERATION	OUTBOUND LOGISTICS	MARKETING & SALES	SERVICE	81

# **6.2 Cross Analysis**

Now we will summarise the findings of this analysis and make comparisons between the two cases in order to find possible differences and/or similarities within each research question. Each research question will be analysed and presented separately.

## 6.2.1 Cross Analysis on Question One: Value Chain Activities and Internet

# **Strategic Vision**

The case companies have different visions for the future operations, as can be seen in Figure 6.6. Sokos Hotels chain aims to increase their online booking as one of their main distribution channels, while Vanajanlinna concentrates on their physical expansion. The companies are in different situations in their operation. Sokos Hotels as a big, relatively established mid-market chain is developing their channel solutions. Vanajanlinna as a young, high-class hotel is investing in enlarging their operations and developing their information technology systems to correspond to future requirements.

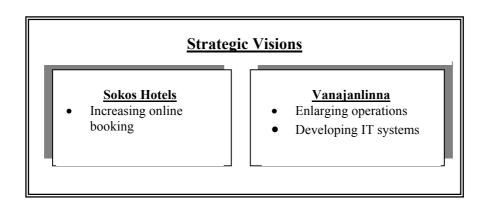


Figure 6.6 Strategic Visions of Case Companies

#### **Views on Internet**

When it comes to threats companies see in information technology, there are dissimilarities (Figure 6.7). Where Sokos Hotels see the lack of ability to handle all the information flows as a threat, Vanajanlinna worries about promising too much over the Internet and replacing personal contact with technological appliances. These threats can be connected to the operations of the case companies. Sokos Hotels is a big chain with huge amount of information flowing between departments, hotels, partners etc. There is a real threat that all this information cannot be handled well. This might be the reason for applying more information technology on their activities, because information technology supports in information handling. Vanajanlinna, on the other hand, sees that in their style of operations, they cannot afford to loose personal contact with their customers. They also see the Internet as a very promising tool, and therefore see a threat in promising too much over a medium where customers cannot touch or feel the product beforehand. This might then be the reason why Vanajanlinna does not want to apply information technology in all of its activities.

# Sokos Hotels Lack of ability to handle all information flows Sokos Hotels Promising too much over the Internet Replacing personal contact with electronical appliances

Figure 6.7 Threats of Information Technology considered by Case Companies

#### **Internet and Value Chain**

Here we will make a comparison between the activities of both case companies, and see how the Internet has affected on their value chains. In other words, we will compare the case companies' virtual value chains activity by activity. The Table 6.1 indicates the virtual value chains of both case companies.

#### Firm Infrastructure

In firm infrastructure activity the effects of information technology are in small part similar in both case companies. The management in both hotels travel much and the communication among management team has been improved in both companies. The sources of this improved communication are presented as e-mail and mobile technology. The differences occur, however, in issues concerning financing, accounting, legal and governmental activities. Sokos Hotels use IT on financing and accounting as management system programs, and on legal and governmental issues by utilizing different services. In Vanajanlinna's case, the use of IT is mostly for informative reasons; they use the Internet as an information provider. This might, to some extent, be dependent on the size of operations and activities involved. Sokos Hotels as a big chain and therefore larger-scale operations might apply IT broader in firm infrastructure than Vanajanlinna. It seems that similarities between case companies concern the improved communication and information distributing issues; these are the benefits to both companies. The dissimilarities occur in the degree and the nature of applying IT. Sokos Hotels go a bit further in services and programs, while Vanajanlinna is utilizing IT here mainly as an information provider.

# Human Resource Management

The actual service action is labour, and therefore the service cannot be replaced by IT, but the training of the labour workforce can be improved with IT. Both case companies apply web-based training in some proportion, but the scales to what extent to apply, are different. Sokos Hotels has developed an application to its human resource management, which is a self-training tool and an information provider for employees. Also Vanajanlinna has some training and development online, but the use of IT here is quite insignificant. The reason why Sokos Hotels apply IT in their training function more widely could be the size of their human resources. There are some more dissimilarities between case companies' human resource management. The online questionnaires are only applied to Sokos Hotels' human resource management. This has some real significance when Sokos Hotels' workforce, where the management wants to conduct an online questionnaire, is about 3000, and they are physically dispersed in 24 cities all over the country. IT integrates these employees all in the same place, which is their Intranet, while Vanajanlinna's employees, about 50, are already physically located at the same place. Here can be seen that Sokos Hotels apply IT more

broadly into its human resource management than Vanajanlinna does. Vanajanlinna, as they think, is still small enough to handle most of its human resource management manually.

# **Technology Development**

In use of IT in technology development there are some dissimilarities between the case companies. Sokos Hotels have developed an experienced IT system with third-party operator, and much data come from its existed system. That data can be utilized for R&D, marketing, management decision making, and product design. As the advent of the Internet technology, Vanajanlinna can now conduct benchmarking via the Internet. Before that, they couldn't do it in so big scale because of the high investment costs. Today they have the same chance as bigger companies to do it and Vanajanlinna is using the Internet widely for benchmarking its competitors. This benchmarking is to improve their product design, research and development, and servicing procedures. As can be seen, both case companies are making research and development with the help of information technology, but they are using different routes.

#### Procurement

The IT's effects on procurement process has been similar in both case companies. The purchases are made real-time via suppliers' extranets. In Vanajanlinna's case the kitchen uses this in ordering all kitchen supplies, but the other purchases are made in traditional way because of the special requirements concerning the style of the hotel. In Sokos Hotels the procurement is conducted also via their suppliers' extranets. Both case companies use extranets in their procurement processes. However, this service is offered by suppliers, and the case companies are their customers, so in that way, companies of all sizes are able to apply this to their procurement processes. IT here has helped both companies in centralizing their purchases and making the procurement process free of time and therefore more convenient to both the buyer and seller side, and quicker and therefore it offers savings in time and money. This application might have, however, helped companies in different ways. As for Sokos Hotels, they have many departments making orders in every single hotel. IT has helped to unite these departments under one program. As they have only few suppliers, this system makes ordering simpler, not more confusing. As for Vanajanlinna, there are only one department, the kitchen, who uses this online procurement system, but they still get these benefits of quicker process.

# **Inbound Logistics**

In inbound logistics only Sokos Hotels proclaims to have applied information technology. They are using real-time storing in their inventory management, whereas Vanajanlinna is operating manually in its inbound logistics activities. This might, once again, relate to Vanajanlinna operating in smaller scale, and therefore they have more limited sources than Sokos Hotels. The smaller scale of operations, and smaller amount of inventory information of Vanajanlinna facilitates the inventory information handling without IT.

#### **Operations**

In operations activity neither of the case companies report to possess any Internet technology applications. This might be in relation to the nature of the case companies. They are service companies in hospitality sector, and therefore their operations can sometimes be considered the same as service. However, there can be found some things still. For example Vanajanlinna has this function of hotel television through which the cleaners can inform the reception about the consumption of the bar in the room. This provides them with the benefit of quicker and more precise reporting tool. This is a clear application of information technology in Vanajanlinna's operations. Anyhow, this is the activity where IT has been applied least.

# Marketing and Sales

For both case companies the value chain activity where Internet technology has affected most is marketing and sales. Both for Sokos Hotels and Vanajanlinna the website as storefront plays an essential role. However, the role of the website is not the same for Vanajanlinna as it is for Sokos Hotels. As to Vanajanlinna, website is mainly an information distribution and a marketing tool, and no transactions, like online booking, is conducted there. Website also has its role in supporting the sales department, but the personal contact in selling is necessary to Vanajanlinna. For storing and sharing customer data to different units inside the company Vanajanlinna uses information technology, as does also Sokos Hotels. For Sokos Hotels website is an information media, but also a marketspace. However, the core utilities in Sokos Hotels' website are still information distribution and advertising. Only Sokos Hotels utilizes IT in its outbound logistics activity in form of real-time transactions, i.e. online booking. The decision to whether to employ online booking or not might here stem from the marketing strategy, images, customer segmentation, and views of service. While Sokos Hotels' strategy is to make online selling one of their main distributing channels, Vanajanlinna sees that online selling function would not give any extra value to their customers, and could also harm their image and service quality. Also the customer base of Sokos Hotels is found to be keener to online booking, while Vanajanlinna's customers, mostly companies, are not reported as keen online booking users. However different ways to apply IT in marketing and sales, it seems that both case companies have at that moment focused most on information and advertising on their website.

#### Service

Both case companies claim, that service is labour conducted by persons, and therefore cannot be handled over the Internet. There are, however, certain things that affect on service, that can be improved with information technology, like the speed of service when making bookings online or traditionally, and the intercommunication towards customers. Both case companies have feedback system online. This received feedback is then used for product design and development in both companies. Although this feedback system existed before the information technology as a traditional paper-based system, there are some new features that benefit the feedback givers. It seems that online feedback system brings value to the company. There is potential to improve the service through customer complaints, and also by offering customer the possibility to offer feedback regardless of time and place. This adds convenience and value to customer as well, when he doesn't have to start writing feedback formula when he is on his way to home but he can do it whenever he has time, and the feedback receiver, because he can have all the feedback on the computer, and doesn't have to deal with lot of paper physically.

## Linkages

When it comes to IT's affect on linkages between the company's activities, both case companies state that IT has affected on these linkages. Whether the effect is direct or indirect, information technology makes the linkages between activities easier and smoother. Analysing the information above concerning the IT's effects on value chain, it seems that IT has affected more on linkages in Sokos Hotels case. They have applied IT more widely on functions that make the information more available all over the hotel and the whole chain, like HRM application, the online booking function to its back-end office, and logistics. This kind of applications affect on linkages between activities, since there is more than one activity using it. Then of course there is e-mail, which is a similar tool to both case companies. That has also affected on linkages, since it has made the communication both inside the company and within outside partners easier.

Table 6.1 Virtual Value Chains of Case Companies

	Virtual Value Chain Activities			
	Sokos Hotels	Vanajanlinna		
Firm Infrastructure	Online investor relations, web-based financial and accounting systems	Web-based financial and accounting systems		
Human Resource Management	<ul> <li>Web-based training and development</li> <li>Internet-based sharing and dissemination of company information</li> </ul>	Online training and development		
Technology Development	• Real-time access by R&D to online sales and service information	Online product design, Online R&D, knowledge directories		
Procurement	<ul> <li>Linkage of purchase and inventory system with suppliers</li> <li>Technology-enabled demand planning and real-time fulfillments</li> </ul>	Linkage of purchase systems with suppliers		
Inbound Logistics	Real-time integrated scheduling and inventory management and planning			
Operations				
<b>Outbound Logistics</b>	• Real-time transactions of orders			
Marketing and Sales	<ul> <li>Online sales channels including website and marketspace.</li> <li>Real-time customer information, web-based advertising and promotion, channel selection, dynamic pricing, website</li> </ul>	Website, real-time customer information, online advertising and promotion		
Service	<ul> <li>Online support of customer service representative through e-mail.</li> <li>Web-based training, real-time customer feedback</li> </ul>	Real-time customer feedback		

## 6.2.2 Cross Analysis on Question Two: Differentiation and Internet

## **Generic Competitive Advantages**

As can be observed below in Figure 6.8, two case companies rarely coincide with each other on the factors of generic competitive advantages. Without a doubt, there are numerous of factors affecting on development of companies' competitive advantage, and in these cases, it shows some distinct elements that affects on it, i.e. the scope of the business, size of business, history/background of company. Sokos Hotels considers that the generic competitive advantages of the company are the large coverage of Finnish customers owners, the variety of services, the top brand, broad business scope, and the interrelationships among sister business units. It indicates that the strong competitive advantage derives from all the business units as a whole. S Group as one of the biggest chain in Finland brings considerable benefits to its sister business units, more precisely; they benefit each other. As a hotel alone, it hardly has the capability to extend its business scope as broad as it is now. All S Group business units cooperate together, share interrelationship, consolidate brand and

reputation, and enhance its performance, strengthen its overall competitive advantage. Vanajanlinna considers that they have three major competitive advantages, which are location, premise, and the quality of services. However, it appears that the uniqueness of premise style/atmosphere is crucial and it attracts the customers to come over and over again. It appears here that besides company advantages, Sokos Hotels have gained more cooperation competitive advantages, however, most of advantages of Vanajanlinna are stemmed from inside the company.

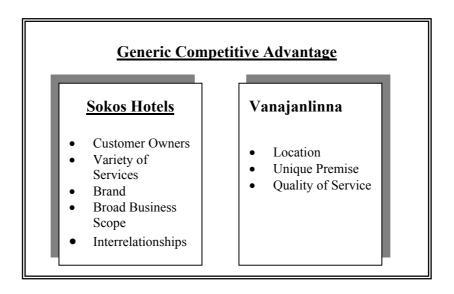


Figure 6.8 Generic Competitive Advantage of Case Companies

#### **General View of Internet and Differentiation**

From both Sokos Hotels and Vanajanlinna's perspective, hotel is labour intensive business, and interaction with people is largely required and appreciated, as well as the physical performance. The lack of human interaction would eliminate a powerful tool for encouraging purchases. In addition, they consider the Internet as a useful tool for helping on information collecting, information distribution, and to some extent lead to cost decreasing (Figure 6.9). Moreover, when it comes to the Vanajanlinna, it considers that Internet application has helped decrease their marketing cost and build marketing awareness, especially, with respect to the smaller size and limited sources of the company. For Vanajanlinna, the Internet can be greater assistant of performing some activities and improving the efficiency. For both cases, the Internet here hardly can be seen as dominant value creator yet for its core competitive advantages. And the Internet plays role as company's strategy supporter, namely, being a tool. Competitive strategy has not been created by Internet technology. In addition, it evolves another question here whether the companies who have applied and developed sophisticated IT system for decades would be benefited by the Internet application as much as that of novice. Notably, two case companies have regarded that the Internet application has not affected strongly on their core competitive advantages.

#### **General View of Internet and Differentiation Sokos Hotels** Vanajanlinna Pros: Pros: Useful tool Useful tool Information Information Collecting Collecting Information Cost Decreasing distribution Awareness Building Cons: Cons: Lack of Human Lack of Human Contact Contact

Figure 6.9 Generic View of Internet and Differentiation of Case Companies

Hereafter, we compare two cases on the basis of each activity in value chain, and see the similarities and dissimilarities in how the Internet has affected on their sources of differentiation. As can be seen at the end of this section, we present a table of cross case analysis of research question two. (Table 6.2)

#### Firm Infrastructure

First of all, two companies consider that this activity is less important as a source of differentiation for them. Secondly, the Internet plays as an information source here. Although Sokos Hotels have showed their uniqueness of policy choices, in decision-making, general management teams rely on its traditional way with the help of information. E-mail, World Wide Web and the Internet provides the sources of information. Again, in Vanajanlinna's case, the superior management information system has been affected by the Internet, and also by mobile technology. It appears that the IT capabilities play a role as business strategy supporter, i.e. company formulates business strategy and sees how IT capabilities can support it. However, here, it hardly can be seen how business strategy can be created through IT. In addition, none of these companies has emphasized on this activity as a source of differentiation.

## Human Resource Management

Sokos Hotels and Vanajanlinna both consider that people as human resource are the unique source for them to differentiate from others. As a matter of fact, they have slightly different emphasis on the people. Sokos Hotels sees that well trained and satisfied people bring the possibility of offering better service. Vanajanlinna notes that the better quality stems from the people knowing customers better because of the activities and scope of business. However, neither of these case companies consider human resource as the main source of differentiation. Sokos Hotels sees that the information technology application for most of functions within human resource activity would not be any huge leading edge for the company, neither for the competitors, since they are more or less on the same level. Vanajanlinna understands that its HRM is quite hard to differentiate with because of the scope and size of business operation. Although Vanajanlinna has not utilized latest information technology on this activity, it appears that the people as a unique factor, which know customer better, have not been influenced clearly.

# **Technology Development**

Two case companies have utilized information technology in a way better suited for their own business situation, but they attribute not stressing this activity as its main source of differentiation to the same reason, which is that many competitors are developing similar type of information applications from third-party developers, as a result, this converges them on the same condition. Since Sokos Hotels has penetrated the information management system with almost each activity in its value chain, the Internet, as new technology, has not been magnificently changed this. Regarding to Vanajanlinna hotel, it has applied information technology for less activities in its value chain. However, they believe that choosing the right software will give the hotel a possibility to differentiate, and it has to be modified just for its special purposes. Moreover, Internet application can create business a competitive strategy, but the company should do it differently from competitors, in a way that delivers a unique type of value to customers.

## Procurement

As for the procurement activity, Sokos Hotels differs considerably from Vanajanlinna. The former, S Group as a whole, has strengthened and emphasized on this significantly for decades, and the latter however has limited performance on this activity since the smaller size and scope of business. Procurement and logistic activities have been handled via extranets in Sokos Hotels. The advantages Sokos Hotels states here stem from purchasing economies of scale and operation effectiveness in terms of procurement, logistic management system, and management team. However, the products themselves are not differed much from its counterparts. As to Vanajanlinna, only kitchen products have been purchased via supplier's extranet, and rest of purchasing relies on its traditional way, such as calling and suppliers visiting. In addition, Vanajanlinna has its exclusive supplier for its unique style furniture. These two cases present that IT application on procurement activity has been affected by the scope of the business operation, size of business, and product itself.

# Inbound Logistic

Both companies have distinct views on this activity being a source of differentiation, moreover, Internet technology has still played minor role here for completely different reason. S Group, as one of the best Finnish business groups, and Sokos Hotels as a whole have been working hard for decades, and have emphasized constantly on improving the efficiency on this activity. As a matter of fact, IT has streamlined S Group and Sokos Hotels' logistic management, and yielded strong competitive advantage here. Therefore, as yet, the Internet has not affected much on this activity for the differentiation. With respect to Vanajanlinna, the hotel sees itself not capable to differentiate in this activity. Since the smaller scope and capability of its business operation and unique product itself in Vanajanlinna, it has not demanded urgently to improve on this activity. Accordingly, the Internet has not been utilized much here. On the other hand, a few questions arise here whether company pursues uniqueness alone, but at the meantime neglects improvement in effectiveness such as speed, cost and flexibility etc., and whether the improvement of operation effectiveness is also subjected to the size and scope of company, and whether the evolvement of uniqueness driver or source of differentiation, such as logistic activity, is influenced by the size and scope of business.

#### **Operations**

This is the area that two case companies have confirmed not being their source of differentiation. Although two companies with different size and scope of their business, they converge at the same explanation, which is the product is service and done person to person, and many operational activities are required largely personal interaction in hotel. Resulting in a further consideration here, in this business, partial performance have to be done physically. However, as for the production process, it begins earlier than checking-in (room, conference and restaurant preparation), and ends

later than checking-out (room, conference, and restaurant availability for the next customer). Hence, it is reasonable to question that how the company could streamline this internal operation process in between, and how this process can be done in the way that delivers the value for both company and customer and different from its counterparts, and what kind of role the information or Internet technology would play here accordingly.

# Marketing and Sales

Case companies have both claimed that the sales and marketing are the main differentiation sources for them, and the Internet has a raised role here in terms of speed, information distributing and collecting, and broad browsing rate. As a matter of fact, interestingly, although the Sokos Hotels and Vanajanlinna are different on its size and scope of business, by looking at the Internet application, it has functioned on the similar tasks such as e-brochure, online advertising, online promotion, information collecting, and communication tool. Furthermore, both of them point out that most of hotels in Finland have rather alike forms of Internet application. In Sokos Hotels, the hotel management system has been used for 20 years. As yet, the company considers that the Internet doesn't bring anything new to differentiation. Vanajanlinna believe that they can differentiate in marketing and sales, because it is not a question of technology, it is a question of creativity and how quick is their decision making. On the basis of above discussion, it seems that many hotels in Finland have deployed "me-too" strategy concerning the Internet application on this activity in light of two case companies, and this imitated Internet deployment has not led them being so distinct. Importantly, these two companies have kept on the competitive advantages where they are standing for. This is again the importance of how the company can deploy Internet technology and deliver unique type of value to customers.

## Service

Two case companies emphasize heavily on offering high quality of service, and both deem this activity as their source of differentiation. Internet is regarded as communication tool mostly in Sokos Hotels, but it appears that Vanajanlinna has benefited by using Internet on its value adding procedure, yet it has not led the company delivering unique and distinctive value. Sokos Hotels perceives that service means not only quality but also creativity. It is not a question of using the Internet or Intranet, but seeing where to add value by using it. Although Sokos Hotels believes that value adding is crucial for hotel business, it appears that they have limited approach on how the Internet could create innovative key values on service activity. As for creativity factor that is pointed out by Sokos Hotels, it hardly can be seen how two companies have created unique service activity and delivery distinct value to customers. In addition, the Internet could be utilized creatively, and it might enable company to fulfil certain unique creation in the service activities.

Table 6.2 Cross Case Analysis of Research Question Two: Sources of Differentiation and Internet.

	Sokos	Hotels	Vanajanlinna Hotel		
	Source of Differentiation	Internet Affected on Differentiation	Source of Differentiation	Internet Affected on Differentiation	
Firm Infrastructure	No	No	No	No	
Human Resource Management	Partial	No	Partial	No	
Technology Development	No	No	No	No	
Procurement	Yes	No	No	No	
Inbound Logistic	Yes	No	No	No	
Operations	No	No	No	No	
Marketing and Sales	Yes	No	Yes	No	
Service	Yes	No	Yes	No	

# 7. CONCLUSIONS AND IMPLICATIONS

In the previous chapter we analysed the empirical data of the two case hotels. In this chapter we will answer two research questions and provide overall conclusions regarding to the findings of this study. In the end of this chapter we will also give valuable implications for management and theory and finally some suggestions for future research.

# 7.1 Findings, Conclusions and Recommendations on Research Questions

## 7.1.1 Research Question One

How can the value chain activities be described under the influence of the Internet?

Regarding to the empirical data from our first research question we have discovered differences in the case companies' virtual value chains. The way how the Internet has affected on case hotel's value chain is unique and dependent on many factors. Our two case companies were rather different, one being a large hotel chain serving both business- and leisure travellers, and the other being small-scale hotel serving mainly business travellers. Because of these differences the information technology has also affected them in different ways. Both case hotels utilize information and Internet technology in information transfer from department to another, and from inside the company to outside. Although both hotels utilize information technology in their functions to some extent, the differences appear in deepening and broadening the Internet-based functions into wider usage. While Vanajanlinna emphasises on using Internet technology mostly on information gathering and distribution, Sokos Hotels goes into deeper level by applying the Internet technology into its operational systems, like selling and storing software. Therefore also the overall usage of information technology is larger in Sokos Hotels case.

Even though the use of different features of Internet technology among our case hotels is rather limited, still, as could be seen from the last chapter, information technology is permeating the case hotels' value chains practically at almost every activity, transforming the way these value chain activities are performed and the nature of the linkage among them. Information together with Internet technology has not only affected on way how individual activities inside the case hotels are performed but, through new information flows, it has also somewhat enhanced the hotel's ability to exploit linkages between activities. Both case companies stress the information and Internet technology's impact on linkages in their virtual value chain, and that they have become smoother with IT. However, also in this issue, the Internet technology has been applied more in Sokos Hotels' case. Because of the larger amount of operations in scale and more physical locations give Sokos Hotels the possibility to benefit more from the unifying media, that is disregarding time and place, while Vanajanlinna has still its functions in one location. The situation is, however, changing also for Vanajanlinna, and we here regard that they haven't yet taken all advantage of Internet technology when it comes to improving the linkages between activities.

Even though there are differences between the case hotels when it comes to the Internet technology's affect on activities, there is a clear resemblance in empirical data. The activities that are most affected by Internet technology are marketing and sales, procurement and technology development/service.

Technology development/service: The Internet has affected strongly on hotel's ways of
improving its service and products. Here it can be seen that the Internet has provided a
possibility to benchmark also for smaller hotels, while it earlier used to be too expensive for

them, and therefore the privilege of only bigger chains. In addition to benchmarking, also online feedback systems and improved data handling offer valuable information for hotel's research and development department and product design. Hotels might need detailed data about certain trends (such as length of stay, average booking lead time, change in voice-center volume and future reservations on a given date) and this information is also more available to our case hotels because of the Internet application. The Internet technology here offers benefits to technology development as smoother flows of information between different functions, like customer feedback reaches the product design or research and development functions.

Internet technology not only gives hotels an opportunity to improve the quality of the offered services, but it also sets new demands on companies in this regard. The development of information technology and the new opportunities it offers has profound implications for the management of the hotel. This means that the hotel manager of the future must be familiar and comfortable with information technology, and able to see and exploit its potential. As one of our case hotels mentioned, they still don't have that kind of management who can take full advantage of the Internet technology. They are still not utilizing the Internet at its best, and they recognize it themself as a problem. In the accommodation business, introducing IT and proper Web services most likely results in many processes in the value chain being altered, perhaps even radically. This not only implies organizational challenges, but also great cost by the standards of any small- and medium sized hotel. One problem with making effective use of technology in the hotels is the lack of appropriate IT training of the personnel. In this regard, the only way to hotels to improve this situation is to increase the IT knowledge of the whole management, and especially the IT knowledge of management, i.e. improvements in the human resource management area.

- **Procurement:** The Internet has changed both case hotels' procurement activity. The hotels use suppliers' Extranets when making orders, and that way their procurement process has been facilitated, centralized and become faster. As feared before the application of information technology, many assumed that the Internet would change everything, rendering all the old rules about the companies. But as both case hotels state, the procurement process itself hasn't change, the steps are still the same. Only the way to take care of these steps of the procurement process has changed. There is also complementarity between Internet activities and traditional activities that the management have to take into consideration. Like introducing Internet applications in procurement activity can place greater demands on physical activities elsewhere in the value chain. Direct ordering, for example, makes warehousing and shipping more important. Second, using the Internet in one activity can have systemic consequences, requiring new or enhanced physical activities that are often unanticipated. These issues have to be considered when applying information technology into functions.
- Marketing and Sales: The Internet has a role as a storefront of both case hotels. It is mainly used for information distribution and marketing. In the marketing activity the Internet has offered companies in peripheral regions an opportunity to improve their competitive position in relation to firms with more attractive geographical locations in urban centre. In another words, the location in Web offers hotels the same starting point in marketing as any other hotel. There is, essentially, equal opportunity to access the market for all types and sizes of hotels. Setting up a website is affordable as costs are relatively low, and therefore it is an affordable type of marketing to both small and large hotels. Once established, the website allows a hotel to conduct a more targeted business 24 hours a day, 365 days in the year, with a potential audience worldwide. The Web enables anyone with an Internet connection access, irrespective of geography, time zone, or computer system. This makes the hotel product more accessible to the new global marketplace and may reduce the need for attendance at trade and consumer shows. Related to the above features of the Web is its ability to provide "a more or less playing field for all". So the Internet technology here also offers savings in some marketing costs.

The Internet also affects on marketing activity in another way, as it offers some other benefits in the mode of information handling. From the registration process our case hotels already possess certain information on customers. With the Internet technology it is possible for hotels, as our case hotels to some extent already are doing, to find out even more valuable information, such as frequency of stay and spending behaviour, through company records. This information can then be brought together on a database system and manipulated to identify and target customers more precise. This is similar to the benefits of technology development/service, but here the gathered information will be utilized for marketing purposes. These procedures are performed in both hotels to some extent, but still there are improvements to be done in this sector.

From our case hotels both are using Internet as a support of their selling activities. However, one case hotel is conducting online booking system, and the other hotel is not. This is due to the different size, customer base and the image of the two case hotels. As mentioned before, everything a company does, have to fit its overall strategy. The Internet applications are not standalone technologies; they must be integrated into the overall value chain. There are some threats that if hotels limit their Web services to inquiries on price and availability over e-mail, the telephone or walk-in approach still offers the only way to an immediate booking confirmation, giving a competitive advantage to these labour-intensive, and hence more expensive service models. However, it must be remembered that one important determinant of the success of online booking application is the willingness of customers to use the Web to book hotel rooms and to search for hotel information. This means that hotels have to, in addition to all other factors, consider their customer segment and needs in order to meet these needs in an efficient and effective way.

# 7.1.2 Research Question Two

How can the sources of differentiation be described under the influence of the Internet?

Concerning the empirical data received from the second research question, we have found differences on sources of differentiation in value chain between case hotels. S Group/Sokos Hotels differs itself from competitive scope, brand, interrelationship, and supply chain management. Vanajanlinna, however, possesses unique premises and high quality of service. These differences might be reflected by their business scope, size and scale. However, by looking at Sokos Hotels alone, the most important sources of differentiation are on marketing and service. This is in accordance with what Vanajanlinna emphasizes on value chain activities. We found that from both hotels marketing and service are considered to be the most crucial sources of differentiation, and case hotels see potential sources of differentiation in terms of the physical service and marketing practices, rather than seeing the sources arising anywhere else in the value chain. In return, we consider that the limited view on sources of differentiation might blur the hotels perceive their overall differentiation and advantages. Furthermore, by emphasizing on a few activities, it has been found that those practices can be easily duplicated by other hotels.

When it comes to the Internet, we have found that the sources of differentiation, which case hotels have stressed in the value chain, have been insignificantly affected by Internet technology thus far. In other words, the Internet has not been utilized by the hotels as the dominant source of differentiation for each activity within value chain. It has been discerned the Internet is used in both case hotels neither to establish distinctive strategic positioning nor to reflect hotels' differentiation strategy. However, clearly, the case hotels have taken advantage of the potential of the Internet technology as an information centre, reservation medium, and operational tool and so forth. As yet, the utilization of Internet technology has not been realized in achieving the hotels' differentiation, but in improving operational effectiveness. Moreover, these applications of Internet have been

broadly shared among hotels in Finland, and the hotels are more or less at the same level when it comes to the Internet application.

A range of sources that are mostly stressed by case hotels is procurement/logistics, marketing, and service. Based on empirical data and analysis, we present our findings, conclusions, and recommendations on each source of differentiation as follows.

- Procurement/logistics differentiation. Internet helps to improve operational effectiveness in this activity. However, we have earlier found that operational effectiveness does not lead the hotel achieving differentiation; on the contrary, this operational effectiveness procurement/logistics activities has been duplicated fast by other counterparts. Without a doubt, improving operational effectiveness is a necessary part of management, and the hotel must constantly change in order to achieve the best practices. However, the best practices can be quickly imitated. Therefore, to achieve differentiation, the hotel should continue defining its value position, making clear the trade-offs, tightening the fit, and integrating all the activities within the value chain. This involves cross-activity integration, such as linking sales activities with order processing. Multiple activities are being linked together through such tools as customer relationship management, supply chain management, and enterprise resources planning systems. We have found that the signals that case hotels, to some extent, have reinforced are distinctive strategy, enhanced fit, and integrated partial activities, especially logistics management. However, when it comes to achieving differentiation, the integration of overall activities within value chain is inevitable. As a result, the Internet technology application plays an important role. It provides a better technological platform, together with hotels' advanced software, and the Internet could become a powerful tool for differentiation strategy.
- Marketing differentiation. We have found that case hotels use mostly Internet as a sales and marketing tool. In addition, it has also commended as a means to make reservation, to promote, and to build awareness. Again, these common features are broadly shared among the hotels. And we further found that these Internet applications have rarely reflected hotels' marketing differentiation or positioning strategy in terms of core product/services, market segmentation, target customers, and promotion etc. It is reasonable to conclude that, for both case hotels, strategically deploying Internet is highly required. Case hotels could revalue their generic adoption in terms of fitness, enhancement and trade-offs together with their marketing strategy and sources of differentiation, and see how the Internet can support and create durable competitive strategy for the hotels as well as deliver added value to the customers.

Case hotels, for instance, could generate information on what an individual customer may want from their websites, and it could also track and measure customers' reactions to different offers posted on the websites. Customer profiles could then be created. By analysing data collected on customer and Web-visitors hotels would not only be able to better understand customer needs and buying patterns, but also be able to tailor information and products/services to individuals. From accommodation bookings and the registration process, hotels already possess certain information on customers. It is also possible for hotels to find out other valuable information, such as frequency of stay and spending behaviour, through company records. This information can be brought together on a database system and manipulated to identify and target the more profitable customers. Hotels could also extend their loyalty programmes online by having special features for their potential and existing frequent customers; such as general information, online enrolment, restricted frequent guest area, create/modify customer profile, special Web offers, and request rewards online.

We believe that the customers, today, are expecting to derive real benefits and values from the hotels. To generate revenues, reduce expenses, or simply do something useful by deploying

Internet technology is not sufficient evident that value has been created; moreover, it's certainly not the way the differentiation is built.

• Service differentiation. Although service is a core source of differentiation for each hotel, the Internet is mostly used in form of online feedback and information centre. We consider that the Internet, as a powerful tool, enables hotels providing considerable novel services to customers. And those services, of course, should be integrated into their value chain, and fit hotel's strategy and trade-offs, rather than taking "me-too" strategy from other hotels.

In addition, the clear evidence shows that both case hotels question that the elimination of interaction between hotels and customers by applying Internet would affect the customer relationship building and retaining. In our conclusion, we consider that although nothing can diminish the importance of direct customer contact, hotels should try to pursue both loyal and potential customers online with technological innovations. With the Internet, the concept of service quality is broadening. Internet technology gives hotels an opportunity to improve the quality and scope of the offered services. E-values should not be narrowed to online information centre or online feedback. The potential of the Web to acquire new customers, retain the regular customers, and extent the range of services, is still largely underdeveloped by the case hotels.

Case hotels could utilise the Web to enhance customer service and the fit of its overall differentiation strategy. A website guide could assist customers in exploring the hotel website. The hotels could post on its website a series of frequently asked questions (FAQs), from which customers might be able to find answers to common queries. Printable property and meeting fact sheets could also be available for customers wishing to make hard copies of online information. Customers could be encouraged to book their meeting facilities by the provision of meeting planning worksheets. The Web also offers hotels the ability to personalise the experiences of customers who visit the websites. Case hotels could, potentially, provide a currency converter service, weather reports, information on Finnish business and travel, news and current affairs, links to travel partners, and links to other websites. These features could serve to add value to the customers during their online interactions with the hotel chains.

In the hotels, the product is rarely seen by the customer as pure "bed room", and there is a bundle of tangible and intangible goods and services. Therefore, with the help of Internet, the hotels should build a service by offering customers value and providing options not available elsewhere.

# 7.2 Implications

## 7.2.1 Implication for Management

The findings, conclusions and recommendations we have drawn in the previous section lead us to ponder deep insights on a number of issues within our research area. Our findings might contribute to the companies that want to sustain their competitive advantage and enhance differentiation strategy under fierce competitive technology environment, but also to the companies who at the moment are deploying Internet technology to their overall competitive strategy.

• From our study, we can see that value chain is a fundamental tool for company to analyse and formulate competitive strategy. Companies have some sort of value chain, however, when it comes to the business in reality, management are seeing more on the basis of individual activity or partial activities within the value chain, rather than seeing and integrating them as a whole.

- Furthermore, as we have seen in our study, within value chain, the integration among the activities is crucial. Integration should involve cross-activities and multi-activities in light of overall company's strategy. And the integration should not focus only on one or a few activities, such as procurement or logistics. This will be easily imitated by competitors, especially with the help of Internet technology; as a result, company might rarely gain durable advantage. In addition, each activity performing solely well might lead company achieving operational effectiveness, but not achieving competitive advantage.
- Moreover, we believe that the integration of value chain should reflect and enhance company's strategy. Simply linking activities within value chain won't lead company anywhere. The strategy defines the integration on how the activities are interdependently and cooperatively performed, and how the activities fit each other and reinforce mutually. Besides fitness, the strategy also involves trade-offs. The company should radically make choice on the best suitability for its strategy, not just simply copy what others do, particularly when it comes to Internet application. Having mastered integration, fitness, and trade-offs, company would become distinctive from its rivals. For counterparts, it is easier to copy technology application, but it is harder or meaningless to imitate other's overall strategy and competitive system.
- To a certain degree, companies have mistaken, simply doing the same things better than competitors are doing or improve their operational effectiveness as their competitive advantage. Indeed, improving operational effectiveness is a necessary part of management, and the companies have to constantly change in order to achieve the best practices. The cases show that even the better practices are spread quickly and end up with doing the same thing in the same way, such as procurement activity. The companies should provide something unique that is valuable to customers.
- Clearly, the elements of uniqueness, value, creativeness, and fitness are highly demanded to the companies' differentiation strategy with Internet application. The Internet should be used rationally to fit and strengthen companies' strategy in order that companies could achieve the best chance of obtaining the benefits offered by the technology.
- When it comes to creating unique value to the customers, indeed, this element is really crucial; companies could broaden their view not just simply looking what others do and imitating it. To some extent, companies are different but not differentiated, especially regarding to Internet deployment, they pursue forms of uniqueness that customers might not value. Therefore, the companies could tailor their particular strategies, and add or create values to meet customers' purchasing criteria and fit target customers' value chain as well.
- In addition, one important issue for the management, when it comes to new technology, is adequate training. The hotel management should possess enough skills in order to take full advantage of the new possibilities of Internet technology and to be able to see and exploit its potential. This does not concern only the management but the whole personnel of the hotel. Only that way all the benefits of information technology could be acquired.

## 7.2.2 Implications for Theory

Our overall purpose of this study was "to gain a deeper understanding of value chain and Internet technology." As we have found many previous studies on competitive advantage have been focused on a specific activity basis, such as marketing, logistic, or service. However, when it comes to the generic competitive advantage strategy with Internet, which is generated and integrated advantages from anywhere within a company's value chain, the researches were rather limited.

This study has explored and described a phenomenon within the specific research area. To be able to reach our purpose, we have investigated two research questions. More specifically, for research question one it was detected that the existing value chain theories and value chain model verified, to a relatively large extent, with the empirical findings of this study. When it comes to the virtual value chain, we have found slight differences on some virtual activities in hotels industry, such as service activity. Regarding to research question two, the majority of the findings for this study supported the existing theories. In sum, this study contributes to existing theories regarding to competitive advantage and differentiation; furthermore, a comprehensive insight of hotel industry is presented. In addition, this study provides a foundation from which further studies may be done.

## 7.2.3 Implications for Future Research

Although competitive advantage and differentiation is an important area, especially, with increased popularity of Internet application, it is rather insufficiently researched yet. As for future research, there are many possibilities that open themselves for continued empirical investigations.

- For this study, we orientated our research to the companies' value chain. The further investigation would be broadened to the whole value chain system, and see how the Internet tailors the value chain system among suppliers, company and buyers, and how it affects on the value chain system and companies' competitive advantage in the rivalry.
- As we have discussed companies are often different but not differentiated, because they
  might pursue forms of uniqueness or differentiation that customers might not value.
  Therefore, it would be also meaningful to further investigate how the customers perceive
  those unique or differentiated values that companies deliver, and how the customers' use and
  purchasing criteria are when it comes to purchasing hotel services.
- When it comes to Internet technology, it is very compelling to probe how the Internet technology has affected on the formulation of customers' purchasing criteria in terms of use and signalling criteria for hotels.
- Furthermore, combining our study findings on companies' value chain and sources of
  differentiation with the outcomes of customers' value chain and purchasing criteria, thus that
  would help companies evolve far more powerful and solid competitive strategy. As a result,
  we strongly recommend a further investigation on how to develop companies' competitive
  advantage strategy on the basis of customer's purchasing criteria and companies' sources of
  differentiation.
- In addition, we have pointed out the essentials of achieving sustainable competitive advantage in Chapter Two; not to mention, this issue is crucial for the companies who want to compete in long-term. Hence, we propose a further investigation on how the companies sustain their differentiation and competitive advantage with the Internet technology.

Indeed, the further research possibilities mentioned above reveal that continuous research in this area is significant. Here, in retrospect what Porter states in 2001, Internet makes it harder for companies to sustain operational advantages, but it opens new opportunities for achieving or strengthening a distinctive strategic positioning. The key question is not whether to deploy Internet technology—companies have no choice if they want to stay competitive—but how to deploy it. Only by integrating the Internet into overall strategy will this powerful new technology become an equally powerful force for competitive advantage.

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## **OTHER SOURCES:**

# **Web Material concerning the Case Companies:**

www.sokoshotels.fi for company information about the case study one
www.s-kanava.net for owner and financial information about the case study one
www.vanajanlinna.fi for company, owner and financial information about the case study two
www.shr.fi for information on hotel industry in Finland

## **Interviews:**

Sokos Hotels: Vice President Lasse Lindevall, in charge of Marketing and Sales, 20<sup>th</sup> of November 15 p.m.

Vanajanlinna: Development Director Jussi Lähde and Sales Assistant Riikka Viitala, 19<sup>th</sup> of November 14 p.m.

# **APPENDIX: Interview Guide**

Company:
Respondent:
Title/Position:
How long have been working in the company:
Address:
Telephone:
Homepage:
Fax:
E-mail:
Date and place:

# **GENERAL QUESTIONS**:

- 1. What year was your company established?
- 2. Describe the background of the company?
- 3. How many employees do you have right now?
- 4. What geographical markets is your company operating in?
- 5. Would you describe your market (type of customers)?
- 6. Who are the main competitors to the company?
- 7. What has been the turn over in the last three years (EUR)?
- 8. What do you consider to be your most important competitive advantages?
- 9. What kind of vision does your company have? Why that?

# **QUESTIONS REGARDING THE RESEARCH QUESTIONS:**

## **Research Question One**

## Value Chain

1. How would you describe the value chain in terms of the organisation?

# Value Chain and Internet

- 2. What kind of technology did you have before the Internet (such as EDI etc.)?
- 3. When did you start to apply the Internet into your company?
- 4. For what purpose do you have Internet applications? (For customers, for internal reasons, for competition)
- 5. How widely do you apply the Internet in your company today?
- 6. Do you think the Internet poses any threats to your hotel operation? If yes, what?
- 7. What do you think the Internet contributes to your company? (Benefits/disadvantages)
- 8. How is the Internet used in:

- a) Internet and Firm Infrastructure
  - i. General management
  - ii. Planning
  - iii. Finance
  - iv. Accounting
  - v. Legal
  - vi. Governmental affairs
  - vii. Quality Management
  - viii. Other
- b) Internet and Human Resource Management
  - i. Recruiting
  - ii. Training and Development
  - iii. Compensation of personnel
  - iv. Other
- c) Internet and Technology Development
  - i. Research and Development
  - ii. Product design
  - iii. Process design
  - iv. Servicing procedures
  - v. Other
- d) Internet and Procurement
  - i. Material (hotel material, office equipment etc.)
  - ii. Procurement process
  - iii. Other
- e) Internet and Inbound Logistics
  - i. Material handling
  - ii. Storing
  - iii. Inventory control
  - iv. Fault product handling
  - v. Other
- f) Internet and Operations
  - i. Equipment maintenance
  - ii. Facility operations
  - iii. Operational activities
  - iv. Other
- g) Internet and Outbound Logistics
  - i. Order processing
  - ii. Delivery operation
  - iii. Material handling
  - iv. Other
- h) Internet and Marketing and Sales
  - i. Advertising
  - ii. Promotion
  - iii. Sales force
  - iv. Channel selection

- v. Channel relations
- vi. Pricing
- vii. Other
- i) Internet and Service
  - i. Training
  - ii. Service supply
  - iii. Other
- 9. How has the Internet affected on your information handling (in terms of information gathering, organizing, selecting, synthesizing and distribution)

Main Functions	Information gathering	Information organizing	Information selecting	Information synthesizing	Information distribution
Firm Infrastructure					
Human Resource					
Management					
Technology development					
Procurement					
Inbound logistics					
Operations					
Outbound logistics					
Marketing and sales					
Service					

10. What's your strategic vision for the Internet operations?

## Sustainability (fit/Linkage)

11. How has the Internet affected the integration between the different activities in the value chain?

# **Research Question Two:**

# Differentiation in Value Chain

- 12. How do you want to differentiate yourself from competitors? Why?
- 13. How do you use the different activities in the value chain in order to differentiate your offerings?
  - a) Firm Infrastructure Differentiation
    - i. Management support:

- ii. Superior management information system:
- iii. Other:
- b) Human Resource Management Differentiation
  - i. Training and development:
  - ii. Recruiting:
  - iii. Compensation of personnel:
  - iv. Training of service:
  - v. Other:
- c) Technology Development Differentiation
  - i. Material handling:
  - ii. Product feature:
  - iii. Model introduction:
  - iv. Software:
  - v. Marketing support:
  - vi. Servicing techniques:
  - vii. Other:
- d) Procurement Differentiation
  - i. Transportation system:
  - ii. Quality material:
  - iii. Product positioning:
  - iv. Other:
- e) Inbound Logistics Differentiation
  - i. Timeliness of supply to operations:
  - ii. Inventory control:
  - iii. Other:
- f) Operations Differentiation
  - i. Tight conformance:
  - ii. Responsiveness of specification changes:
  - iii. Product appearance:
  - iv. Time to operate:
  - v. Other:
- g) Outbound Logistics Differentiation
  - i. Rapid product delivery:
  - ii. Accurate and responsive order processing:
  - iii. Other:
- h) Marketing and Sales Differentiation
  - i. Advertising and promotion level and quality:
  - ii. Sales force coverage and quality:
  - iii. Personal relationships:
  - iv. Other:
- i) Service Differentiation
  - i. Service quality:
  - ii. Wide service coverage:
  - iii. Other:

#### **Internet and Differentiation in Value Chain**

- 14. How has the Internet affected the way you use the different activities in the value chain in order to differentiate your offerings?
  - a) Internet and Firm Infrastructure Differentiation
    - i. Management support:
    - ii. Superior management information system:
    - iii. Other:
  - b) Internet and Human Resource Management Differentiation
    - i. Training and development:
    - ii. Recruiting:
    - iii. Compensation of personnel:
    - iv. Training of service:
    - v. Other:
  - c) Internet and Technology Development Differentiation
    - i. Material handling:
    - ii. Product feature:
    - iii. Model introduction:
    - iv. Software:
    - v. Marketing support:
    - vi. Servicing techniques:
    - vii. Other:
  - d) Internet and Procurement Differentiation
    - i. Transportation system:
    - ii. Quality material:
    - iii. Product positioning:
    - iv. Other:
  - e) Internet and Inbound Logistics Differentiation
    - i. Timeliness of supply to operations:
    - ii. Inventory control:
    - iii. Other:
  - f) Internet and Operations Differentiation
    - i. Tight conformance:
    - ii. Responsiveness of specification changes:
    - iii. Product appearance:
    - iv. Time to operate:
    - v. Other:
  - g) Internet and Outbound Logistics Differentiation
    - i. Rapid product delivery:
    - ii. Accurate and responsive order processing:
    - iii. Other:
  - h) Internet and Marketing and Sales Differentiation
    - i. Advertising and promotion level and quality:
    - ii. Sales force coverage and quality:

- iii. Personal relationships:
- iv. Other:
- i) Internet and Service Differentiation

  - i. Service quality:ii. Wide service coverage:iii. Other: