

**VIRTUAL VALUE CHAIN AND COMPETITIVE ADVANTAGE  
OF FIVE-STAR HOTELS IN KENYA**

**BY**

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## DECLARATION

This research project is my original work and has not been presented to any other University for an examination.

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## **DEDICATION**

I dedicate this project to my parents, Mr. Moses Akidua and Mrs. Margaret Asaji, and my fiancée Monica Karanja.

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## **ABBREVIATIONS AND ACRONYMS**

- ARR** – Average Room Rate
- GDS** – Global Distribution Systems
- ICT** – Information and Communication Technology
- LAICO** – Libya African Investment Corporation
- OTA** – Online Travel Agency
- OTAs** – Online Travel Agencies

## **ABSTRACT**

The stiff competition among the Kenyan five star hotels has forced the managers to look for alternative and cost effective ways of getting extra revenue. One of the strategies is to use Information and Communication Technology and incorporate e-business, which brings more business at a lower cost. Furthermore, the information captured on the computer systems is a great source of information that helps the hotel management to understand their business, their market and, their customers' needs and thereby come up with innovative products. The ability to anticipate and satisfy customer needs leads to customer loyalty and hence incremental business and revenue. The adoption of Internet marketing enables the hotels to reach a global market at a relatively lower cost compared to any other channel of marketing. The research was centered on the two concepts; competitive advantage and the virtual value chain. Literature was gathered on these concepts while paying close attention to the practice in the hotel industry. Findings from closely related studies were also considered before embarking on the actual research. The information about the adoption of Information and Communication Technology and e-business in and the performance of the five star hotels in Kenya was gathered through a questionnaire. The questionnaires were sent through both soft and hard copies and responses were available within three weeks. Data was collected in a suitable manner for ease of statistical analysis. All the pertinent information relating to the virtual value chain, competitive advantage and performance of the hotels were analyzed. A comparison was drawn between the number of computer systems used by the hotels, the number of online travel agencies, the use of Internet marketing, the rate of use of the hotel websites and the revenues from the online channels of business. The findings showed that the five star hotels that participate in Internet marketing and are in partnership with many online travel agents and make use of their websites received higher revenues from online sales and had low transaction costs.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the Study

Virtual value chain refers to the sequential execution of value-adding activities that transform “raw information into new marketplace services and products that are unique to the information world.” (Rayport & Sviokla, 1995). Rayport and Sviokla (1994, 1995) also argue that information has become a source of competitive advantage in its own right leading to the emergence of virtual value creation activities, independent of a physical value chain, that lead to lower transaction costs. Each activity in the physical value chain has a physical component and an information-processing component (Porter and Millar, 1998). The information-processing component encompasses the steps required to capture, manipulate, and channel the data necessary to perform the activity.

The transaction cost economics theory regards the transaction as the basic unit of analysis. The understanding of transaction cost economizing is central to the study of organizations through assessing how their governance structures serve to economize on these transaction costs (Williamson, 1975, 1979, 1983). Transaction cost economics identifies transaction efficiency as a major source of value. The transaction cost view informs the understanding of value creation via the virtual value chain.

Transaction costs includes costs of acquiring new customers and suppliers, maintaining old customers and suppliers, communication costs, product development and innovation costs, marketing costs, and costs of managing inventory among others (Amit and Zott, 2001). The steady increase in tourism earnings have led to expansion and new investments in hotels in Kenya (Wadongo, Odhuno, Kambona, and Othuon,

2010). In addition Kenya is placed strategically as the business hub and an entry point to the East and Central Africa market. Whether the motivation is leisure or business, the traveling population will need good accommodation and other services that go with it. The greater the influx of tourists, the greater the demand will be for hotel services. The location of tourist class hotels in Kenya has been strategic for both leisure and business travelers. The location aside, most modern hotels cater for both business and leisure travelers.

Currently there are several five star hotels in Kenya including Intercontinental Hotel, Laico Grand Regency Hotel, Nairobi Hilton Hotel, The Norfolk Hotel, The Stanley Hotel, Nairobi Serena Hotel, Safari Park Hotel among others. Competitiveness in the hotel industry does not end with naturally beautiful destinations, infrastructure, and quality of facilities and service other factors like interconnectivity and the use of the Internet and e-business also play an important role. The hotels have the chance of using the virtual value chain created by the interconnectivity in the physical value chain to position themselves competitively in the market.

### **1.1.1 The Virtual Value Chain**

A value chain consists of five core activities: inbound logistics, operations, outbound logistics, marketing and sales, and services; and four support activities: firm infrastructure, human resources management, technology development and procurement. Porter and Millar (1998) argue that each activity in the value chain has a physical and information-processing component. The information-processing component comprises the steps required to capture, manipulate, and channel the data necessary to perform the value chain activities. Alongside the physical value chain there emerges a virtual world of cyberspace induced by an increase in electronically networked information systems.

The virtual world is characterized by digitized information and communication channels (Weiber and Kollmann, 1998). This information affects the competitive scope and reshapes the way products meet buyer needs by offering customized products and services. Information, therefore, plays an important role in terms of competitive success because it is through information that existing processes can be better analyzed and controlled (Porter and Millar, 1998). The transactions created in real-time increases the competitive intensity with regard to speed and efficiency of the business. In addition it places a heavy demand on organizations to manage customers' information for their future use (Bhatt and Emdad, 2001).

According to Rayport and Sviokla (1994, 1995) there are autonomous value creation activities in the marketplace, which can be traced back to the importance of information. By information functioning as a source of competitive advantage, virtual value creation activities can emerge in the marketplace, independent of a physical value chain. The virtual value creation activities are not however of the same nature as the physical value activities identified by Porter (1985), but take the form of the collection, systemization, selection, combination and distribution of information. The virtual value chain increases the transaction efficiency which is a source of competitive advantage in the marketplace.

### **1.1.2 Competitive Advantage**

Competitive advantage is at the heart of a firm's performance in competitive markets (Porter, 1995). Competitive advantage provides the architecture for describing and assessing strategy, linking it to company behaviour, and understanding the sources of competitive advantage (Porter, 1995). Competitive strategy aims to establish a profitable and sustainable position against the forces that determine industry competition (Porter, 1985).

A firm is said to have a competitive advantage when it is implementing a value creating strategy not simultaneously being implemented by its competitors (Barney, 1991). According to Ghemawat and Rivkin (1998), a firm is said to have a competitive advantage over its rivals if it has driven a wide wedge between the willingness of buyers to pay for its products and the cost it incurs; a wider wedge than its competitors have achieved. A firm must, therefore, identify its position relative to the competition in the market. Transaction economics theory provides opportunities for hotels to gain competitive advantages through transaction efficiency.

### **1.1.3 The Service Concept**

The service concept has been defined in many different ways. Heskett (1986) defines it as the way in which the “organization would like to have its services perceived by its customers, employees, shareholders and lenders”. Edvardsson and Olsson (1996) refer to the service concept as the prototype for service and define it as the “detailed description of what is to be done for the customer and how this is to be achieved”. This involves understanding the needs of customers in the target market and aligning this with the organization’s strategy and competitive intentions. The service concept is at the inseparable crossroad of service marketing and service operations that exists for most service organizations.

Edvardsson et al. (2000) define the service concept as a detailed description of the customer needs to be satisfied, how they are to be satisfied, what is to be done for the customer, and how this is to be achieved. Clark et al. (2000), and Johnston and Clark (2001) further define the service concept as service operation: the way in which the service is delivered; service experience: the customer’s direct experience of the service; service outcome: the benefits and results of the service for the customer and value of the service: the benefits the customer perceives.

#### **1.1.4 Hospitality Industry in Kenya**

The hospitality industry is a service-giving sector, under the general tourism sector, which evolved in line with the coming of transportation industry (Kamau and Waudo, 2012). Hospitality industry is a popular generic name for hotel and restaurant industries. Hotel is therefore part of hospitality sector and it is a commercial establishment providing lodges, meals, and guest services.

Hospitality industry in Kenya evolved at the coast region for the first time. This was because of the coming of Arab traders and railway-line construction workers in the region. Their presence necessitated the building of the first catering establishment at the coast, which was known as the Grand Hotel of Mombasa (Kamau and Waudo, 2012). They also argued that following the construction of railway; there was a growing demand for catering and the hospitality industry service. This led to the demand for trained personnel. In 1960, hotels like Norfolk had reached international five-star rating. Later in 1975, hospitality training was also started at Kenya Utalii College with a limited capacity.

The Hospitality industry gives services like food and beverages, and lodging. The business operation of the hospitality industry has direct relation with the business operation of the tourism industry. According to Wadongo et al. (2010), the hospitality industry made a significant contribution for the economic development of the country. One of the industries in the hospitality sector is the hotel industry. Hotels are classified as five-star, four-star, three-star, two-star, one star and other hotels. Class, elegance, ambiance and quality services are the major distinguishing factors of the hotels. Hotels in Kenya are operating in high competition (Kamau and Waudo, 2012).



### **1.1.5 Five-star Hotels in Kenya**

The present hotel star rating in the country has five star hotels at the apex and it is expected that the quality benchmarks for these ratings shall be higher as the hotels strive to improve the quality of their facilities and services in order to remain competitive. The country has a number of five star hotels most of which are embracing modern business practices and new technologies in a constant quest to gain competitive advantage. Moreover most of these hotels are networked in a chain anchoring a given brand that competes both locally and internationally.

Contextually, the research will focus on all the five star hotels in Kenya that presently have implemented computer systems and e-business as part of their business strategy. The listed five star hotels in Kenya include Fairmont Norfolk, Nairobi Hilton, Intercontinental Hotel, The Stanley, Nairobi Safari Club, Windsor Hotel, Safari Park, Laico Regency and Nairobi Serena Hotel. The five star hotels in Kenya have a similar ownership structure made up of holding and management companies with one or more hotel outlets in the country. Majority of the five star hotels in Kenya have a similar ownership and management structure made up of a holding or a management company running one or more hotel outfits.

The shareholding of the holding companies is either through the Nairobi Securities Exchange or private companies. The Nairobi Serena Hotel is owned and managed by the Tourism Promotion Services, East-Africa (TPS-EA) that is listed on the Nairobi Securities exchange. The Norfolk Hotel is owned by Fairmont Hotels & Resorts, a Canadian-based operator of luxury hotels and resorts. The Stanley Hotel is under the ownership of the Sarova Group. The research will therefore identify these online and offline systems that these hotels have put in place, the degree of interconnectivity, the management of the entire virtual value chain and the resulting benefits.

## **1.2 Research Problem**

The concept of the virtual value chain shows a theoretical aspect of how hotels can create value and gain competitive advantage through the application of an interconnected, networked business environment and e-business. The virtual value chain reduces costs related to acquisition and maintenance of new customers and suppliers, product development, customization and marketing, communications costs, innovation and it enhances brand loyalty. It is, therefore, imperative for an empirical research to be conducted in order to gain insights into the concept of the virtual value chain based on the transaction cost theory, and whether it offers competitive advantage. The virtual value chain as a competitive tool is yet to be fully explored in the hotel industry and the tangible benefits highlighted. A research gap therefore exists and hotel managers will be challenged to focus how to leverage the benefits of the virtual value chain.

Hotels in Kenya are adopting Information and Communication Technology (ICT) as strategic instruments that will enable them achieve competitive advantage (Maringa, 2011). The hotels have implemented both online and offline property management systems (PMS) and central reservation systems (CRS) that manage their inventory in real-time. ICT therefore becomes an enabler of the virtual value chain that fundamentally influences the dimensions of competitive advantage in terms of transactional efficiency and effectiveness (Weiber and Kollmann, 1998).

Bhatt and Emdad (2001) analyses how the virtual value chain is created in e-business and the advantages to the general business operations. Weiber and Kollmann (1998) present the division of markets into marketplace and marketspace and evaluate the significance of virtual value chains in opening up further possibilities in the marketplace and marketspace. According to van Hooft and Stegwee (2001), a

fundamental approach to setting up an e-business initiative is needed to fully utilise the capabilities of Internet technology in a specific business setting. Such an initiative has to build on the strengths of the organization and take full advantage of the opportunities in the market, meanwhile identifying costly unsuccessful projects and preventing unwanted market disturbances introduced by carelessly designed e-commerce solutions that lead to ineffective virtual value chains.

In a research paper on the value chain analysis in Telkom Kenya, Otieno (2010) researched on the value chain activities that constitute the value chain at Telkom Kenya and determined the key factors that influence the value chain activities. Oslah (2012) presented an approach to integrate supplier performance into the overall value chain at Kenya Airways and determine the relationship between supplier performance and the value chain analysis and the resulting competitive advantage. Njeru (2010) concludes that the main advantages of adopting ecommerce as part of a value chain marketing Kenyan are the ability to reach the global marketplace and lower labour costs.

The above researches focus mainly on the physical value chain and the upstream or downstream linkages with suppliers and customers and marketing opportunities as separate elements of the virtual value chain. However, the real value of the virtual value chain is derived from the usage of the information flowing through the value chain and the resultant transactional efficiencies across the interconnected value chain activities that lead to lower costs of doing business. This study was therefore to answer the question: What is the influence of the virtual value chain on competitive advantage of five-star hotels in Kenya?

### **1.3 Research Objective**

The objective was to determine the influence the virtual value chain has on the competitive advantage of the five-star hotels in Kenya.

### **1.4 Value of the Study**

This research will contribute information that the management of hotels can use in refining their virtual value chain. The information herein will be of strategic importance to the policy makers in the five-star city hotels in Kenya in the process of drafting and implementing their company policies and strategic plans.

The study will also contribute information to the body of knowledge both in the area of e-business and competitive advantage and especially in the hospitality industry.

This study will assist in expanding the knowledge on how organizations can use information to reduce transaction costs, product development, and enhance customer loyalty.

The findings of this study will also help the hotel management on how to use the virtual value chain to position their firms competitively in the hospitality sector.

Management will learn how to create linkages and relationships within the value chain that yield information that is used in acquiring new customers, product development, pricing, positioning and also creating customer loyalty.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter discusses the concept of competitive advantage from the virtual value chain based on the theory of transaction cost economics and how these concepts form the basis of the research. Independently, these concepts have been widely researched and published.

#### **2.2 Theoretical Perspectives**

Transaction cost theory tries to explain why companies exist, and why companies expand or source out activities to the external environment. The transaction cost theory supposes that companies try to minimize the costs of exchanging resources with the environment, and that companies try to minimize the bureaucratic costs of exchanges within the company. Companies are therefore weighing the costs of exchanging resources with the environment, against the bureaucratic costs of performing activities in-house. The theory sees institutions and market as different possible forms of organizing and coordinating economic transactions.

Generally, when external transaction costs are higher than the company's internal bureaucratic costs, the company will grow, because the company is able to perform its activities more cheaply, than if the activities were performed in the market. However, if the bureaucratic costs for coordinating the activity are higher than the external transaction costs, the company will be downsized. The transaction costs related to the exchange of resources with the external environment could be reflected by the following factors; environmental uncertainty, opportunism, risks, bounded rationality, and core company assets.

The factors above will all potentially increase the external transaction costs, where it may become expensive for a company to control these factors. Organizations that economize on transaction costs can be expected to extract more value from transactions. Therefore, to reduce these costs, firms are adopting e-business to facilitate a virtual value chain that reduces transaction costs and increases efficiency. The transaction cost approach critically informs the understanding of the virtual value chain and the value created.

Transaction cost economics identifies transaction efficiency as a major source of value, since enhanced efficiency reduces costs. In general, organizations that economize on transaction costs can be expected to extract more value from transactions and thereby derive sustainable competitive advantage. According to Williamson (1979), because enhanced efficiency in the physical value chain reduces transaction costs, value is created. From this perspective, value is derived from the diminution in transactional inefficiencies that include direct costs related to planning, executing, monitoring, transactions and indirect costs related to asymmetric, information, uncertainty, complexity, etc. As mentioned by Amit and Zott (2001), ‘organizations that economize on transaction costs can be expected to extract more value from transactions’.

Businesses create alliances, joint ventures and other inter-organizational ties that enable them to create more value than in a stand-alone position. These partners are both upstream and downstream and permeate the physical value chain of the business. Size, density, configuration and heterogeneity of networks are factors that have been identified as key determinants for building a competitive advantage, and thus for value creation (Dyer and Singh, 1998).

### **2.3 The Service Concept and Value Creation**

The service concept is a frequently used term in the service design. The service concept has been defined in many different ways. Heskett (1986) defines it as the way in which the organization would like to have its services perceived by its customers, employees, shareholders and lenders. It has also been defined as the elements of the service package, or what Collier (1994) calls the “customer benefit package”.

This approach of defining the nature of a service in terms of its constituent parts has also appeared in the marketing literature. Lovelock and Wright (1999), for example, use the “8Ps” of marketing which encompass the elements of the service product, process, place, physical evidence, people, productivity and quality, plus additional marketing elements, price and promotion. The “8Ps” is based on the “7Ps” by Booms and Bitner (1981) which was developed from the “4Ps” by McCarthy (1960).

Edvardsson and Olsson (1996) refer to the service concept as the prototype for service and define it as the “detailed description of what is to be done for the customer (what needs and wishes are to be satisfied) and how this is to be achieved”. They stress service concept development as a critical stage in service design and development. This involves understanding the needs of customers in the target market (which they call the “service logic”) and aligning this with the organization’s strategy and competitive intentions. This what and how approach is also used by Lovelock et al. (1999) who separate the “service marketing concept” as the benefits to the customer (i.e. the what) and the “service operations concept” as the specification of how the service will be delivered. Dibb et al. (1997) use the notion of the “marketing concept” as an attempt to encourage organizations to understand and then satisfy customers’ needs and fulfill the objectives of the organization.

The service concept is at the inseparable crossroad of service marketing and service operations that exists for most service organizations. Edvardsson et al. (2000) define the service concept as a detailed description of the customer needs to be satisfied, how they are to be satisfied, what is to be done for the customer, and how this is to be achieved. Clark et al. (2000), and Johnston and Clark (2001) further define the service concept as: service operation (the way in which the service is delivered), service experience (the customer's direct experience of the service), service outcome (the benefits and results of the service for the customer) and value of the service (the benefits the customer).

#### **2.4 The Virtual Value Chain in the Marketplace**

Information technology is changing the way companies operate (Porter and Millar, 1985) and especially the operation of their value chain. Value chain is a tool to disaggregate a business into strategically relevant activities (Brown, 1997). The value chain divides a company into strategically relevant activities and identifies physically and technologically distinguishable value activities, for which the customer is prepared to pay. A value chain consists of five core activities: inbound logistics, operations, outbound logistics, marketing and sales, and services; and four support activities: firm infrastructure, human resources management, technology development and procurement. Porter and Millar (1998) argue that each activity in the value chain has a physical and information-processing component.

The information-processing component comprises the steps required to capture, manipulate, and channel the data necessary to perform the value chain activities. It can be argued that alongside the physical world there emerges a virtual world of cyberspace induced by an increase in electronically networked information systems, this virtual world being characterized by digitized information and communication



channels (Weiber and Kollmann, 1998). The information flow through the value chain affects the competitive scope and reshapes the way products meet buyer needs by offering customized products and services. Information, therefore, plays an important role in terms of competitive success because it is through information that existing processes can be better analyzed and controlled (Porter and Millar, 1998).

The transactions created in real-time increases the competitive intensity with regard to speed and efficiency of the business. In addition it places a heavy demand on organizations to manage customers' information for their future use (Bhatt and Emdad, 2001). 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 new world of information is called a marketpace. Distinctively, the physical world is called the marketplace. The marketplace has given rise to a new world of e-business and e-commerce which is a new frontier in value creation.

The extent to which e-commerce will affect the marketing of products and services will depend on the amount and the value of information that flows through the value chain. In e-business, information becomes the main medium through which business transactions are exchanged. Although the relative importance of these two kinds of chains depends on the characteristics of the products and services, their integration, nevertheless, plays a critical role in the success of e-commerce. Virtual value chain refers to the sequential execution of value-adding activities that transform "raw information into new marketpace services and products that are unique to the information world." (Rayport & Sviokla, 1995).

Five information-processing task activities are seen as constituent of a virtual value chain activity: gathering, organizing, selecting, synthesizing, or distributing information. The special advantage of the virtual world 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. The virtual value chain has become a source of competitive advantage in its own right (Rayport & Sviokla, 1995).

The value that can be realized through e-commerce will be partly determined by the extent to which different value chain activities of a firm are interconnected with suppliers, manufacturers, and customers, allowing simultaneous flow of information about multiple transactions to these parties (Bhatt and Emded, 2001). In e-business, businesses require to integrate two kinds of activities; those that are embedded into the physical value chains and the others that are built through information into the virtual chain (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 virtual value chain contributes to lowering of transactional costs within the firm and externally while doing business with business partners. These costs comprise the cost of acquiring and maintaining new customers and suppliers, communication costs, innovation and inventory management, and the cost of product development and customization.

The most obvious difference between traditional and e-business is that when analyzing an e-business is that one or more parts of its value chain are online. Each stage of the virtual value chain offers new opportunities to use information in order to create a new product or service or make the process more efficient. 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, synthesize it, and distribute it (Rayport and Sviodka, 1995).

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 (EDI) (Porter, 2001).

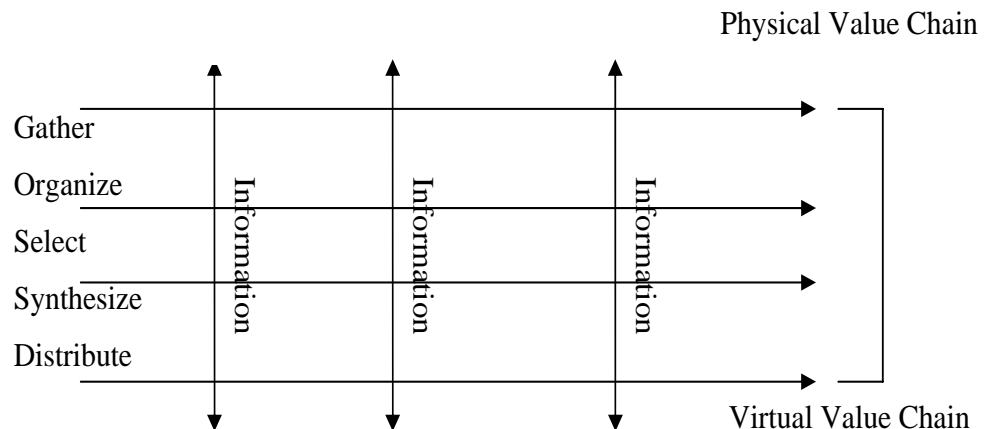
The virtual value chain changes the dynamics of competition in three vital ways. The virtual value chain changes the industry structure thereby altering the rules of competition. It also creates competitive advantage by giving companies new ways to outperform their rivals. The virtual value chain also spawns new businesses from within a company's existing operations (Porter and Millar, 1998). According to Brown (1997) value chain is a tool to disaggregate a business into strategically relevant activities. This enables identification of the source of competitive advantage by performing these activities more cheaply or better than its competitors. Its value chain is part of a larger stream of activities carried out by other members of the channel-suppliers, distributors and customers.

The discussions on the virtual value chain leads to three important perspectives. The first perspective is the emphasis on relationship management between activities in the value chain. The second perspective concerns the need for the relationships to result in competitive advantage. The third perspective identifies the role of information to evaluate the nature of opportunities offered, to identify optional methods for competing and to coordinate the value chain's activities towards successful implementation of the value strategy (Walters and Lancaster, 2000).

Walters and Lancaster (1999a, 1999b) define three aspects of value. The first aspect defines value as being determined by the utility combination of benefits delivered to the customer less the total costs of acquiring the delivered benefits. Value is then a preferred combination of benefits (value criteria) compared with acquisition costs. Secondly, relative value is the perceived satisfaction obtained (or assumed to be available) from alternative value offers. The third aspect identifies value proposition as a statement of how value is to be delivered to customers.

Slywotzky and Morrison (1997) used a customer-centric approach to propose a modern value chain in which the customer is the first link in the value chain. The task of management is to identify customer needs and priorities, the channels that can satisfy those needs and priorities, the services and products best suited to flow through those channels, the inputs and raw materials required to create the products and services and the assets and core competencies essential to the inputs and raw materials. The value of any product or service is its ability to meet the priorities of the customer.

**Figure 2.1** The Virtual Value Chain



**Source:** Rayport and Sviodka (1995)

Companies adopt value adding information processes in three stages. In the first stage, visibility, companies acquire an ability to “see” physical operations more effectively through information (Rayport and Sviodka, 1995). 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 virtual activities for physical ones; they begin to create a parallel value chain in the marketplace.

Finally, businesses use information to establish new customer relationships. At this third stage, managers draw on the flow of information in their virtual value chain to deliver value to customers in new ways. In effect, they apply the generic value-adding activities to their virtual value chain and thereby exploit the value matrix. As companies move into the information world to perform value-adding steps, the potential for topline growth increases. Each of the three stages represents considerable opportunity for managers (Rayport and Sviodka, 1995).

## **2.5 Creating and Sustaining Competitive Advantage**

Porter (1998) defines competitive advantage as a position a firm occupies against its competitors. It implies a distinct and ideally sustainable edge over competitors (Thompson, 1997). Barney (2007) also concurs when he defines competitive advantage as the ability of a firm to create more economic value than rivals. Competitive advantage is therefore more than the idea of competitive strategy, which may or may not prove distinctive (Johnson et al, 2008).

It is important to remember that competitive advantage is being sought for one major purpose; to serve customers real needs, it is not simply to beat competition (Ohmae, 1988). Competitive advantage is created and sustained when a firm performs the most critical functions either more cheaply or better than its competitors (Porter, 1998). He further says that sustained competitive advantage requires effective control of cost drivers and those economies of scale, learning, linkages, inter-relationships and timing provide the key opportunities for creating advantage.

Porter (1998) has shown how companies can seek broad advantage within an industry or focus on one or a number of distinct segments. He argues that advantage can accrue from cost leadership, differentiation and focus strategies. Competitive advantage can be viewed as the value an organization is able to create to differentiate itself from its competitors (Dubé & Renaghan, 1999). The value that is created by an organization is measured by the price customers are willing to pay for its particular service (Passemar & Kleiner, 2000). If customers perceive the service as producing the required benefits, they will purchase that service and will continue to do so over time (Wood, 2004). Hitt et al. (2001) define competitive advantage as ‘something’ that occurs when an organization puts a value-creating strategy in place. This should be a strategy whose benefits cannot be copied, or which would be too expensive to copy.

Kim and Oh (2004) are of the opinion that the competitive advantage of an organization is the result of the resources that the organization has developed internally. The competitive advantage that an organization possesses depends, thus, on how it develops and employs its resources. Given the current business landscape, it is necessary for organizations to keep ahead of competitors by utilizing strategies of differentiation. Differentiation is accomplished through gaining and sustaining competitive advantage (Colgate, 1998).

A sustainable differentiating strategy requires an organization to bond emotionally with customers and focus on building long-term relationships with them. Organizations might accomplish sustainable differentiation by continually providing consistent brand messages. Even though an organization is able to gain a competitive advantage, it is easy for a competitor to match that organization and draw alongside it. Organization can sustain its competitive advantage only if barriers to imitation are put in place. If competitors are unable to copy an organization, its competitive advantage may well become sustainable in the long run. According to Porter (1998), competitive advantage grows fundamentally out of value a firm is able to create for its buyers that exceeds the firm's cost of creating it.

Value is what buyers are willing to pay, and superior value stems from offering lower prices than competitors for equivalent benefits or providing unique benefits that more than offset a higher price. Porter (1998) argues that there are two basic types of competitive advantage: Cost leadership and differentiation. There are three strategies for achieving competitive advantage: cost leadership, differentiation and focus.

**Figure 2.2** Competitive Strategies

		<b>COMPETITIVE ADVANTAGE</b>	
		Lower Cost	Differentiation
<b>COMPETITIVE SCOPE</b>	Broad Target	<b>1. Cost Leadership</b>	<b>2. Differentiation</b>
	Narrow Target	<b>3A. Cost Focus</b>	<b>3B. Differentiation Focus</b>

**Source:** Porter M.E (1998)

To achieve competitive advantage, each of the generic strategies involves a fundamentally different route, combining the type of competitive advantage required with the scope of the strategic target in which competitive advantage is to be achieved. The cost leadership and differentiation strategies seek competitive advantage in a broad range of industry segments, while focus strategies aim at cost advantage (cost focus) or differentiation (differentiation focus) in a narrow segment.

In cost leadership, a firm sets out to become the low cost producer in its industry. The sources of cost advantage are varied and depend on the structure of the industry and may include the pursuit of economies of scale, proprietary technology and preferential access to raw materials (Porter, 1998). In the case of differentiation, a firm seeks to be unique in its industry along some dimensions that are widely valued by buyers. It selects one or more attributes that many buyers in an industry perceive as important,



and uniquely positions itself to meet those needs (Porter, 1998). The firm is rewarded for its uniqueness with a premium price. A focused differentiation strategy seeks to provide high perceived product/service benefits justifying a substantial price premium, usually to a selected market segments or niche (Johnson et al, 2008). Cost Leadership refers to a strategy where a firm sets out to become the low cost producer in its industry.

The firm has a broad scope and serves many industry segments, and may even operate in related industries. The firm's breadth is therefore more important to its cost advantage. The sources of cost advantage are varied and depend on the structure of the industry. They may include the pursuit of economies of scale, proprietary technology, preferential access to raw materials, etc. A low cost producer must find and exploit all sources of cost advantage.

Low cost producers typically sell a standard, or no-frills, product and place considerable emphasis on reaping scale or absolute cost advantages from all sources (Porter, 1998). If a firm can achieve and sustain overall cost leadership, then it will be an above average performer in its industry provided it can command prices at or near the industry average. At equivalent or lower prices than its rivals, a cost leader's low cost position translates into higher returns.

A cost leader, however, cannot ignore the bases of differentiation. If its product is not perceived as comparable or acceptable by buyers, a cost leader will be forced to discount prices well below competitor's to gain sales. This may nullify the benefits of its favourable cost position. A cost leader must achieve parity or proximity in the bases of differentiation relative to its competitor to be an above average performer, even though it relies on cost leadership for its competitive advantage (Johnson et al,

2008). Parity in the bases of differentiation allows a cost leader to translate its cost advantage directly into higher profits than competitors. Proximity in differentiation means that the price discount necessary to achieve an acceptable market share does not offset a cost leader's cost advantage and hence the cost leader earns above average returns. The strategic logic of cost leadership usually requires that a firm be the cost leader, not one of several firms vying for this position.

When there is more than one aspiring cost leader, rivalry among them is usually fierce because every point of market share is viewed as crucial. Unless one firm can gain a cost lead and "persuade" others to abandon their strategies, the consequences for profitability can be disastrous. Thus cost leadership is a strategy particularly dependent on preemption, unless major technological change allows a firm to radically change its cost position (Porter, 1985). The cost leadership is often driven by company efficiency, size, scale, scope and cumulative experience (learning curve). A cost leadership strategy aims to exploit scale of production, well-defined scope and other economies, producing highly standardized products, using high technology.

Differentiation as a strategy confers uniqueness as an advantage. In this case a firm seeks to be unique in its industry along some dimensions that are widely valued by buyers. It selects one or more attributes that many buyers in an industry perceive as important, and uniquely positions it self to meet those needs (Porter, 1998). The firm is rewarded for its uniqueness with a premium price. The means for differentiation are peculiar to each industry. Differentiation can be based on the product itself, the delivery system by which it is sold, the marketing approach and a broad range of other factors.

A firm that can achieve and sustain differentiation will be an above average performer in its industry if its price premium exceeds the extra cost incurred in being unique. A differentiator, therefore, must always seek ways of differentiating that lead to a price premium greater than the cost of differentiating. A differentiator cannot ignore its cost position, because its premium prices will be nullified by a markedly inferior cost position (Gibcus and Kemp, 2003).

A differentiator thus aims at cost parity or proximity relative to its competitors, by reducing costs in all areas that do not affect differentiation. The logic of differentiation strategy requires that a firm choose attributes in which to differentiate itself that are different from its rivals (Porter, 1998). A firm must be truly unique at something or be perceived as unique if it is to expect a premium price. In contrast to cost leadership, however, there can be more than one successful differentiation strategy in an industry if there are a number of attributes that are widely valued by buyers. It is therefore the work of the management to identify the attributes valued by buyers and how to satisfy them.

Focus strategy on the other hand is quite different from the others because it rests on the choice of a narrow competitive scope within an industry. A focused differentiation strategy seeks to provide high perceived product/service benefits justifying a substantial price premium, usually to a selected market segments or niche (Johnson et al, 2008). In many markets these are described as premium products and are usually heavily branded. The focuser selects a segment or group of segments in the industry and tailors its strategy to serving them to the exclusion of others. By optimizing its strategy for the target segment, the focuser seeks to achieve a competitive advantage in its target segments even though it does not possess a competitive advantage overall.

According to Porter (1998), the focus strategy has two variants, cost focus and differentiation focus. In cost focus, a firm seeks a cost advantage in its target segment, while in differentiation focus a firm seeks differentiation in its target segment. Both variants of the focus strategy rest on differences between a focuser's target segments and other segments in the industry. The target segments must either have buyers with unusual needs or else the production and delivery system that best serves the target segment must differ from that of other industry segment.

Cost focus exploits differences in cost behavior in some segments, while differentiation focus exploits the special needs of buyers in certain segments (Porter, 1998). Such differences imply that the segments are poorly served by broadly-targeted competitors who serve them at the same time as they serve others. The focuser can thus achieve competitive advantage by dedicating itself to the segments exclusively. Breadth of target is clearly a matter of degree, but the essence of focus is the exploitation of a narrow target's differences from the balance of the industry. Narrow focus in and of itself is not sufficient for above-average performance.

A focuser takes advantage of sub optimization in either direction by broadly targeted competitors. Competitors may be underperforming in meeting the needs of a particular segment, which opens the possibility for differentiation focus. Broadly-targeted competitors may also be over performing in meeting the needs of a segment, which means that they are bearing higher than necessary cost in serving it. An opportunity for cost focus may be present in just meeting the needs of such a segment and no more (Porter, 1985). Therefore if a focuser's target segment is not different from other segments, then the focus strategy will not succeed (Porter, 1998). If a firm can achieve sustainable cost leadership (cost focus) or differentiation (differentiation

focus) in its segment and the segment is structurally attractive, then the focuser will be an above average performer in its industry. Segment structural attractiveness is a necessary condition because some segments in an industry are much less profitable than others. There is often room for several sustainable focus strategies in an industry, provided that focusers choose different target segments.

## **2.6 The Virtual Value Chain and Competitive Advantage**

Amit and Zott (2001) surveyed the foundations of value creation in virtual markets. They found out that that no single theory described above could fully explain value creation of the virtual value chain. Indeed, traditional approaches to value creation are being challenged as ‘the characteristics of virtual markets combined with the vastly reduced costs of information processing allow for profound changes in the ways companies operate and in how economic exchanges are structured.’ (Amit and Zott, 2001). Once applied to electronic markets, traditional approaches show limitations in determining the sources of value creation. Amit and Zott (2001) extracted, from their data, four interdependent value drivers; namely efficiency, complementarity, lock in (customer intimacy) and novelty, that constitute a unit of analysis for the study of virtual value creation.

Transaction efficiency is one of the primary value drivers in the virtual value chain (Amit and Zott, 2001). Transaction efficiency means that the lower the costs of the medium of exchange between buyer and seller, the higher the value will be. Efficiency enhancements relative to offline businesses can be realized in a number of ways. It reduces information asymmetries between buyers and sellers through the supply of up-to-date and comprehensive information (Amit and Zott, 2001). The speed and facility with which information can be transmitted via the Internet makes this approach convenient and easy. Not only will the transactions created in real-time

increase the competitive intensity with regard to speed and efficiency of the business, but also they will place a heavy demand on organizations to manage customers' information for their future use. By tracking customer information, a firm becomes aware of customer preferences and tastes, and also can make targeted efforts in meeting those demands earlier than its competitors (Bhatt and Emdad, 2001). Therefore, the Internet enables multiple opportunities for innovative businesses to reduce transaction costs while at the same time handling customer needs in real-time or lesser times compared to competitors.

In the virtual world, businesses could transcend the limitations of time and space that characterize the physical world. By leveraging the cheap interconnectivity of the virtual markets, businesses further enhance transaction efficiency by enabling faster and more informed decision-making (Amit and Zott, 2001). It also provides for greater selection at lower costs by reducing distribution costs, streamlining inventory management, simplifying transactions, allowing individual customers to benefit from economies of scale through demand aggregation and bulk purchasing, streamlining the supply chain, and speeding up transaction processing and order fulfillment, thereby benefiting both vendors and customers (Amit and Zott, 2001).

Complementarity is a major source of value within highly networked industries. The basic idea behind this concept is that two entities or two products in combination sometimes provide more value than the sum of the amounts of value they could create independently (Teece, 1986). In the e-tourism industry, many examples show that firms “leverage this potential for value creation by offering bundles of complementary products and services to their customers” (Amit and Zott, 2001).

Lock in phenomenon occurs when barriers at exit are high and this happens when suppliers have incentives to preserve their relationship instead of contracting with other firms, but also when clients remain loyal and cease to multi-home. By preventing such migration behaviors, firms are supposed to build a competitive advantage and thereby to create additional value (Amit and Zott, 2001). Lock in settles at the intersection of transaction cost economics and network theory since it implies the presence of network externalities and switching costs.

Lock in mechanisms used in many businesses is the introduction of loyalty programmes that promise customers benefits when they consume the products from given business. With the adoption of new technology with two rival variants it has been demonstrated that network externalities largely contribute to reinforce the “technological lock in” as soon as “one variant irreversibly and exclusively dominates the market”. Amit and Zott (2001) argue that high switching costs facilitate customer lock-in the particular case of e-business, including loyalty programs, trustful relationships, familiarity and user friendly interfaces, customization and personalized service.

To create value, hotel businesses have to innovate both in the virtual and the physical business space. Although virtual markets show inherent innovation facilities and capabilities, the businesses that have adopted the virtual value chain have to be proactive and innovate in the ways they do business (Hackney et al., 2004). For example, existing innovation research recognizes the importance of ICTs for turnover and employment growth at the level of the firm (Koellinger, 2008). Beyond the positive impact of ICTs on new product development processes, the Internet also amplifies the market success of new products.

Amit and Zott (2001) observe that innovative companies that embrace virtual markets all introduced new ways of conducting and aligning commercial transactions. They create value by connecting previously unconnected parties, eliminating inefficiencies in the buying and selling processes through adopting innovative transaction methods, capturing latent consumer needs, and/or by creating entirely new markets (Amit and Zott, 2001).

Overall, several factors influence the capacity of a firm acting in the virtual world to create value. Whether these value drivers belong to traditional approaches or to the virtual market approach, such theorizing helps us integrate an array of research on value creation. Moreover, it offers a comfortable basis for investigating the sources of value creation in virtual market intermediation.

Information, therefore, plays an important role in terms of competitive success because it is through information that existing processes can be better analyzed and controlled (Porter and Millar, 1998). The transactions created in real-time increases the competitive intensity with regard to speed and efficiency of the business. In addition it places a heavy demand on organizations to manage customers' information for their future use (Bhatt and Emdad, 2001).



## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter highlights the methodology that was adopted in order to meet the objectives of this study as stated in chapter one. Included in this chapter is the research design, target population, sample design (size), data collection methods and the procedure for data analysis.

#### **3.2 Research Design**

A cross sectional research survey was used in this research since the same variables were determined and measured across all the five star hotels in Kenya. These variables were descriptive and quantitative in nature thereby implying that descriptive statistics were used for analysis.

The research was conducted through a cross sectional survey involving all the five star hotels in Kenya. The process involved collecting, sorting, processing and interpreting data from the five star hotels who responded to the questionnaires. The choice of Kenya as a study area was considered because of convenience in terms of accessibility, time schedule and financial resources available to the researcher. Most of the observations or gathering of data was made in the period of September using both primary and secondary sources.

#### **3.3 Target Population**

The target population was all the five star hotels in Kenya. These hotels included Fairmont Norfolk, Nairobi Serena Hotel, The Stanley, Intercontinental Hotel, Hilton Hotel, Laico Regency, Nairobi Safari Club, The Windsor Hotel, Safari Park Hotel, Hemingways Resort, Sarova Whitesands Beach Resort & Spa, Serena Beach Resort &

Spa, Jacaranda Indian Ocean Beach Club and Leisure Lodge Golf Resort. All the hotels in the target population have ICT infrastructure and corporate websites. Most of the secondary data pertaining to e-business and performance of the hotels were provided by the hotel management team in the Sales and Marketing or ICT sections. Most hotels have their e-business and ICT strategy being handle at the head office of the managing or holding companies. The specific hotel under study therefore represents the whole chain and act as a sample.

### **3.4 Data Collection**

Primary and Secondary data was collected in the course of this study. These were collected through self administered questionnaire comprising both open and closed ended questions. The questionnaire sought answers regarding the hotel's website, the revenues from the online channels, demographic profile of guests from the online channels, how guest data is used, average room rate from online bookings, types of computer systems in use at the hotel and the marketing activities done by the hotel using the internet. Most of this information exists as secondary data and was easily available from the hotel management and websites.

A similar questionnaire was sent to all the chosen hotels and further clarifications were sought using telephone interviews and through meetings. Management contacts in these hotels were used to avail the information or administer the questionnaires. The designation of management contacts used to collect data from the various hotels ranged from E-Commerce Managers, ICT Managers, Sales Managers, Reservation Managers, Business Development Executives and Sales Executives.

### **3.5 Data Analysis**

Data consisted mainly of information from the closed ended questions in the questionnaire. Information from the open ended questions was analyzed through narrative analysis and listing. Presentation of findings was in tables of frequencies and percentages with a narrative after each table for ease of interpretation.

Data collected was prepared and analyzed using descriptive statistics. These included correlation analysis, percentages and frequencies. Frequency table was used to summarize the existence of hotel websites. Percentages were used to show and compare the revenues from the online channels.

The quality of the actual data collected was checked against the initial data requirements as indicated in the questionnaire. Some of the data was not exhaustive as the respondents opted to leave out certain information deemed sensitive as stipulated by the hotel's data protection policies.

## **CHAPTER FOUR**

### **DATA ANALYSIS, FINDINGS AND DISCUSSION**

#### **4.1 Introduction**

This chapter presents data analysis and interpretation of the findings. This research sought to determine the influence of the virtual value chain on the competitiveness of the five star hotels in Kenya. This chapter gives the analysis of the collected data, their interpretation and presentation in form of tables and charts for easy understanding. It touches only on the actual responses given on the questionnaires that were returned. It starts with the organization bio data, adoption of ICT in the five star hotels, adoption of e-business and the general use of information collected through the value chain process.

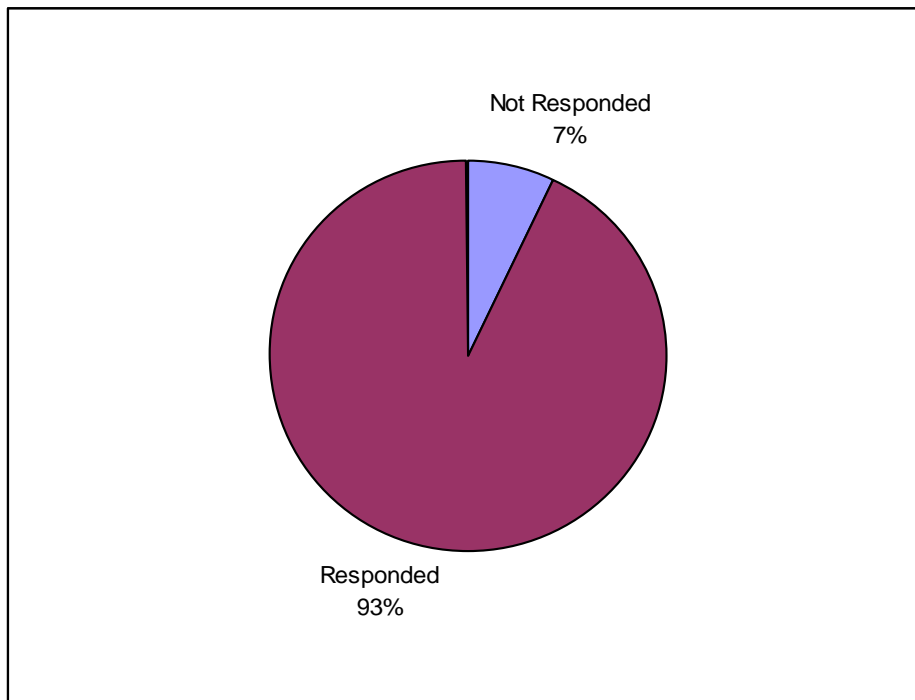
#### **4.2 Organizational Bio Data**

This section will look at the percentage of the five star hotels that responded to the questionnaires, the names of the hotels and the positions in the hotels, of the personnel who responded to the questionnaire. The designation of management contacts who completed the questionnaire at the hotels ranged from E-Commerce Managers, ICT Managers, Sales Managers, Reservation Managers, Business Development Executives and Sales Executives.

#### 4.2.1 Response Rate of the Hotels

Figure 4.1 give the response rate of the sampled population under study. It illustrates the extent to which the respondents were reached to collect the required data and information.

**Figure 4.1** Response rates of the five star hotels in Kenya



The results in figure 4.1 indicate that out of 14 respondents, 13 of them responded to the questionnaire (92%) while only one hotel failed to respond (14%). One hotel, Hilton Hotel Nairobi declined to share information citing their data security policy. The questionnaires were responded to by the hotels' ICT Managers (Nairobi Safari Club, Intercontinental Hotel, and Hilton Hotel), Group Sales Managers (Jacaranda Indian Ocean Beach Resort, Fairmont Hotel, Windsor Golf Hotel and Country Club), E-Commerce Managers (Nairobi Serena Hotel, Serena Beach Resort and Spa, Sarova Stanley Hotel, Sarova Whitesands Beach and Resort), Reservation Managers (Hemmingways Resort, Watamu) and Business Development Executives (Leisure Lodge Beach and Golf Resort, Safari Park Hotel).

### 4.3 Adoption of Information Communication Technology (ICT)

This section will look at the adoption of Information and Communication Technology (ICT) by the five star hotels in Kenya, in their daily business operations, and the degree of connectivity of this ICT infrastructure. The respondents were asked to select from a list, computer systems that are used at their respective hotels. The objective of the researcher was to find out if most of the business operations at the hotels are automated and that information is being captured through the value chain. In addition, the researcher asked the respondents to indicate if the computer systems at the hotel were fully connected, partially connected or not connected. The degree of connectivity gave an indication of the information flow through the value chain.

#### 4.3.1 The Computer Systems being used at the Hotel

Table 4.1 shows the major ICT systems used in hotel operations and the number of hotels using these computer systems. The results in Table 4.1 show that all the hotels who responded use at least one computer system. The frequency in the table shows the number of hotels using the given computer system.

**Table 4.1** List of ICT Systems used at the hotel and their frequency of use

<b>Computer Systems used by the Hotels</b>	<b>Frequency</b>	<b>Percentage</b>
Customer Relations System (CRM)	3	7.0
Supply Chain Management System (SCMS)	5	11.6
Human Resource Management System (HRM)	8	18.6
Central Reservations System (CRS)	10	23.3
Property Management System (PMS)	6	14.0
Document Management System (DMS)	1	2.3
Financial Management System (FMS)	9	20.9
Business Intelligence (BI)	1	2.3
<b>Total</b>	<b>43</b>	<b>100</b>

An analysis done on the ICT adoption shows that all the hotels have at least one ICT system in use. The most used (23.3%) computer system used by five star hotels in Kenya is the Central Reservation System. This is followed by the Financial Management System (20.9%) and Human Resource Management System (18.6%). The least used systems by the five star hotels are the Document Management Systems (2.3%) and the Business Intelligence System (2.3%). The results indicate that majority of the five star hotels have implemented computer systems through which they can capture information about their customers and business processes in general.

### 4.3.2 The Degree of Connectivity

Table 4.2 indicates the degree of connectivity of the computer systems in the hotels. It indicates whether the systems are fully connected, partially connected, not connected or if the respondent was not sure of this parameter.

**Table 4.2** Degree of connectivity

Degree of Connectivity	Frequency	Percentage
Fully Connected	4	33
Partially Connected	8	67
Not Connected	0	0
Not Sure	0	0
<b>Total</b>	<b>12</b>	<b>100</b>

The results of the study indicate that a minority (33%) of the five star hotels have fully connected ICT infrastructure. The majority (67%) have partially connected computer systems. However, none of the hotels has standalone systems. The degree of connectivity gives an indication of how information flows through the business and the ability of this information to be analysed and used as a competitive tool.

#### 4.4 Adoption of E-Business

In this section, the researcher sought to find out the adoption of e-business by the five star hotels in Kenya. In particular the section looked at the presence of hotel websites, how the hotels were using the websites, the revenues that the hotels got through online bookings and marketing activities, other affiliate websites that the hotels used, and how their websites are managed. The researcher asked the responded to indicate if their respective hotels had a website and how these websites were being used by the hotel to gain competitive advantages and how much revenues the hotels received through the online channels.

##### 4.4.1 Existence of a Hotel Website

Table 4.3 indicates the existence of hotel websites used by the five star hotels in Kenya and the names of the websites.

**Table 4.3** Existence of a hotel website

<b>Nature of response</b>	<b>Frequency</b>	<b>Percentage</b>
Agree	12	100
Not Agree	0	0
Not Sure	0	0
<b>Total</b>	<b>12</b>	<b>100</b>

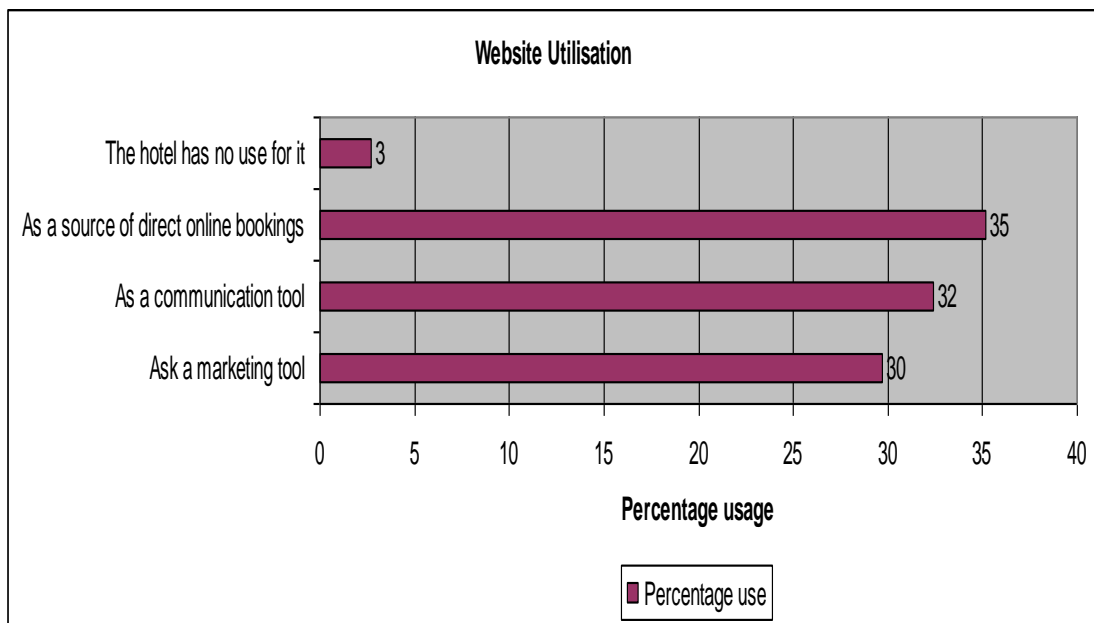
The results indicate that all the hotels have websites. However, analysis also needs to be done on how these websites are being used. Some hotels under the same hotel group share the same website but with a section dedicated to specific hotel outlets. All the five star hotels in Kenya have a functional website as shown by table 4.3.



#### 4.4.2 Utilization of Hotel Websites

Analysis was done on how the five star hotels made use of their websites. The analysis was to find out if the hotels used the websites as a marketing tool, a communication tool, as sales tool (source of online bookings) or if the hotel had no use for the website.

**Figure 4.2** How hotels use their websites

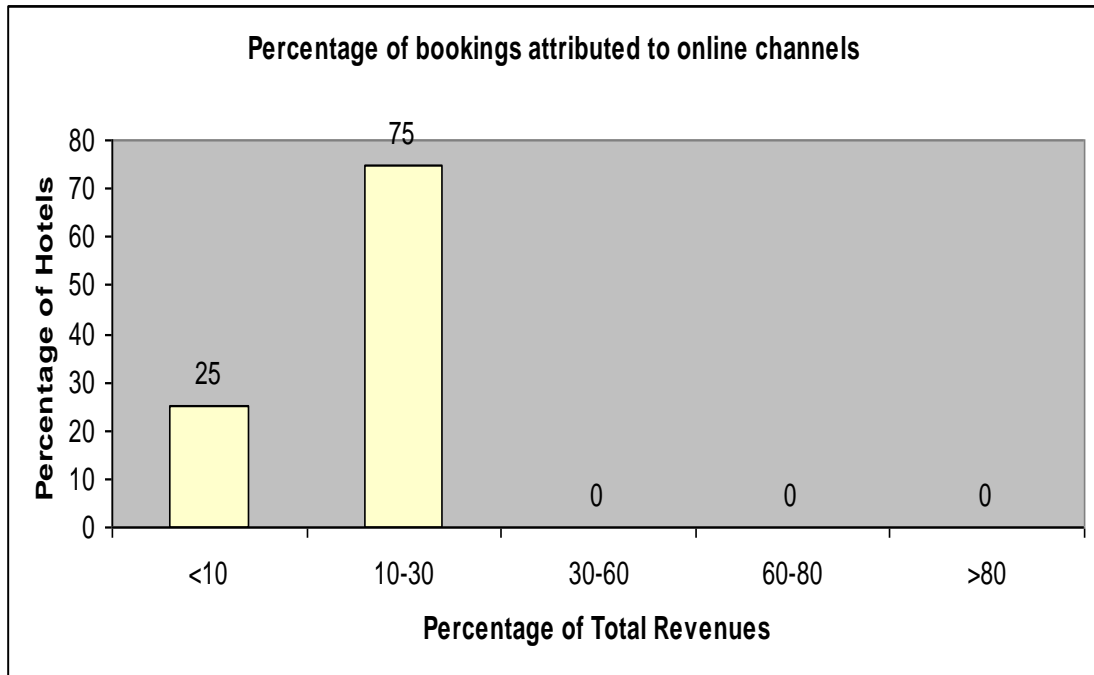


It was found out that 30% of the five-star hotels used the website as a marketing tool, 32% as a communication tool, 35% as a sales tool and 3% had no specific use for the website. Most five star hotels (35%) therefore used their websites for the purposes of getting more direct sales in form of hotel bookings or reservation inquiries.

### 4.4.3 Revenues from E-Business

Figure 4.3 shows the percentage of revenues from online channels compared to the total revenues made by the five star hotels in any given year.

**Figure 4.3** Percentage of bookings from online bookings



It was deduced from the analysis that most hotels (75%) received between 10-30% of their total yearly revenues from the online channels that include the hotel website, affiliate travel agent websites (OTAs) and the global distribution systems (GDSs). The rest (25%) of the five star hotels received less than 10% of their total yearly revenues from the online channels. There was no hotel that managed to get more than 30% of their total yearly revenues from the online channels.

#### 4.4.4 Online Channels being used by the hotels

Figure 4.4 shows a list of online travel agents (OTAs) that the five star hotels use to tap into the online sales and marketing opportunities.

**Table 4.4** Number of Online channels used by each five star hotel

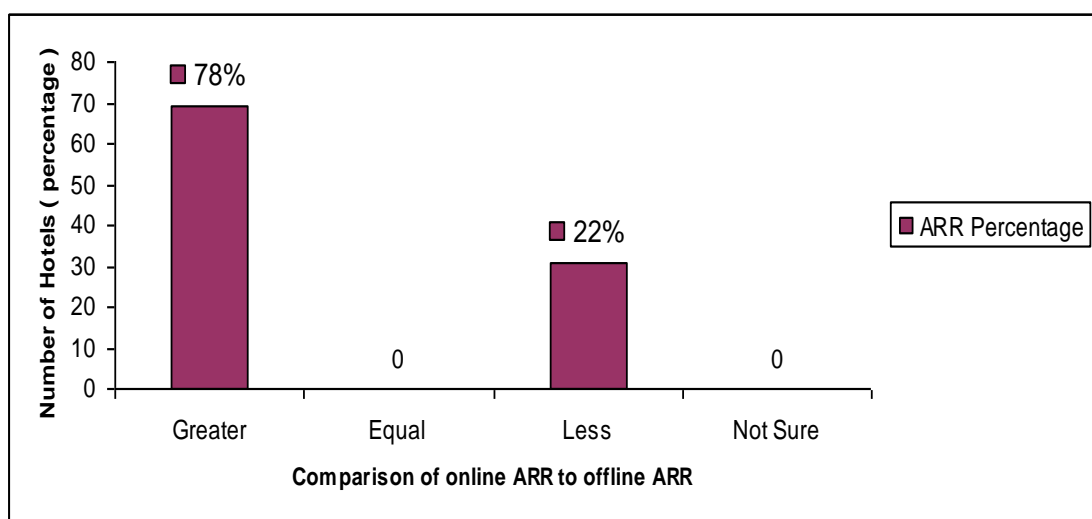
<b>Hotel Name</b>	<b>Number of OTAs</b>
Fairmont Norfolk	3
Nairobi Serena Hotel	11
The Stanley Hotel	8
The Intercontinental	5
Nairobi Safari Club	0
The Windsor Hotel	3
Safari Park Hotel	1
Hemmingways Resort - Watamu	2
Sarova Whitesands Beach Resort & Spa	8
Serena Beach Resort and Spa	11
Indian Ocean Beach Club	2
Leisure Lodge Golf Resort	0

The online travel agents (OTAs) have contractual agreements with the five star hotels to distribute and market their inventory on the internet. The highest number of OTAs signed up and used by some of the five star hotels is 11. However, one five star hotel had not signed up with any online travel agent. The OTAs provide the hotels with the opportunities to reach a global market at a much lower cost. Consequently, the more the number of customers acquired the more the revenues that the hotels receive through the online channels.

#### 4.4.5 Comparing Average Room Rate (ARR) of online and offline channels

Figure 4.4 shows the comparison between the average room rate from the offline and the online channels from the various five star hotels under study. The intention was to gauge how the average room rate from online channels compares to the offline channels.

**Figure 4.4** Comparison of the Average Room Rates from offline and online channels



From the figure 4.4, most (78%) of the five star hotels in Kenya stated that the average room rate (ARR) from the online channels was higher than the average room rate from offline channels while a minority (22%) indicated the exact opposite.

#### 4.5 Use of the Information Flow through the Virtual Value Chain

This section looks at how the five star hotels in Kenya use the information that they collect from their customers. In addition the section also tries to find out how often is this information is used, whether the information is used in innovating the product offering or developing specific products for a given target market or clientele. Lastly, the section seeks to find out if the five star hotels have loyalty programs, and if they use social media platforms as part of their strategy.

### 4.5.1 Profiling Customers

Table 4.5 indicates whether the five star hotels capture and keep guest details during their stay at the hotels.

**Table 4.5** Capturing customer details

<b>Nature of response</b>	<b>Frequency</b>	<b>Percentage</b>
Agree	12	100
Not Agree	0	0
Not Sure	0	0
<b>Total</b>	<b>12</b>	<b>100</b>

The results in table 4.5 indicate that all (100%) the hotels capture and store the guest details. These details include the names, the gender, country of origin, their special dates and anniversaries, room and food preferences among others.

### 4.5.2 Frequency of use of the guest information

Table 4.6 indicates how frequent the guest information is used by the five star hotels for various business purposes.

**Table 4.6** Frequency of use of the guest information

<b>Nature of response</b>	<b>Frequency</b>	<b>Percentage</b>
More frequent	5	42
Frequent	5	42
Less frequent	1	8
Not used	1	8
<b>Total</b>	<b>12</b>	<b>100</b>

The results in table 4.6 indicate that most (42%) of the five star hotels in Kenya frequently use the guest information they collect and gather for business purposes. A minority (8%) of the five star hotels do not use the guest information after the guests complete their stay at the hotels. Generally a majority (over 90%) of the five star hotels, collect, categorise, analyse and make use of the guest details after their stay at the various hotel outlets.

### 4.5.3 How Hotels Use the Guest Information

Table 4.7 shows how the city hotels use the guest information collected through the offline and online channels. This is in terms of optimizing the check-in and check-out processes, getting customer preferences and special days, developing personalized products and up-selling the already existing products.

**Table 4.7** How hotels use the guest information

<b>How the information is used</b>	<b>Frequency</b>	<b>Percentage</b>
Enhance check-in/Check-out process	9	21
Get customer preference	9	21
Get customer special days	9	21
Develop customised products	8	18
Up-sell hotel products	8	18
<b>Total</b>	<b>43</b>	<b>100</b>

From the table 4.7, mostly (21%) the five star hotels utilise the guest information for the purposes of enhancing the check-in and check-out processes, understanding the guest preferences in order to serve them better during their stay at the hotel and also to understand their anniversaries and special days. Less frequently( 18%) the five star hotels use the information to develop customised products targeted at the specific guest groups and to up-sell their already existing products. Generally, all the five star hotels organise, analyse and use the information about their customers that is collected through their computer infrastructure for the purpose of improving services.

#### 4.5.4 Existence of Loyalty Programs

Analysis was done on the number of five star hotels with loyalty program based on their frequency of responses.

**Table 4.8** Presence of a loyalty program

<b>Nature of response</b>	<b>Frequency</b>	<b>Percentage</b>
Agree	7	58
Not Agree	4	33
Not Sure	1	8
<b>Total</b>	<b>12</b>	<b>100</b>

The results indicated in Table 4.8 indicate that the majority (58%) of the five-star hotels have loyalty programs. However, 33% do not have loyalty programs. The loyalty programmes are aimed at locking customers to a particular hotel or hotel brand and leads to repeat customers and hence increase the competitiveness of the hotel.

#### 4.5.5 Using Internet Marketing

The table 4.9 indicates how the five-star hotels use internet marketing for their business. The researcher asked the respondents to select from a list, the internet marketing channels their respective hotels used.

**Table 4.9** Adoption of internet marketing by five star hotels

<b>Internet platform used</b>	<b>Frequency</b>	<b>Percentage</b>
Social media	11	33
Opt-in email newsletters	10	30
Pre-stay/Post-stay email	5	15
Paid digital adverts	7	21
<b>Total</b>	<b>27</b>	<b>100</b>

The objective of the researcher was to find out if the any hotels were incorporating the new online channels of marketing into their marketing strategies. The results in table 4.8 indicate that five star hotels in Kenya use social media more frequently (33%) in their internet marketing activities followed by opt-in email newsletters (30%). Pre-stay, post-stay emails and paid digital adverts are least used (21%) as part of their online marketing strategies.



## 4.6 Achievement of Competitive Advantage through the Virtual Value Chain

This section will look at the correlation between the number of online travel agents and the revenues from the online channels, the number of computer systems and the revenues from online channels.

### 4.6.1 Effect of the Number of online travel agents, internet marketing, computer systems, guest information and website on online revenues

Table 4.10 indicates the correlations between the number of online travel agents that the city hotels use, the number of computer systems, how the hotels use guest information, rate of use of the hotel website, the degree of adoption of internet marketing and the revenues from the online channels.

**Table 4.10** Effect of number of OTAs, internet marketing, number computer systems, use of guest information and website on online revenues

Correlation	R Square	p value
Number of Online Travel Agents (OTAs) * Revenues from Online Channels	0.3802	0.0433
Number of Computer Systems * Revenues from Online Channels	0.0999	0.3436
Degree of using guest information * Revenues from Online Channels	0.7504	0.0006
Rate of use of the website( marketing, communication, sales) * Revenues from Online Channels	0.2667	0.1039
Adoption of internet marketing * Revenues from Online Channels	0.4953	0.0157

From a correlation analysis table 4.10, the number of online travel agents that a hotel partners with, is positively correlated to the revenues that the hotel receives from the online channels. This relationship is positive and significant since the p value is less than 0.05. The number of computer systems being used at the hotel, however, does not correlate to the online revenues received from the online channels. This relationship is insignificant since the p value is greater than 0.05.

The analysis also indicate that the degree of use of the information collected from guests who stay at the hotel has a positive and significant correlation to the revenues received from online channels. The degree of use of the information relate to activities like enhancing the check-in and check-out process, getting guest preferences, getting guest special days and anniversaries, developing products targeted at the guests and up-selling the hotel products and services.

The way the hotels use the website as a communication tool, online booking channel and as a marketing tool, however, has an insignificant influence on the online revenues. This relationship is insignificant since the p value is greater than 0.05. The adoption of internet marketing by the five star hotels in Kenya has a positive and significant correlation to the online revenues since the p value is less than 0.05.

#### 4.6.2 Cost of acquiring a client through online channels

Table 4.11 indicate results the cost of acquiring a customer from the online channels compared to the offline channels.

**Table 4.11** Cost of acquiring a customer through the online channels

<b>Nature of response</b>	<b>Frequency</b>	<b>Percentage</b>
Higher than offline channels	4	33
Equal to the offline channels	0	0
Lower than offline channels	8	67
Do not know	0	0
<b>Total</b>	<b>12</b>	<b>100</b>

The results in table 4.11 show that most (67%) of the five star hotels in Kenya spend quite less in acquiring a customer through the online channels as compared to the offline channels. A few (33%) of the hotels found that the cost of acquiring a customer via the online channels was higher.

#### 4.7 Discussion of Findings

From the analysis it was established that all the five star hotels in Kenya have a functioning website, however hotels varied on how they utilized their websites. A minority of the hotels (3%) had no particular use for their website. They had put no effort in monetizing or utilizing the website for any business activity. Majority (97%) of the hotels use their websites to add value to their customers in several ways; as a communication tool, marketing tool or as a channel to get more sales. From the analysis 32% of the hotels use the website as a source of information about the hotel and its products.

The statistics also show that 29% of the five star hotels use their websites as a marketing tool for their products. Majority (35%) of the hotels use their websites as a sales channel by integrating them to booking engines and ecommerce infrastructure from where potential customers make reservations. Despite having functional websites, this factor alone did not lead to increased revenues from the online channels. The analysis affirms the assumption that having the website does not necessarily guarantee more sales. To gain more sales other factors like marketing and brand awareness must be incorporated into the ICT and e-business strategy.

The analysis revealed that three factors had a positive impact on the amount of revenues the hotels received from the online channels. One of the factors is the number of partnerships that the hotels have with OTAs; the higher the number of OTAs the more the revenues. This is because the hotel is able to reach a global audience by having its products distributed through the internet. Consequently, the hotels are able to get more inquiries and reservations through their websites from diverse locations and markets around the world. The cost of acquiring such customers is also very low compared to other channels of business and therefore the transaction costs are low.

The second factor is how the hotels use the customer information collected via the virtual value chain also has a positive effect on the revenues from the online channels. Most of the hotels (21%) use the guest information for the purposes of enhancing the check-in and check-out processes, understanding the guest preferences in order to serve them better during their stay at the hotel and also to understand their anniversaries and special days.

Consequently, the hotels are able to come up with innovative products that fit their customers' needs and preferences and also reduce the cost of processing customer transactions. In addition, from the guest profiles and information the hotels are able to anticipate demand and hence leverage on their product prices. The third factor is the role of internet marketing which has a direct influence on the amount of revenues from the online channels.

The more the hotels invest in internet marketing activities the more the revenues they get from internet sales. All the five star hotels in Kenya participate in internet marketing including the social media platforms, opt-in email newsletters, pre-stay and post-stay emails or paid digital adverts. The most adopted forms of internet marketing are social media and email newsletters at 33% and 30% respectively. Internet marketing is the cheapest form of marketing and has the widest reach at very short timeframes. Internet marketing also gives the hotels the ability to segment and target their products to various market segments.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATION**

This chapter contains the summary, discussions, conclusion and recommendations. It also provides the limitations, recommendation for policy and practice as well as recommendations for further research.

#### **5.1 Summary**

Here the results of the study are summarized, discussed and conclusion is made according to the research findings. The results indicated that most five star hotels have embraced ICT and e-business although not effectively. All the hotels have corporate websites, they have formed partnerships with online travel partners and they do internet and digital marketing.

A majority of the hotels have loyalty programmes which they use to retain and lock-in their customers. From the analysis, it was also established that the five star hotels also have computer systems that they use in their daily operations of managing the hotels. It is therefore possible to conclude that there a significant adoption of ICT and e-business within the five star hotels in Kenya which gives them competitive advantage over the other hotels in the same market.

It was noted that the number of computer systems used in a given hotel did not necessarily lead to an increase in revenues from the online channels. This is regardless of the fact that all the hotels indicated that their computer systems were connected. The connectivity factor indicates that the information flow within the hotel is seamless and the collected information can easily be organized and analyzed. The most utilized computer systems are the central reservation system (CRS) that captures information about the guests and assists in managing their stay at the hotel.

## **5.2 Conclusion**

The virtual value chain created by the adoption of ICT and e-business, in this respect were found to have the ability of offering a competitive edge to the five star hotels in Kenya by reducing transaction costs and increasing revenues. Business automation and the adoption of ICT in the hotel operations increase the efficiency of doing business. However, the greatest benefit is the ability of the computer systems to collect, store and analyse information collected through the value chain. The information collected is the source of competitive advantage in its own right. All the five star hotels in Kenya have at least one computer system being used at the hotel.

The research also revealed that competitive advantage can be achieved by the hotels entering into partnerships with many key online travel agents (OTAs). This was found to increase their global presence and leading to acquisition of more customers at a relatively lower cost. In addition, hotels are able to target and position different products in different markets at the same time based on the general characteristics on the market. Only two five star hotels had entered into partnerships with more than 10 OTAs.

However, for the virtual value chain to be effective the flow of information through the chain and the hotel should be flawless. In the virtual value chain, information becomes a source of competitive advantage in its own right. The hotel management is able to use the information that is collected in understanding customer preferences and thereby come up with relevant products. Nevertheless, only 33% of the five star hotels were found to have their computer systems fully connected; a factor that increases the efficiency of information capture, collection and analysis.

In addition, all the five star hotels were found to be participation in at least one form of internet marketing. Internet marketing is relatively cheap, easy to implement and can be configured to target a given market segment at a given time. The hotels used social media platforms (33%), email newsletters (30%), pre-stay and post-stay emails (15%) and paid digital advertising (21%). As part of their customer retention strategies, most (58%) five star hotels have implemented loyalty programmes through which repeat customers are rewarded. More importantly, the hotel management should incorporate e-business as part of their companywide strategy.

### **5.3 Implications on Policy, Theory and Practice**

The findings and conclusions from the study show that the virtual value chain can greatly increase the competitive advantage of the five star hotels in Kenya. It is therefore recommended that the five star hotels in Kenya adopt ICT, e-business and ecommerce as part of their companywide strategy. This strategy should be implemented in totality; most of the operations at the hotels should be automated and these computer systems should be connected to make sure that information flow through the value chain is flawless.

Hotel websites should also be developed with the purpose of using them as communication tools, sales channels integrated with ecommerce platforms, and marketing tools, with the objective of reaching the global market. This also would provide additional touch points between the hotels and potential customers in the customer acquisition funnel. The more the number of touch points the higher the probability of getting more customers and more conversions into revenues. Furthermore, the five star hotels should enlist with as many online travel agents and partners as they can. These partners distribute their inventory around the world to the regions where the hotels would not otherwise have reached on their own.



These partners also invest in marketing and brand awareness for these hotels. The consequence is that the hotels' presence around the world is felt and therefore more likelihood that they would get more customers and revenues. In addition to having the e-business infrastructure, the five star hotels should also invest in marketing their products and services especially through the internet. This is the cheapest way of marketing and reaching a wider audience within a short time span.

Internet marketing is also easy to manage because of the reliance on computer systems most of which are internet based subscription services. The social media platforms also provide a very cost effective way of enhancing the hotels' brand and engaging current and potential customers. Lastly, the five star hotels in Kenya should use make use of the information collected in all the above activities, categorize the information, analyze it and use it to understand their customers. Through this information, the hotels will be able to come up with innovative products that suit their customers' needs.

#### **5.4 Limitations of the Study**

The results of this study may have been affected by several limitations. The population of the five star hotels in Kenya is generally small and the response rate to the questionnaire was high, a majority of the hotels refused to share detailed information especially regarding their revenues and financial performance. Some of the reasons cited included company information policies that restrict the sharing of such information to non shareholders. Other hotels also feared to share their information fearing that it would leak to their competition. Data on the actual yearly revenues was limited and this made it extremely difficult to gauge the exact impact of the parameters under study on the actual performance of the hotels.

There was also a limitation on the access to data especially when several departments had to be consulted. This is because e-business is a companywide strategy and it cuts across several departments, for example ICT, Sales and Marketing, Finance, Operations and Audit departments. This led to a delay and it took too long to get some data. In most cases, the concerned people were so engrossed in the daily hotel operations and did not pay much attention to the formalities that go with the questionnaire like acknowledging the introduction letter through a formal response.

### **5.5 Suggestions for Further Studies**

The study established that the virtual value chain is a key factor that contributes to competitiveness of five star hotels in Kenya. Further research can be conducted on how e-business and ecommerce fits into the hotel industry especially as regards the structure, operations, personnel and training, financing and best practices. Many big hotel brands have such ICT and e-business infrastructure in place; however, research needs to be done on how these ICT and e-business infrastructure can effectively be incorporated into the overall company.

Research needs to be done on how the various players in hotel industry can effectively collaborate. These includes the hotels that provide the accommodation, the suppliers of technology, the travel agents and tour operators who sell the hotel products and services, the suppliers of food, drinks and entertainment and transport and government agencies that monitor the movements of persons across borders. If this process is seamless, then the cost of transaction at the hotel would be greatly reduced and this would benefit all the players in the industry and the customers.

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## APPENDICES

### Appendix I – Letter of Introduction to Respondents

Mulutu Jackson,  
D61/63308/2010,  
School of Business,  
University of Nairobi,  
P.O Box 30197,  
Nairobi  
September 2013.

Dear Respondent,

#### **RE: COLLECTION OF SURVEY DATA**

I am a postgraduate student at the University of Nairobi, School of Business. In order to fulfill the degree requirements, I am undertaking a management research project on the virtual value chain and competitive advantage of five star hotels in Kenya.

Your hotel has been chosen to form part of this study. The information you provide will be used exclusively for academic purposes. Kindly assist me collect data by filling out the accompanying questionnaire.

Yours Faithfully,

Mulutu Jackson  
MBA Student,  
University of Nairobi

Dr. Z. B. Awino.  
School of Business,  
University of Nairobi



**Appendix II – Questionnaire**  
**(Please help answer the following questions)**

**SECTION A: General Introductions**

1. What is the name of your hotel?

-----

2. Indicate your position and department

-----

**SECTION B: Degree of Information Communication Technology (ICT) adoption**

1. What computer systems does the hotel use to manage daily operations? Kindly select from the list below.

- a. Customer/Guest Relations Management System
- b. Supply Chain Management System
- c. Human Resources Management System
- d. Central Reservations System
- e. Property Management System
- f. Document Management System
- g. Financial/Accounting Management System
- h. Business Intelligence Systems

2. Which other systems are in use at the hotel?

-----

-----

3. How well interconnected at the systems you selected above?

- Fully interconnected
- Partially interconnected
- Not interconnected
- Not sure

### SECTION C: E-Business adoption

1. Does your hotel have a website?

- Agree                               Disagree                               Not sure

2. If you agree, kindly indicate the name of the website e.g. www.myhotel.com

-----

3. If the hotel has a website, kindly indicate how it is being utilized. ( Select all that applies).

- As a marketing tool  
 As a communication tool  
 As a source of direct online bookings  
 The hotel has no use for it

4. What percentage of the total yearly revenues is attributed to online bookings?

- < 10       10 -30       30 – 60       60 – 80       > 80

5. If you don't mind, kindly share the trend in the number of bookings received via the website in the last few years.

Year	% of total yearly revenues

6. Which online travel agents does the hotel work with? Select from the list below:

- a. Expedia.com                                
b. Booking.com                                
c. Transhotel.com                                
d. Hotelbeds.com                                
e. Agoda.com                                
f. GDS/ODD (Global Distribution System)

Which other channels does the hotel use? List them below:

-----  
-----

7. How are the above OTAs and channels managed?

Centrally                       individually                       Not sure

8. If centrally managed, which Channel Management System does the hotel use?

-----

9. How would you compare the average room rate (ARR) from the online bookings to the ARR from the offline channels e.g. walk-ins, sales teams and FITs?

Greater than the offline bookings

Equal to the offline bookings

Less than the offline bookings

I do not know

10. What is the cost of acquiring a customer through the hotels online channels compared to the offline channels?

Higher than the offline channels

Equal to the offline channels

Less than the offline channels

I do not know

11. What is the continental profile of the guests received via the online channels as a percentage?

a. Africans.....

b. Europeans.....

c. American (North).....

d. Asians.....

e. Australia.....

f. South Americas.....

## **SECTION D: Use of the information collected**

1. Does the hotel create and store the profile of all their guests?  
 Agree                       Disagree                       Not sure
  
2. If you agree, how frequent is the above guest profile used in the subsequent bookings and reservations?  
 More frequent  
 Frequent  
 Less frequent  
 The information is never used again
  
3. If frequently being used, in what way is the information above used by the hotel?  
(Select all that are applicable).  
 To get payment details in order to shorted check-in/ check-out process  
 To get the guest preferences in order to prepare for their room and meals  
 To get their special days in order to offer them gifts and celebrate together  
 To develop special products that fit their preference  
 To try up-sell hotel products
  
4. Does the hotel have a loyalty program?  
 Agree                       Disagree                       Not sure
  
5. What internet marketing programs does the hotel use (select all that applies)?  
 Social media  
 Opt-in email newsletters  
 Pre-stay and post-stay email communication  
 Paid digital adverts

### **Appendix III – Five Star Hotels in Kenya**

1. Fairmont Norfolk
2. Nairobi Serena Hotel
3. The Stanley Hotel
4. The Intercontinental
5. Hilton Hotel
6. Laico Regency
7. Nairobi Safari Club
8. The Windsor Hotel
9. Safari Park Hotel
10. Hemingways Resort
11. Sarova Whitesands Beach Resort & Spa
12. Serena Beach Resort and Spa
13. Jacaranda Indian Ocean Beach Club
14. Leisure Lodge Golf Resort

**Source:** Adapted from Republic of Kenya (2003)

