

**INFORMATION COMMUNICATION TECHNOLOGY AND STRATEGY
IMPLEMENTATION IN STATE CORPORATIONS OF KENYA IN THE
TOURISM SECTOR**

BY

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DECLARATION.

This research project is my original work and has not been presented for award in any other University.

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DEDICATION

I would like to dedicate this piece of work to the Almighty God who has been my strength and encouragement.

I cannot forget my family, friends and classmates for their endless support through all these.

May the almighty God bless and guide you all abundantly.

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ABBREVIATIONS AND ACRONYMS

DOI: Diffusion of Innovations

DSS: Decision Support System

ICT: Information Communication Technology

IT: Information Technology

SPSS: Statistical Package for Social Sciences

ABSTRACT

This study sought to find the role information communication technology and strategy implementation in state corporations of Kenya in the tourism sector. The research was guided by technology acceptance model or theory of planned behavior to better understand the role of ICT. Primary data was used for the study and the research instrument was a questionnaire. The population for the study were top management level, middle level managers and low level management in seven parastatals in the tourism sector namely Kenyatta International Convention Centre (KICC), Tourism Finance Corporation, Kenya Tourism Board, Kenya Utalii College, Bomas of Kenya, Kenya safari, hotels and lodges and Tourism Fund. The response rate was 96% (n=60). The study found out that Information communication technology is among the key players in the management of many organizations and that ICT supports organizations by providing a channel through which the organization's operations are handled in a smooth manner which eventually increases the efficiency of the organization. Its multifunctionality and flexibility creates room for tailored solutions that are based on personalization and localization in the endeavor to meet diverse needs. The study recommends that State corporations should address the challenges realized from this study in order to ensure effective adoption of ICT. System instability should be paid much attention and the concerned departments should fully coordinate to ensure that the systems are up and running. Lastly, the study recommends state corporations to ensure that they purchase enough systems to ensure that all staff can access them and this will increase staff productivity and service delivery. The systems should also be updated from time to time to limit the possibilities of system downturns.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Since the dawn of the theme of information communication technology governance on strategy implementation in the 1990s, studies have reported the benefits of proper Information Technology in strategy implementation in organizations. Although the available studies are not conclusive, they provide important evidences about the relevance of Information Technology governance to strategies execution.

A good IT governance, as stressed by Weill and Ross (2004) and Broadbent and Kitzis (2005), is important to develop trust and transparency among the stakeholders, a better way to deliver results through Information Technology projects and desirable behavior in using Information Technology in alignment with organizational priorities and organizational strategies. Weill and Ross (2004) and Lunardi et al. (2009) further complement that IT governance is the most important foundation for the generation of value to the organization through information technology.

Organizations, Diffusion of Innovations (DOI) theory, Fickman (1992) performed a critical review of Information Communication technology implementation and adoption in organisations. The theory focuses on different adoption contexts and their match with the context in which the classical diffusion theory was developed. The unified theory of acceptance also aims to explain user intentions to use an information and subsequent usage behavior. The theory holds that the four key constructs (performance expectancy, effort expectancy, soil influence, and facilitating conditions) are direct determinants of usage intention and behavior towards Information Communication Technology.

State corporations in Kenya are legal entities established by the Government to undertake a specified mandate on its behalf. Their legal status varies from being a part of government to stock companies with a state as a regular stockholder. The defining characteristics are that they have a distinct legal form and they are established to carry out specified mandates. In addition, they are common with natural monopolies and infrastructure such as railways and

telecommunications, strategic goods and services like mail, weapons, natural resources and energy, politically sensitive business, broadcasting, demerit and merit goods like healthcare. This description comports with that given by section 2 of the *State Corporations Act*, 1 which defines a State corporation as a body that is: Defined that way by statute; a body corporate established by an Act of Parliament, A bank or other financial institution or other company whose shares or a majority of whose shares are owned by government or by another State Corporation, and a subsidiary of a State Corporation.

1.1.1 Information Communication Technology

Information Communication Technology is an umbrella term that includes all technologies for the manipulation and communication of information. Information Communication technology is today considered a very powerful enabler of development goals because of its unique characteristics that dramatically improve communication and the exchange of information to strengthen and create new economic and social networks (Beaudry and Pinsonneault, 2010).

Information Communication technology is applicable to the full range of human activity from personal use to business and government. It is multi functionality and flexibility creates room for tailored solutions that are based on personalization and localization in the endeavor to meet diverse needs (Gallivan and Srite, 2005).

1.1.2 Strategy implementation

A strategy is considered as an organizations road map for future direction and scope. The process of putting a strategy into action is strategy implementation. A strategy is considered successful when it is fully implemented and working in practice. Steiner and Miner (1977) cited that strategy implementation is concerned with the design and management of systems to achieve the best integration of people, structure, processes and resources.

Wheelen and Hunger noted that strategy implementation is the process by which strategies and policies are put action through the development of programs, budgets and procedure (Wheelen and Hunger, 2008). The process of strategy implementation has a number of characteristics; it involves putting strategy into action, it is an operational process, requires managerial skills and leadership, requires coordination among all organization units and functions, involves strategic control and lastly it involves management of change.

1.1.3 Information Communication technology and strategy implementation

Organizations have adopted strategies to ensure that there is proper implementation of their development plans. One of the strategies that have been adopted is the use of information technology by organizations. This has seen a shift from the traditional tools of strategy implementation. Today we have witnessed a fundamental transformation of modern world, as the industrial society that marked the 20th century rapidly gives way to the information society of the 21st century. The period has been dubbed the digital era.

Nowadays Information Systems can be from data processing to Decision Support and Executive Information Systems. There are many computer packages: automated and manual for Strategy implementation. These packages are used for strategy implementation across all industries, including manufacturing, service, public sector and non-profit organizations. In pre-computer era, the process of strategy implementation was likely to be a time consuming, but essentially simple exercise.

Today, strategy implementation process in large organizations is much more complicated, involving the large amount of data, their processing, rounds of adjustments, revisions and sensitivity analysis, monitoring and evaluation. The effective use of Information Communication technology has facilitated a number of processes within the implementation stages.

This has further reduced the Turn Around Time for the services offered by involved organizations. The organizations can confidently display their service charters in their offices. Previously, the preparation for any strategy implementation used much paper works. Currently, the whole implementation process is set on computer applications with many independent modules, which are coordinated via e-mail, local Area Network, Intranet and Groupware Environment (Rice and Gattiker, 2001).

1.1.5 State corporations in Kenya

State corporations in Kenya are also referred to as government parastatals. At independence in 1963, parastatals were retooled by sessional paper no. 10 of 1965 into vehicles for the indigenization of the economy. Majority of key parastatals in Kenya were established in the 1960s and 1970s. Today, there are over 200 state corporations in Kenya. State corporations are formed by the government to meet both commercial and social goals. State corporations exist for various reasons such as to correct market failure, provide education, health, to exploit social and political objectives, redistribute income or develop marginal areas (Kinyanjui, 2010).

Ontunya (2006) cites that one of the main challenges facing implementation of ICT by state corporations is the high cost of the systems. According to him, majority of the systems used by state corporations are costly and this impact the state corporation's budget. McGuckin et al (1998) cite that systems, applications, soft wares and machines are imported from developed countries by state corporations in third world countries (Milne 2006).

Zeithaml (2002) notes that training of employees is another challenge related to technology facing the state corporations. According to him, state corporations have to hire training expatriates from the company's manufacturing the soft wares. He further adds that such trainings are expensive and have a significant impact on the state corporation's budget. To the public, training them on the use of the technology is a challenge is this is partially contributed by the low literacy level of majority of the customers (Yen 2005).

A high internet charge is a challenge that bars majority of members of the public from embracing technology. This means that the public may not adopt some of the e-services that are offered by state corporations. Systems stability is a big challenge facing the adoption of ICT by state corporations. When systems are down, the public tend to develop a negative attitude towards the service and in the long run lose trust (Saloner and Shepard 1995).

The dynamic nature of technology is another challenge facing state corporations. What is technology today becomes ancient tomorrow. This has forced state corporations to spend a lot of money purchasing new applications or upgrading the existing ones. Such new systems require fresh training to the employees which in turn increases the running costs of state corporations (Economides and Salop 1992).

1.2 Research problem

Successful strategy implementation is a pride to any organization. Milne (2006) notes that the entire implementation process requires a skilled team of professionals, integrated strategy management process, tools, technologies and support. Walker (2002) adds that Strategic Plans are long-term plans though they are sometimes interconnected with short-term plans and they provide framework for preparation of the annual budget.

Given the magnitude of the role of strategic plans in organizations, there is a need to have a responsive managerial system capable to react correctly to ensure appropriate decisions at the right time and at the right place. In addition, to achieve a successful strategy implementation it is very important to have accurate, relevant and timely information.

The Government of Kenya issued a telecommunications policy statement that set out the government vision on telecommunications development to the year 2015. This would aid in of implementation of second phase of Vision 2030 strategy amongst various corporations.

In addition, the government launched the Information Communication Technology Board in 2007 to oversee the development of Information Communication Technology in Kenya to support implementation of the government strategies. Despite evidences showing the relevant role of Information Communication Technology in implementation of strategies, there are myriad of challenges that face the state corporations to execute these strategies.

This could be as a result of Information Communication Technology resources available, public servants' Information Communication Technology skills state corporations structures and leadership commitment. It is from the background that the study aims to establish if the above named factors indeed affects role of Information Communication Technology in strategies implementation in the state corporations. Scholars like Lewis, Agarwal and Sambamurthy (2003) cite that Information systems can have four roles in organizations: support, factory, turnaround, strategic.

Other scholars like McGuckin, Streitwieser and Doms (1998) argue that Information systems can be from data processing, Transaction Processing Systems to Management, Decision Support, Executive Support and Strategic Management Information Systems the available literature is not enough and there is a need to do further studies on the role of Information Communication technology adoption in strategy implementations. Locally, Njogu, William M (2010) has conducted a study to determine the extent of Information Communication Technology in state corporations in Kenya. In his study, he argues that ICT adoption and application in Kenya has provided new ways to do business; it has created new opportunities for the Kenyan firms, eliminated barriers that had traditionally stifled flows of information and promoted efficiency in a host of activities in state corporations.

According to Kinyanjui M (2010), Strategy implementation in state corporations in Kenya involves a high level of documentation and information processing, storage, and retrieval. The information intensiveness of the corporation's responsibility is such that tools and technologies that would speed up the documentation, management and information handling are not only important but professionally necessary. The value of accuracy, correctness, completeness, relevance and timeliness are characteristics of information which ICT systems do generate to meet the corporations strategy implementation needs. This study therefore seeks to answer the following question, what is the role of ICT in strategy implementation in state corporations?

1.3 Research Objective

This study seeks determine the role of Information Communication Technology in strategy implementation in state corporations of Kenya and the challenges they face during strategy implementation.

1.4 The value of the Study

The study play a major role in the Kenyan Government in transforming Kenya into newly industrializing middle income country providing high quality life to all her citizens by applying effective ICT in strategy implementation to achieve the desired results, through adopting a structured process management approach, measuring and tracking performance continuously ,ensuring top management support .

The study will also aid the Government policy makers to identify gaps and provide a basis for the formulation of technology oriented roadmaps and policies as a way of achieving the vision 2030.Through this study, the policies will be skewed towards efficiency and effectiveness as major operations in the sectors identify and embrace the use of ICT.

Finally, the research will contribute to the existing literature on the role of technology in state corporations, and how technology can be of use in the implementation of strategy in the corporations

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter introduces a theoretical foundation on ICT adoption in any industry and the researcher discusses the findings of previous studies on the role of ICT in organizations. The researcher reviews the role of ICT in organizations, factors that determine ICT adoption by organization, outcomes of ICT adoption by organizations and the challenges to ICT adoption within state corporations.

2.2 Theoretical Foundation

Some studies use technology acceptance model or theory of planned behavior in order to understand the adoption of new technology in the public sector setting (Aboelmaged, 2010; Wahid, 2010; Davis, 1989). Although those models suggest perceived usefulness and perceived ease of use as critical antecedents to users' technology adoption process, those models are not specific on the implementation of a new technology such as strategy implementation.

My theoretical framework draws on Croom & Brandon-Jones (2007), which is found useful to understand key challenges of strategy implementation in government sector. Since its inception, the theory has been adopted by researchers to provide empirical evidence on the relationships that exist between usefulness, ease of use and system use (Szajna 1994). Kenyan state corporations adopt technology for a number of reasons. Such reasons may be to centralize operations, improve quality of service, and increase the quality of service delivery to the public among others.

The Innovation diffusion theory is a model grounded in business study. Since 1940's the social scientists coined the terms diffusion and diffusion theory (Dean, 2004). This theory provides a framework with which we can make predictions for the time period that is necessary for a technology to be accepted. Constructs are the characteristics of the new technology, the communication networks and the characteristics of the adopters.

We can see innovation diffusion as a set of four basic elements: the innovation, the time, the communication process and the social system. Here, the concept of a new idea is passed from one member of a social system to another. Clemons, (1992) redefined a number of constructs for use to examine individual technology acceptance such as relative advantage, ease of use, image, compatibility and results demonstrability.

The advantage of the improved system is that it has allowed for better communication between the state corporations and its stakeholders since they have to communicate to ensure that less time is taken to implement government policies.

ICT adoption plays a key role in the strategic planning process as well as the implementation process. The biggest role is the management of the entire strategy implementation process. Management is the process of reaching organizational goals by working with and through people and other organizational resources.

Management has three characteristics: It is a process or series of continuing and related activities, it involves and concentrates on reaching organizational goals and lastly it reaches these goals by working with and through people and other organizational resources. The basic management functions that make up the management process in any strategy implementation are Planning, organizing, influencing, controlling and decision making.

Planning is a process that involves choosing tasks that must be performed to attain organizational goals, outlining how the tasks must be performed, and indicating when they should be performed. Planning activity focuses on attaining goals. Managers outline exactly what organizations should do to achieve a successful strategic planning.

Planning is concerned with the success of the organization in the short term as well as in the long term (Lalonde, 1998). Application of computers is providing forecasting which is key in proper planning, managers use forecasts to be able to plan for future strategic plans.

Organizing is defined as the assigning of tasks developed in the planning stages, to various individuals or groups within the organization. Organizing is to create a mechanism to put strategic plans into action. People within the organization are given work assignments that contribute towards the successful implementation of the strategic planning.

Tasks are organized so that the output of each individual contributes to the success of departments, which, in turn, contributes to the success of divisions, which ultimately contributes to the success of the strategic plan (Burt, Dobeir & Starling, 2003).

The use of ICT applications in this function enable managers to monitor effectively the planned activities which have been assigned to different individuals. ICT is also used to design structures through which managers determine the outcome from the assigned duties. This has a great impact on the success of the implementation process.

Influencing is referred to as motivating, leading or directing. Influencing can be defined as guiding the activities of organization, members, in the direction that helps the organization move towards the fulfillment of the goals. The purpose of influencing is to increase productivity. Human-oriented work situations usually generate higher levels of production over the long term than do task oriented work situations because people find the latter type distasteful (Stevens, 1998).

ICT has come with computer applications that help in increasing productivity because they simplify work making people to want to work even more. By providing computers to staff, they influence their performance and the final output is improved, they are also influenced to work for longer hours and this has a positive contribution on the strategic plan (McGuckin et al 1998).

In strategy implementation, controlling involves the following roles played by the manager: Gathering information that measures performance, comparing present performance to pre-established performance norms and determining the next action plan and modifications for meeting the desired performance parameters in the implementation process.

The use of ICT can help managers in gathering information that measures performance, this is most important because you need to measure the performance of the staff. Also computer

application is important in determining present performance to pre-established performance norms. The pre-established performance norms are very important in the implementation process and they contribute a lot towards the success of the whole process (Walker 2002).

Decision making has a significant contribution towards the success of strategic planning. This is also one of the key functions of managers, making decisions which are key to the performance of the strategic process and the entire organization.

Managers may use an ICT application known as Decision Support System (DSS) in coming up with concrete decisions that can be used within the organization. A Decision Support System collects data from a host of internal and external sources, organizes and condenses these raw numbers into key indicators and builds "what-if" scenarios around them (Stolarick 1999). Decision makers then evaluate the alternate solutions the DSS proposes.

Real-world decisions are often complex and very few are based on "perfect" knowledge. A DSS can only ask probing questions, supply additional data upon request, help flow-chart complex processes and plug different variables into simulation models.

The user makes the actual decision, the idea of designing formal computer programs to aid business decision making dates back to the 1980s. Early models tailor made to specific client needs caught the imagination of designers and theorists (Lalonde, 1998). By the end of the decade, their ideas and experiences coalesced into the Decision Support System. This function is enabled by the use of computers.

2.3 Factors that shape ICT adoption, use, and outcomes

A major research tradition of ICT is adoption, particularly exploring the evolution of the technology acceptance model (Davis & Morris, 2007). This model incorporates four influences (performance expectancy, effort expectancy, social influence, and facilitating conditions) on behavioral intentions, which then affect technology use.

Moreover, these relationships are moderated by gender, age, experience, and voluntariness of use and have demonstrated strong validity, reliability, and predictive power. Another central theoretical approach to influences on ICT adoption is examining it as a socially-situated process. That is, the adoption and use of organizational ICTs are not solely individual decisions, nor determined necessarily by objective or even perceived characteristics.

Influences may come from individual (e.g., innovativeness and self-efficacy), social (e.g. influence), and institutional (e.g., top management commitment) contexts (Lewis, Agarwal, & Sambamurthy, 2003), via central or peripheral cognitive processing routes (Bhattacharjee & Sanford, 2006). Social influence and norms may come from a variety of sources, may be supportive or resistant, and may have both intended and unintended consequences.

In the case of one organization's IT planning, three influences played a major role: the company's business process re-engineering, the consultant, and the organization's business environment. These three converged in the development of new rules and norms about crucial aspects and relevant stakeholders that limited the consideration of alternatives because of detrimental results (Tillquist, 2002). Opinion seekers may have greater influence on one's attitudes about an ICT than opinion leaders because of the implied status conferral (Vishwanath, 2006).

Moreover, the influence of number of opinion seekers on attitudes may be moderated by the degree of cohesiveness of the group – indicating internalization of attitudes rather than compliance with the group norm. One department's positive rationales for adoption of an ICT (or technology concept) may be rejected by other departments within the same organization, what Leonardi (2011) calls innovation blindness.

Both this rejection and the diffusion of technology across organizational boundaries may reflect an over-time, reciprocal influence process. Ongoing usage is also likely to alter one's beliefs and attitudes and affect the nature of subsequent use (Bhattacharjee & Premkumar, 2004).

Johnson and Rice (1987) analyzed how initial agenda-setting (framing of the problem and potential solutions) in an organizations' adoption process influenced the failure or successful integration of stand-alone word processing.

Messages about a potential ICT, which are particularly influential during early stages of adoption, can reframe salient attributes of a technology, thereby helping to constrain and organize the innovation's meaning. Vishwanath's (2009) experiment revealed how social influence frames affected how important particular attributes and expectations about an ICT were, which in turn affected adoption decisions.

The influence of emotions on adoption, use and outcomes are under-analyzed. TAM could be extended to include emotional and psychological aspects of use and users (such as temporal dissociation, focused immersion, heightened enjoyment, control, curiosity, playfulness and innovativeness) as factors that affect perceived ease of use and usefulness (Ahuja & Thatcher, 2005), thus increasing the likelihood of adopting an ICT. Guinea and Markus (2009) believe that emotion, consensus, and automatic behavior may be more important than traditional concepts in explaining ongoing use.

Other influential emotions include challenge, achievement, loss and deterrence (Beaudray & Pinsonneault, 2010), or cognitive absorption (consisting of temporal dissociation, focused immersion, heightened enjoyment, control, and curiosity) (Agarwal & Karahanna, 2000).

An organization's culture is both a direct and moderating influence on ICT adoption and implementation (Harrington & Guimaraes, 2005). The term culture generally refers to "specific norms, values, assumptions, and social structure that shape members' beliefs and behaviors within these organizations" (Gallivan & Srite, 2005, p. 299).

One cultural characteristic specifically related to new ICTs is absorptive capacity, the "organization's ability to recognize the value of new information, assimilate it, and apply it to commercial ends" (p. 39). Understanding cultural influences is especially salient with increased corporate mergers, globalization, and standardization of business practices. Organizational culture research needs to be integrated into ICT research, which Gallivan and Srite (2005) attempt to do through social identity theory.

This theory argues that individuals have both personal identities and social identities. Indeed, they may have membership in multiple social identities, including organizational and national cultures. These identities are associated with categorization, identification with certain groups, and social comparison (of in-groups and out-groups) processes.

Each of these identities can influence attitudes toward and ways of adopting and using ICTs (e.g., relevant regulations, mediated trust, support for reinvention, gender roles). For example, cultures with high respect for authority are likely to adopt an ICT more readily, but with less reinvention (Al-Shohaib et al., 2010). Kayworth (2006) integrate IT and cross-cultural research.

This theory highlights the importance of fit between value orientations of the potential users, and values embedded in the IT. Developing a match between organizational and national culture and IT values reduces conflict and thus increases adoption and use of new technology. Organizations may also be influenced by other organizations, especially if the focal organizations perceive themselves as leaders, scan the environment, and emulate other leaders (Teo, Wei, & Benbasat, 2003; Zorn, Flanagin, & Shoham, 2011).

Organizations may also learn about an ICT concept through consultants, the press and industry discourse, other firms, industrial infrastructure, etc. (Wang, 2009). The physical and digital properties of ICTs may also influence the way people adopt and use them. Materiality refers to the arrangement of an artifact's physical and/or digital materials into particular forms that endure across differences in place.

Use of the adjective material is chosen to remind readers that there are some aspects of the technology that are intrinsic to it and not part of the social context in which the technology was used. Orlikowski (2000, p. 406), for example, wrote that software for groupware embodies particular symbol and material properties, documented use of a help-desk queuing software by IT technicians and argued that its "material features" made possible activities such as assigning jobs or documenting what one did to solve a particular use problem.

Thus, the materiality of an ICT, by virtue of providing capabilities to do some things and by making others difficult, can shape the way that people decide to adopt and use it (Jonsson, Holmström, & Lyytinen, 2009; Wagner, Newell, & Piccoli, 2010). In turn, other scholars argue that the materiality of a technology is so thoroughly shaped by social processes, and is always interpreted and used in the context of social interaction, that it makes most sense to describe people's organizational activities with a new ICT as socio material (Orlikowski, 2007).

2.4 Consequences of ICT adoption and use

Research considers a wide variety of outcomes (i.e., consequences, implications, and effects) associated with ICT adoption and use in strategy implementation. In strategy implementation, ICT adoption has eight outcomes: adoption/acceptance/adaptation, organizational assimilation, conflict, knowledge management, structure, organizational environment, and performance.

The primary outcomes of influences and processes are adoption and use of the ICT. The adoption process includes more than just adoption or rejection (Rice, 2009; Rogers, 2003). Research also studies rejection, discontinuance, acceptance and adaptation/reinvention. Indeed, Barki, Titah and Boffo (2007) conceptualize information system user-related activity as including adoption, acceptance, and adaptation.

Acceptance includes concepts such as user satisfaction, responses, attitudes, and beliefs, and how use is integrated with or routinized into other work processes. Acceptance does not necessarily follow from initial adoption or system use.

One direction of research on end-user satisfaction is to expand its theoretical explanations. Au, Ngai and Cheng (2008) apply expectation, needs, and equity theories to argue that the ratio of inputs to needs (equitable needs fulfillment) varies across individuals; thus, the technical aspects of a new ICT alone cannot explain end user satisfaction.

Adaptation or reinvention is the process whereby users, groups and organizations modify, reinvent, appropriate, or adapt particular features or uses of a new ICT (Johnson & Rice, 1987). This is a subtle, complex, and over-time process, which may be heavily constrained by pre-existing social and organizational norms, managerial agendas, individual needs and abilities, work networks, training, and technology features.

A few studies assess the extent to which ICTs may affect an individual's organizational assimilation (or socialization), that is, the extent to which newcomers learn about and adjust to the culture, values and norms of an organization. In Waldeck, Seibold and Flanagin's (2004) study, advanced technologies were second in importance only to face-to face communication in aiding new employees' socialization.

Use of workplace technologies can also shape organizational members' construal's and enactments of time (such as pace, urgency, or future perspective) as elements of organizational culture (Ballard & Seibold, 2004).

Several studies analyze how new technologies contribute to conflict or may be used to manage it. These conflicts may arise from the acceptance and adaptation processes of ICTs or the unexpected and undesirable problems that occur in technology use. Conflict is especially likely to arise if an ICT disrupts existing organizational structures and work processes.

In the context of software reuse, managerial interventions, such as coordination mechanisms and organizational learning practices, may reduce conflict (Sherif, Zmud, & Browne, 2006). Virtual teams may also generate conflicts due to geographical, cultural, professional, and temporal differences and dispersion (Majchrzak, et al., 2000; Wakefield, Leidner, & Garrison, 2008). Hence, virtual team leaders must use ICTs to occupy various roles for different kinds of conflict.

ICTs may affect or restructure organizational knowledge management by changing encoding, storage, retrieval, coordination and reuse processes (Heinz & Rice, 2009). These changes in turn can improve knowledge sharing and use, improving team performance (Choi, Lee, & Yoo, 2010).

Nonetheless, there is considerable doubt about the effectiveness of knowledge management systems, partially because of the crucial role of tacit knowledge (experiential understanding not easily transferable) that is difficult to manage through technologies.

More generally, Ruey-Lin, Tsai and Ching-Fang (2006) showed that interactions among the technical, social, and innovative contexts in a semiconductor-fabrication equipment company explained problems in knowledge transfer, coordination and reuse. Closely related, communicative structures such as advice networks may be reshaped as users appropriate an ICT in response to discrepant events.

In Leonardi's (2007) study of technicians in a large IT organization, appropriations generated new and different types of information. This new information became the basis for seeking and finding advice in different ways and through different organizational network members.

ICT may provide the occasion for changes in organizational structure, at different levels, and in either content (e.g., discourse) or relationships (communicative or transactional) (Rice & Gattiker, 2001).

Organizational-level studies have explored the validity of a number of popular hypotheses about technology's effects on organization form and function. For example, new technologies do not always bring about the demise of hierarchy or the fixtures of authority that had historically dominated organizations (Schwarz, 2002).

Hierarchy may be reshaped or reinforced, depending on management's implementation approach and non-management responses. Although ICTs may facilitate organizational downsizing, technologies do not deterministically cause it. Adverse environmental conditions can trigger downsizing, and the role that technologies play in organizational downsizing can vary according to the change strategy (Pinsonneault & Kraemer, 2002).

Two societal-level structural outcomes include the organization's market environment, and its public communication space. In the market context, ICTs can influence managerial decisions to engage in new structural relationships with other organizations (For instance, a CEO considering entering the fiber-optics product market) and levels of organizational factors (For instance, orientation toward emerging or existing technology) (Eggers & Kaplan, 2009).

In the public online Usenet groups, levels of interaction and information overload shape both the content and relational structure of message and response complexity and participation duration (Jones, Ravid, & Rafaeli, 2004). Straub and Watson's review (2001) focuses on the network-enabled relationships of businesses with consumers, identifying four primary research issues: strategy, organizational design, metrics and managing Information Systems.

Finally, a primary espoused organizational motivation for implementing ICT is to improve performance, whether at the individual, group, organizational or societal level. At the individual level, IT "road warriors" suffer from family-work conflicts, overload, lack of reward fairness, and job autonomy. These factors can lead to exhaustion and turnover, which negatively affect performance (Ahuja, Chudoba, Kacmar, McKnight, & George, 2007).

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter sets out various stages and phases that will be followed in the collection, measurement and analysis of data. Specifically the following subsections will be included; research design, target population, data collection instruments, data collection procedures and the data analysis.

3.2 Research Design

According to Saunders et al (2009), research design is a management business research that is undertaking a critical assessment of the same. Field survey will be used because it serves both qualitative and quantitative communication with representative's sample of individuals or respondents from the target population. It enables the researcher to gather data at a particular point in time and use it to describe the nature of the existing conditions.

The descriptive design will be chosen because it basically describes the characteristics of the population as they are at present minimizing biases and maximizing the reliability of the evidence collected. Generally descriptive research aims to produce statistical information about aspects thus making it the most suitable method for the study topic for it to allow for unbiased research findings.

3.3 Population of the study

According to Ngechu (2004) a study population is a well-defined or specified set of people, group of things, households, firms, services, elements or events which are being investigated. Target population should suit a certain specification, which the research is studying and the population should be homogenous. Keya (1989) states that individuals or things or elements that fit a research specification. The population can be divided into sets, population or strata and which are mutually exclusive.

Mugenda and Mugenda, (2003), explain that the target population should have some observable characteristics, to which the research intends to generalize the results of the study.

For purpose of this study the target population will be stratified through top management level, middle level managers and low level management in the listed parastatals in the tourism sector. This research will cover employees in state corporations that deal with tourism.

3.4 Data Collection

Data collection is an important part of any research study. Inaccurate data collection can lead to invalid results. There are two types of data: primary and secondary data. The commonly used methods of primary data collection are interviews, questionnaires and observation. The primary data collection method is the most suitable for this study and entails the use of questionnaires. This is due to its advantage of allowing the researcher to get firsthand information from the correspondents.

The questionnaires will have both open ended and closed ended questions. Close-ended questions deal with numerical values while open-ended questions allow for explanation and expression of feelings. In addition, observation method will be used to gather more information. Data will be collected using questionnaires. Dwivedi (2008) defines questionnaires as devices for securing answers to questions using a form which the respondent fills in himself or herself.

The questionnaires will be administered to the three hierarchical levels of management and to the heads of ICT in all the seven parastatals under the Tourism sector.

The researcher will exercise care and control to ensure all questionnaires issued to the respondents are received. To achieve this, the research will maintain a register of questionnaires, that will be sent, and those that will be received.

3.5 Data Analysis

This includes the process of packaging the collected information, putting it in order and structuring main components in a way that the findings are easily and effectively communicated. The researcher will peruse completed questionnaires and document analysis recording sheets. Quantitative data collected will be analyzed and presented through percentages, means, standard deviations and frequencies.

The information will be displayed by use of bar charts, graphs and pie charts and in prose-form. This will involve tallying up responses, computing percentages of variations in response as well as describing and interpreting the data in line with the study objectives and assumptions.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION OF RESULTS

4.1 Introduction

This chapter presents the findings and results of the study in the order of the research objectives. It begins by analyzing the demographic characteristics of the sample, investigates how the sample understands the role of information and communication technology, reviews the factors that shape ICT adoption, use and outcomes and the consequences of ICT adoption and use and lastly the ICT challenges faced by state corporations. The results are based on a response rate of 96% (n=60).

4.2 Respondents organization

As expressed in table 4.1, majority of the respondents (22%) were from Kenya Utalii College followed by Tourism Finance Corporation with 19%. Kenya Tourism Board and Tourism Fund had the same number of respondents (17%) while Bomas of Kenya had the least respondents (5%).

The response was commendable with most of the respondents eager to express their comments on the topic; a subject that had rarely been studied before in this context.

The response rate was at 100% with most of the questioners duly filled and picked for analysis.

Table 4.1: Respondents organization

Category	Frequency	Percentage
Kenyatta International Convention Centre	4	10
Tourism Finance Corporation	8	19
Kenya Tourism Board	7	17
Kenya Utalii College	9	22
Bomas of Kenya	2	5
Kenya safari, and lodges	4	10
Tourism Fund	7	17
Total	52	100

4.3 Gender

Figure 4.2 shows that majority of the respondents were male (58%) while the female respondents constituted 42% of the sample.

The government had put into place the policy of gender equality and enforced the same on the employment guidelines in all government bodies, this brought about a shift from earlier studies where the gender gaps were notably huge.

From the response noted, the challenges and other issues facing the respondents did not vary as much across the genders, most problems were encountered in both genders, an indication that both genders were actively involved in the implementation of strategy and use of Information Communication Technology.

Table 4.2: Respondents gender

Category	Frequency	Percentage
Male	30	58
Female	22	42
Total	52	100

4.4 Age.

Table 4.3 Figure 4.3 shows that the 18-25 age group of respondents consisted of 8% of the respondents, the others were as follows; 36-45 (34%), 46-50 (6%), > 50 (4%). The 26-35 age groups formed the largest proportion of the study population, with more than 48% representation from the age categories in this group.

According to the tabulation, most respondents were between the age of 26 years to 50 years, Most of the respondents who fell under the age of 25 years were not actively involved in key roles in strategic implementation, and hence they could not authoritatively comment on the topic.

Table 4.3: Respondents age

Category	Frequency	Percentage
18-25	4	8
26-35	25	48
36-45	18	34
46-50	3	6
Above 50	2	4
Total	52	100

4.5 Work Experience

Table 4.4 below show that 44% of the employees had worked for a period of 3 to 5 years at their organizations. This was followed by those who had worked for over 5 years (38%), and 1– 2 years (14%). The least group of workers were those who had worked for less than one year (4%). In most organizations, the data showed that respondents who were over 26 years had a tendency of staying for more than 5 years in the said organizations, most respondents had an experience of between 4 years to 9 years. Most of them eluded to the fact that they wanted to stay and realize their fruition of the strategic plans that they had natured from the beginning.

The employees above the age of 49 years did not show much interest in the future direction of the organizations, this is due to the fact that they had the perception that they had done their part in the implementation and could now leave the major roles to the younger ad more energetic teams. They however indicated the willingness to support most of the noble ideas.

Table 4.4: Respondents years of work

Category	frequency	Percentages
Below 1 year	2	4
Between 1 to 2years	7	14
Between3 to 5	23	44
Over 5 years	20	38
Total	52	100

4.6 Management level

Table 4.5 and Figure 4.5 show that junior staff constituted 19% of the respondents. Top Management and Middle Level constituted 39% and 42% of the sample respectively.

Most of the ICT managers fell in the Middle level Management.

In most organizations, it was noted that the involvement rate of the juniors employees in the implementation of the strategic was very minimal. Most management teams in different organizations concentrated on the middle and apex levels to make key decisions and utilize key systems in the verge to achieve their strategic goal.

This was not taken lightly by the team below as they felt delinked from the whole process. During data collection, most of the junior staff were not willing to respond due to lack of knowledge on this topic, an issue that led to them having the least number of respondents among the management levels.

Table 4.5: Respondents management level

Category	Frequency	Percentages
Top Management	20	38
Middle level	22	41
Junior Staff	10	19
Total	52	100

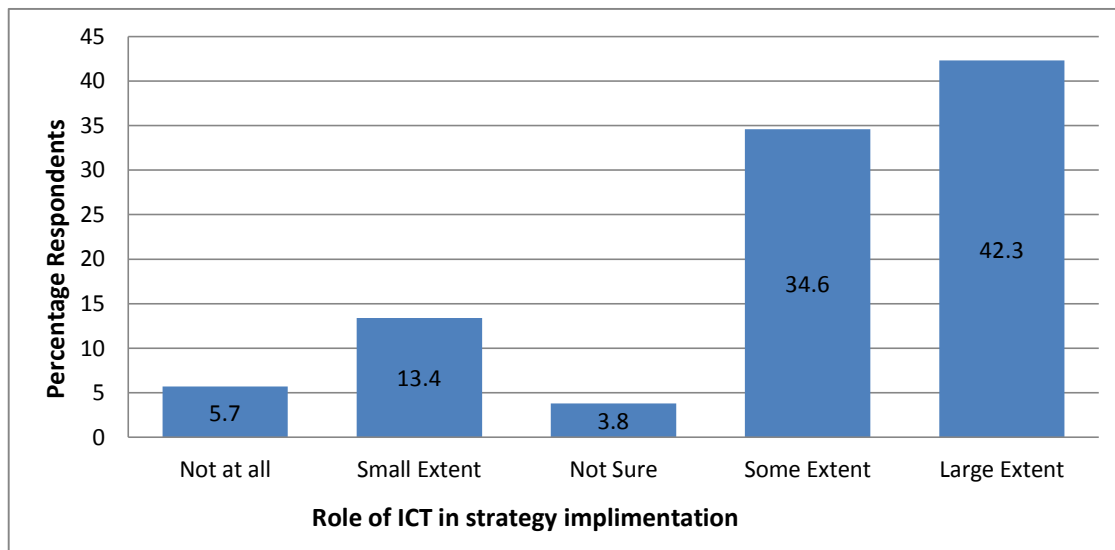
4.7 Role of ICT in strategy implementation

Figure 4.6 show that majority of the respondents understand the roles of ICT in strategy implementation (about 76%) while 13.4% of the respondents some understanding. Only 5.7% and 3.8% of the respondents do not understand the roles of ICT in strategy implementation or are not sure of it respectively.

Most of the respondents did not understand the two aspects well enough and hence, they also failed to identify the linkage of the two. Respondents who had good knowledge of the ICT systems felt that had it not been for the systems, most of the key indicators would not be achieved.

A sizable percentage also felt that ICT was the major orchestrator of their strategic directions, based on the fact that most systems had a automated check mechanisms against the set key indicators.

Figure 4.1: Respondents understanding of the roles of ICT in strategy implementation



Respondents perception on the roles of ICT in strategy implementation

From table 4.7, 98% of the respondents agree that ICT plays a role of planning in organizations while less than 5% of the respondents disagree that ICT plays a role of influencing in organizations. Less than 4% of the respondents do not agree or disagree that ICT plays a role of organizing in organizations.

Ranking the perception on the roles of ICT in strategy implementation on the basis of the mean, shows that the roles in order of popularity are Planning, Controlling, Organizing, Decision making and influencing.

Table 4.7: Respondents perception on the roles of ICT in strategy implementation

Factors	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Total	Mean	Rank
Planning	0(0)	0(0)	1(1.9)	25(48)	26(50)	52(100)	4.48	1
Organizing	0(0)	0(0)	2(3.8)	30(57.6)	20(38.4)	52(100)	4.38	3
Influence	1(1.9)	2(3.8)	0(0)	40(76.9)	10(19.2)	52(100)	4.13	5
Controlling	0(0)	0(0)	0(0)	30(57.6)	22(42.3)	52(100)	4.42	2
Decision making	0(0)	0(0)	0(0)	34(65.3)	18(34.6)	52(100)	4.34	4

Values in parentheses () are row percentages, while values outside parentheses are frequencies.

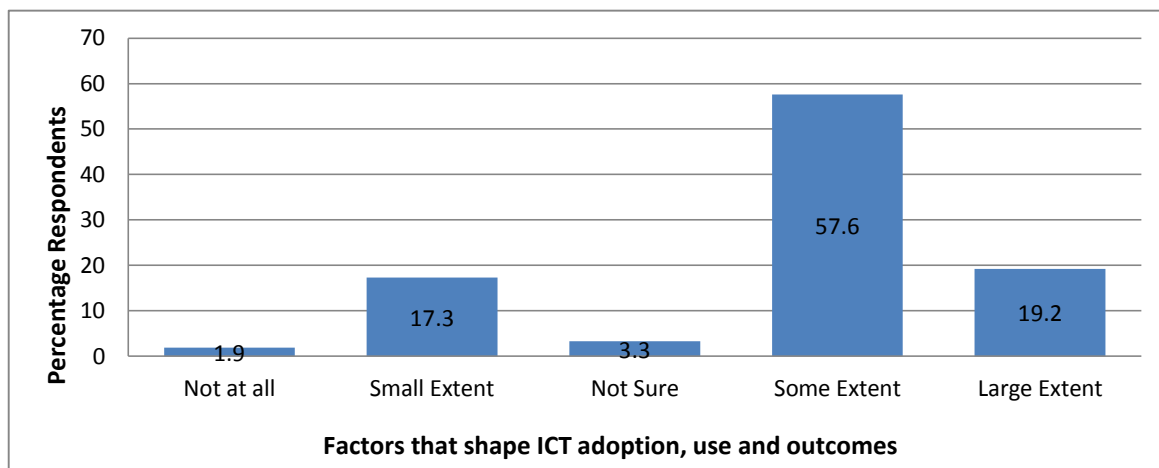
4.8 Factors that shape ICT adoption, use and outcomes

From Figure 4.7, about 76% of the respondents understand the factors that shape ICT adoption, use and outcomes. 1.9% and 3.3% of the respondents do not understand the factors that shape ICT adoption, use and outcomes or are not sure of the factors respectively.

57.5 % believed to have some small extent understanding on the factors that shape ICT adoption, use and outcomes though their explanations did not really warrant the same.

Most respondents were not sure of what shaped the ICT due to lack of involvement on the same.

Figure 4.2: Respondents understanding on the factors that shape ICT adoption, use and outcomes



4.8 Respondent's perception on the factors that shape ICT adoption, use and outcomes

From table 4.9, about 90% of the respondents agree that organizational culture is a factor that shapes ICT adoption, use and outcomes. Less than 23% of the respondents disagree that emotions is one of the shape ICT adoption, use and outcomes. About 19% of the respondents do not agree or disagree that institutional forces shape ICT adoption, use and outcomes.

Ranking the perception of the respondents the factors that shape ICT adoption, use and outcomes on the basis of the mean, shows that the factors in order of popularity are Organizational culture, Conceptualization of and influences on adoption, Institutional forces, Materiality, Intra-organizational norms and agendas and lastly emotions.

Table 4.9: Respondents perception on the factors that shape ICT adoption, use and outcomes

Factors	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Total	Mean	Rank
Conceptualization of and influences on adoption	0(0)	2(3.8)	8(15.3)	30(57.6)	12(23.0)	52(100)	3.99	2
Intra-organizational norms and agendas	0(0)	1(1.9)	9(17.3)	34(65.3)	8(15.3)	52(100)	3.92	5
Emotions	2(3.8)	10(19.2)	10(19.2)	25(48.0)	5(9.6)	52(100)	3.55	6
Organizational culture	0(0)	0(0)	0(0)	32(61.5)	20(38.4)	52(100)	4.38	1
Institutional forces	0(0)	0(0)	10(19.2)	33(63.4)	9(17.3)	52(100)	3.97	3
Materiality	0(0)	2(3.8)	7(13.4)	35(67.3)	8(15.3)	52(100)	3.94	4

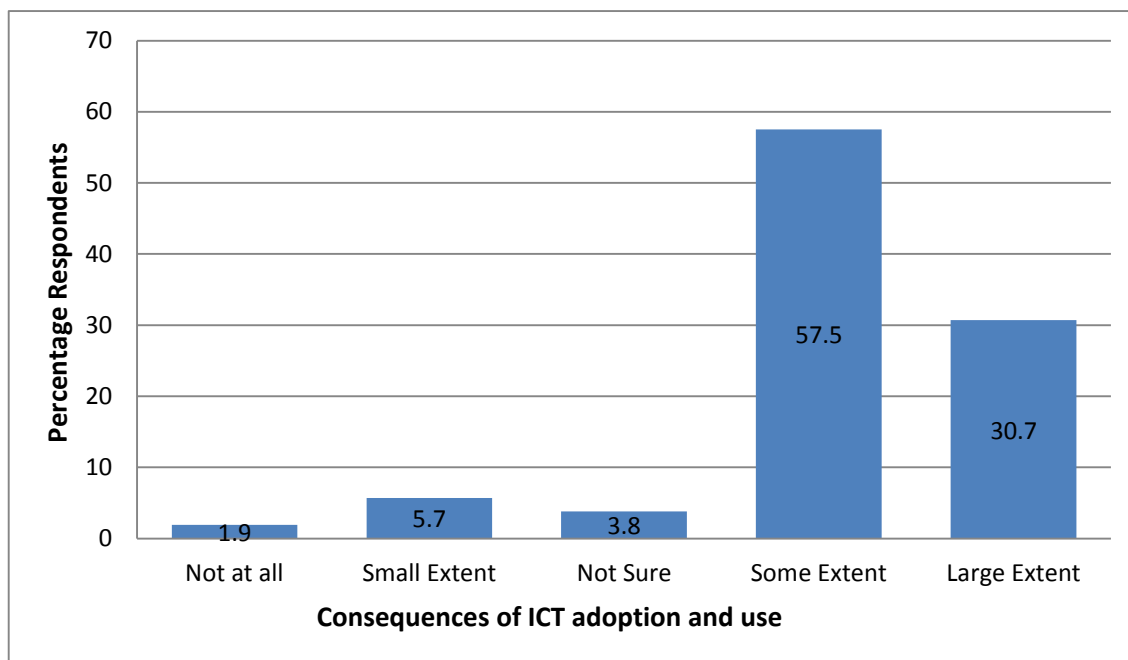
Values in parentheses () are row percentages, while values outside parentheses are frequencies.

4.9 Consequences of ICT adoption and use

Figure 4.8 show that about 87% of the respondents understand the consequences of ICT adoption and use. 1.9% and 3.8% of the respondents do not understand the consequences. of ICT adoption and use or are not sure respectively.

Most of the respondents could not quantify the consequences they had in mind. This was due to lack of clear way to measure the performance indicators that were there before and after the adoption of the technologies.

Figure 4.3: Respondents understanding of the consequences of ICT adoption and use



4.10 Respondents perception on the consequences of ICT adoption and use

Table 4.11 show that about 95% of the respondents agree that performance is one of the consequences of ICT adoption and use. Only 5.7% of the respondents disagree that organizational environment is one of the consequences of ICT adoption and use. 13.4% of the respondents do not agree or disagree that organizational environment is one of the consequences of ICT adoption and use.

Ranking the perception of the respondents on the consequences of ICT adoption and use on the basis of the mean, shows that the consequences in order of popularity are performance, Structure, adoption, acceptance and adaptation, Conflict, Organizational assimilation and Organizational environment.

Table 4.11: Respondents perception on the consequences of ICT adoption and use

Factors	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Total	Mean	Rank
Adoption, acceptance and adaptation	0(0)	0(0)	0(0)	32(61.53)	20(38.4)	52(100)	4.38	4
Organizational assimilation	0(0)	0(0)	0(0)	40(76.92)	12(23.0)	52(100)	4.23	5
Conflict	0(0)	0(0)	0(0)	30(57.6)	22(42.3)	52(100)	4.42	3
Structure	0(0)	0(0)	0(0)	10(19.2)	42(80.7)	52(100)	4.80	2
Organizational environment	0(0)	3(5.76)	7(13.4)	32(61.5)	10(19.2)	52(100)	3.94	6
performance	0(0)	0(0)	0(0)	8(15.38)	44(84.6)	52(100)	4.84	1

Values in parentheses () are row percentages, while values outside parentheses are frequencies.

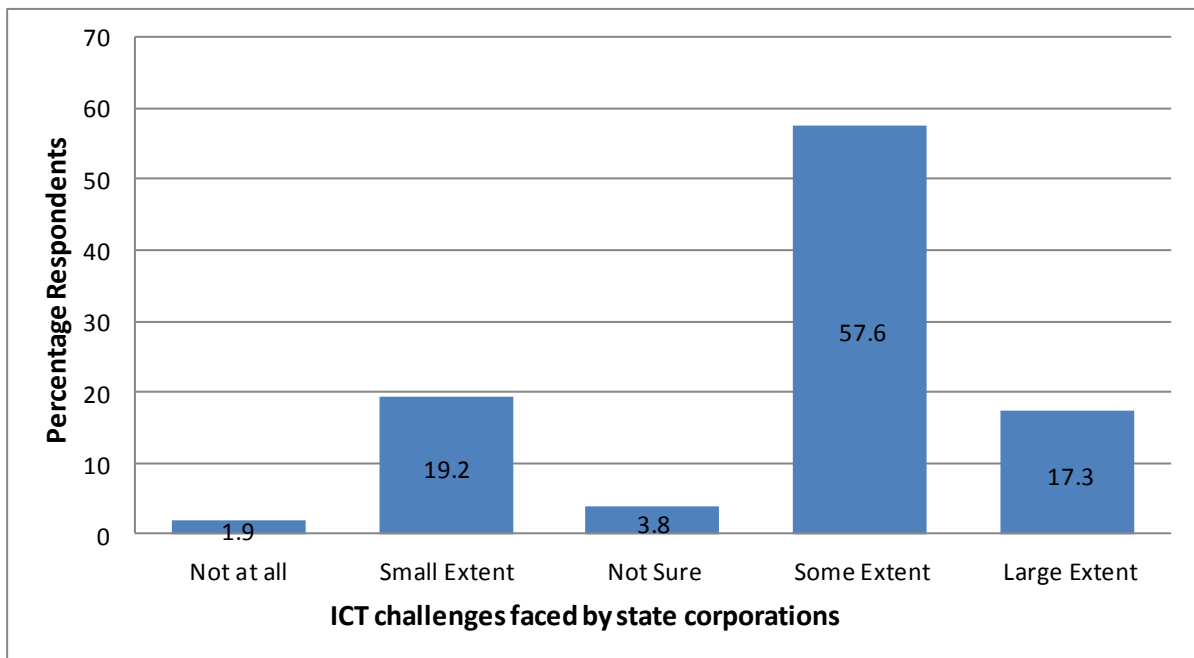
4.10 ICT challenges faced by state corporations

Table 4.12 and figure 4.9 show that about 80% of the respondents understand the ICT challenges facing state corporations. 1.9% and 3.8% of the respondents do not understand the ICT challenges facing state corporations or are not aware of the challenges respectively.

This aspect was affected by the fact that most of the respondents in different organizations were either untrained or lacked interest to interact with ICT systems and hence could not identify with any challenges that arose from them.

There was a cross culture of fear of technology use across the organizations which lead to laxity in utilizing the same. Most organization had also not pegged the use of technology into their performance indicators; a factor that lead to ignorance from the respondents point of view as it had no effect on their overall performances.

Figure 4.4: Respondents understanding of the ICT challenges faced by state corporations



4.11 Respondents perception on the ICT challenges faced by state corporations

From table 4.13, over 90% of the respondents agree that High costs of systems and the Dynamic nature of technology are one of the ICT challenges facing state corporations.

Less than 21% of the respondents disagree that Public literacy level is an ICT challenge faced by state corporations. 5.7% of the respondents do not agree or disagree that lack of public access to ICT services is an ICT challenge faced by state corporations.

Ranking the perception of the respondents on the ICT challenges faced by state corporations on the basis of the mean, shows that the challenges in order of popularity are High costs of systems, Dynamic nature of technology, Systems instability, Employee training, Lack of public access to ICT services due to high internet charges and Public literacy level.

Table 4.13: Respondents perception on the ICT challenges faced by state corporations

Factors	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Total	Mean	Rank
High costs of systems.	0(0)	0(0)	2(3.8)	10(19.2)	40(76.9)	52(100)	4.73	1
Employee training	1(1.9)	5(9.6)	4(7.6)	30(57.6)	12(23.0)	52(100)	4.19	4
Public literacy level	2(3.8)	10(19.2)	10(19.2)	25(48.0)	5(9.6)	52(100)	3.40	6
Dynamic nature of technology	0(0)	0(0)	1(1.9)	12(23.0)	39(75)	52(100)	4.73	2
Lack of public access to ICT services due to high internet charges	0(0)	3(5.76)	3(5.76)	36(69.2)	10(19.2)	52(100)	4.01	5
Systems instability	0(0)	1(1.9)	0(0)	30(57.6)	21(40.3)	52(100)	4.36	3

Values in parentheses () are row percentages, while values outside parentheses are frequencies.

CHAPTER FIVE

SUMMARY, DISCUSSION AND CONCLUSION

5.1 Introduction

This chapter presents the summary of findings of the research, discusses the results, draws conclusions and makes recommendations for future adoption of ICT in state corporations in the tourism sector.

5.2 Summary

Significant findings that arose from the study on the role of ICT on strategy implementation in state corporations were;

Perception of the respondents on the roles of ICT in strategy implementation on the basis of the mean, shows that the roles in order of popularity: Planning, Controlling, Organizing, Decision making and influencing. The questionnaire had provision for the respondents to add more roles. The roles that were added are provision of quick service and information, provision of accurate information, the centralization of state information, easy communication between the head office and county offices.

Perception of the respondents the factors that shape ICT adoption, use and outcomes on the basis of the mean, shows that the factors in order of popularity: Organizational culture, Conceptualization of and influences on adoption, Institutional forces, Materiality, Intra-organizational norms and agendas and lastly emotions.

Perception of the respondents on the consequences of ICT adoption and use on the basis of the mean shows that the consequences in order of popularity: performance, Structure, adoption, acceptance and adaptation, Conflict, Organizational assimilation and Organizational environment.

Perception of the respondents on the ICT challenges faced by state corporations on the basis of the mean, shows that the challenges in order of popularity: High costs of systems, Dynamic nature of technology, Systems instability, Employee training, Lack of public access to ICT services due to high internet charges and Public literacy level.

5.3 Discussion

The study sought to find out the roles of ICT in strategy implementation. The study found that one of the roles of ICT in strategy implementation is planning. State corporations use ICT to plan for their daily activities and their strategic planning.

This matches Lalonde (1998) literature that planning is concerned with the success of the organization in the short term as well as in the long term and that the application of ICT provides forecasting which is key in proper planning and managers use forecasts to be able to plan for future strategic plans.

The second role of ICT in strategy implementation in state corporations that came out from the study is controlling. This matches Walker (2002) literature when he cited that the use of ICT can help managers in gathering information that measures performance and this is most important because one needs to measure the performance of the staff. He further added that computer applications are important in determining present performance to pre-established performance norms.

The study sought to find out the factors that shape ICT adoption, use and outcomes. One of the factors that came out of the study is organizational culture, conceptualization of and influences on adoption. This matches Davis & Morris (2007) literature on the evolution of the technology acceptance model which incorporates four influences (performance expectancy, effort expectancy, social influence, and facilitating conditions) on behavioral intentions, which then affect technology use.

The second factors shaping ICT adoption, use and outcomes that came out of the study is institutional forces. This matches Flanagin and Shoham (2011) literature that organizations may be influenced by other organizations, especially if the focal organizations perceive themselves as leaders, scan the environment, and emulate other leaders and that organizations may also learn

about an ICT concept through consultants, the press and industry discourse, other firms, industrial infrastructure among others.

The study sought to find out the consequences of ICT adoption and use. One of the consequences that came out of the study is performance. This matches Ahuja, Chudoba, Kacmar, McKnight and George (2007) literature that one of the primary espoused organizational motivation for implementing ICTs is to improve performance, whether at the individual, group, organizational or societal level.

The literature goes ahead to cite that at the individual level, IT road warriors suffer from family-work conflicts, overload, lack of reward fairness, and job autonomy. These factors can lead to exhaustion and turnover, which negatively affect performance. The second consequence that came out of the study is structure.

This matches Rice and Gattiker (2001) literature that cites that ICT may provide the occasion for changes in organizational structure, at different levels, and in either content (e.g., discourse) or relationships (communicative or transactional).

New technologies do not always bring about the demise of hierarchy or the fixtures of authority that had historically dominated organizations. The same was echoed by Schwarz (2002) that hierarchy may be reshaped or reinforced, depending on management's implementation approach and non-management responses.

5.3.4 ICT challenges faced by state corporations

The study sought to find out ICT challenges faced by state corporations. The first challenge that came out from the study is the high costs of systems. This matches Ontunya (2006) literature that cites that one of the main challenges facing implementation of ICT by state corporations is the high cost of the systems. According to him, majority of the systems used by state corporations are costly and this impact the state corporation's budget.

The second challenge that came out of the study is the dynamic nature of technology. This matches the literature by Economides and Salop (1992) that what is technology today becomes ancient tomorrow. This has forced state corporations to spend a lot of money purchasing new applications or upgrading the existing ones. Such new systems require fresh training to the employees which in turn increases the running costs of state corporations.

5.4 Conclusion

Information communication technology is among the key players in the management of many organizations. ICT supports organizations by providing a channel through which the organization's operations are handled in a smooth manner which eventually increases the efficiency of the organization.

ICT is today considered a very powerful enabler of development goals because of its unique characteristics that dramatically improve communication and the exchange of information to strengthen and create new economic and social networks. ICT is applicable to the full range of human activity from personal use to business and government. It is multifunctionality and flexibility creates room for tailored solutions that are based on personalization and localization in the endeavor to meet diverse needs.

ICT adoption plays a key role in the strategic planning process as well as the implementation process. The biggest role is the management of the entire strategy implementation process. The process of strategy implementation has a number of characteristics that involves putting strategy into action, it is an operational process, requires managerial skills and leadership, requires coordination among all organization units and functions, involves strategic control and lastly it involves management of change.

An important role of ICT in strategy implementation state corporations is planning. Planning is very important in any organization and lack of proper planning in the implementation process of any strategy leads to delays and partial accomplishment and that the stake holders have to bear the blame from the would be beneficiaries of that strategy.

The effective use of ICT has facilitated a number of processes within the implementation stages. This has further reduced the Turn Around Time (TAT) for the services offered by many state corporations.

Hence, this study concludes that ICT plays a key role in strategy implementation in state corporations in Kenya.

5.5 Recommendation

Kenyan state corporations are yet to fully adopt ICT for strategy implementation. The state corporations need to address the challenges realized from this study in order to ensure effective adoption of ICT. System instability should be paid much attention and the concerned departments should fully coordinate to ensure that the systems are up and running.

The state corporations should also ensure that they purchase enough systems to ensure that all staff can access them and this will increase staff productivity and service delivery. The systems should also be updated from time to time to limit the possibilities of system downturns.

5.6 Implication on Policy, Theory and Practice

The findings from the study will have a great impact on Policy, Theory and Practice of IT related fields. The study will benefit other researchers on studies of effective ICT in strategy implementation in both private and public sectors by identifying the gaps and providing foundation for future studies based on the findings. In addition, the research will contribute to the existing literature on the role of technology in state corporations. The study will help the management of state corporations promote more efficient and effective processes and present more accessible and accountable services to conference attendants, businesses and citizens by sponsoring and adhering to change management techniques.

REFERENCES

- Agarwal, R., & Karahanna, E. (2000). Time flies when you're having fun: Cognitive absorption and beliefs about information technology usage. *MIS Quarterly*, 24(4), 665-694
- Ahuja, M. K., & Thatcher, J. B. (2005). Moving beyond intentions and toward the theory of trying: Effects of work environment and gender on post-adoption information technology use. *MIS Quarterly*, 29(3), 427-459.
- Al-Shohaib, K., Frederick, E., Jamal Al-Kandari, A. A., & Dorsher, M. D. (2010). Factors influencing the adoption of the internet by public relations professionals in the private and public sectors of Saudi Arabia. *Management Communication Quarterly*, 24(1), 104- 121.
- Au, N., Ngai, E. W. T., & Cheng, T. C. E. (2008). Extending the understanding of end user information systems satisfaction formation: An equitable needs fulfillment model approach. *MIS Quarterly*, 32(1), 43-66.
- Bagozzi RP., Davis FD, and Warshaw PR, (1992). Development and test of a theory of technological learning and usage, *Human Relations*, 45(7): 660–686
- Ballard, D. I., & Seibold, D. R. (2004). Communication-related organizational structures and work group temporal experiences: The effects of coordination method, technology type, and feedback cycle on members' construals and enactments of time. *Communication Monographs*, 71(1), 1-27.
- Barki, H., Titah, R., & Boffo, C. (2007). Information system use-related activity: An expanded behavioral conceptualization of individual-level information system use. *Information Systems Research*, 18(2), 173-192.
- Beaudry, A., & Pinsonneault, A. (2010). The other side of acceptance: Studying the direct and indirect effects of emotions on information technology use. *MIS Quarterly*, 34(4), 689-710.
- Bhattacharjee, A., & Premkumar, G. (2004). Understanding changes in belief and attitude toward information technology usage: A theoretical model and longitudinal test. *MIS Quarterly*, 28(2), 229-254.
- Bhattacharjee, A., & Sanford, C. (2006). Influence processes for information technology acceptance: An elaboration likelihood model. *MIS Quarterly*, 30(4), 805-825.

- Burt, D., Dobelr, D. & Starling, S. (2003). *World Class Supply Management: The Key to Supply Chain Management*, (7th edition), New York: McGraw-Hill.
- Choi, S-Y., Lee, H., & Yoo, Y. (2010). The impact of information technology and transactive memory systems on knowledge sharing, application, and team performance: A field study. *MIS Quarterly*, 34(4), 855-870.
- Davis FD, 1989, Perceived usefulness, perceived ease of use, and user acceptance of information technology, *MIS Quarterly*, 13(3): 319–340
- Eggers, J. P., & Kaplan, S. (2009). Cognition and renewal: Comparing CEO and organizational effects on incumbent adaptation to technical change. *Organization Science*, 20(2), 461-477.
- Gallivan, M., & Srite, M. (2005). Information technology and culture: Identifying fragmentary and holistic perspectives of culture. *Information and Organization*, 15(4), 295-338.
- Gay L R, 1992, *Educational Research, Competences for Analysis and Application*, Ohio: Charles E. Merrill Publishing, Co.
- Harrington, S. J., & Guimaraes, T. (2005). Corporate culture, absorptive capacity and IT success. *Information and Organization*, 15(1), 39-63.
- Heinz, M., & Rice, R. E. (2009). *An integrated model of knowledge sharing in contemporary communication environments*. In C. Beck (Ed.), *Communication yearbook*, London: Routledge.
- Jones, Q., Ravid, G., & Rafaeli, S. (2004). Information overload and the message dynamics of online interaction spaces: A theoretical model and empirical exploration. *Information Systems Research*, 15(2), 194-210.
- Jonsson, K., Holmström, J., & Lyytinen, K. (2009). Turn to the material: Remote diagnostics systems and new forms of boundary-spanning. *Information and Organization*, 19(4), 233-252.
- Kombo D.K and Tromp D. L.A (2006). *Proposal writing and thesis proposal: An introduction*. MBA Thesis. Paulines Publications, Africa: Nairobi
- LaLonde, B. J. (1998). Supply Chain Evolution by the Numbers. *Supply Chain Management Review* 2(1), 7–8.

- Leidner, D. E., & Kayworth, T. (2006). Review: A review of culture in information systems research: Toward a theory of information technology culture conflict. *MIS Quarterly*, 30(2), 357-399.
- Leonardi, P. M. (2011). Innovation blindness: Culture, frames, and cross-boundary problem construction in the development of new technology concepts. *Organization Science*, 22(2), 347-369.
- Lewis, W., Agarwal, R., & Sambamurthy, V. (2003). Sources of influence on beliefs about information technology use: An empirical study of knowledge workers. *MIS Quarterly*, 27(4), 657-678.
- Lewis-Beck, & Michael S, 1995, *Data Analysis: an Introduction*, New Jersey:Sage Publications Inc.
- Majchrzak, A., Rice, R. E., Malhotra, A., King, N., & Ba, S. (2000). Technology adaptation: The case of a computer-supported inter-organizational virtual team. *MIS Quarterly*, 24(4), 569-600.
- McGuckin RH., Streitwieser. & Doms M, (1998). The effect of technology use on productivity growth, *Economic Innovation & New Technology*, 1—26.
- McGuckin RH., Streitwieser. & Doms M, 1998, The effect of technology use on productivity growth, *Economic Innovation and New Technology*, 1—26.
- Milne A, 2006, What is in it for us? Network effects and bank payment innovation, *Journal of Banking & Finance*, 30 (6): 1613-1630.
- Ontunya P, 2006, *A survey of consumer adoption of mobile phone banking in Kenya*. Unpublished MBA Research Project, University of Nairobi.
- Orlikowski, W. J. (2000). Using technology and constituting structures: A practice lens for studying technology in organizations. *Organization Science*, 11(4), 404-428.
- Rice, R. E., & Gattiker, U. (2001). *New media and organizational structuring*. In F. Jablin, & L. Putnam (Eds.), *New handbook of organizational communication*. Newbury Park, CA: Sage.
- Ruey-Lin, H., Tsai, S. D.-H., & Ching-Fang, L. (2006). The problems of embeddedness: Knowledge transfer, coordination and reuse in information systems. *Organization Studies*,27(9), 1289-1317.

APPENDIX 2: Questionnaire

INFORMATION COMMUNICATION TECHNOLOGY AND STRATEGY IMPLEMENTATION IN STATE CORPORATIONS OF KENYA IN THE TOURISM SECTOR

This research is meant for academic purpose. You're kindly requested to provide answers to these questions honestly and precisely as possible. Responses will be treated with utmost confidentiality. Please tick [] appropriate or fill in the required information on the spaces provided.

SECTION A: GENERAL INFORMATION

1. Organization.

Kenyatta International Convention Center.

Tourism Finance Corporation

Kenya Tourism Board.

Kenya Utalii College.

Bomas of Kenya.

Kenya Safari, Hotels and Lodges.

. Tourism Fund

2. Gender of the respondent

Male

Female

3. Age in years of respondent

18-25

26-35

36-45

46-50

Above 50

4. Years worked at the organization?

Below 1 year

Between 1- 2 years

Between 3 - 5 years

Over 5years

5. What is your position in the organisation?

Top Management

Middle Level

Junior Staff \

SECTION B: ROLES OF I.C.T IN STRATEGY IMPLEMENTATION

1. To what extent do you understand the roles of I.C.T in strategy implementation? Please rank between 1-5 (5 being the highest)

Not at all (1)	Small Extent (2)	Not Sure (3)	Some Extent (4)	Large extent (5)

2. To what extent do you think the following are roles I.C.T in strategy implementation in state corporations? Please rank between 1-5 (5 being the highest priority)

	1 Strongly Disagree	2 Disagree	3 Neither agree nor disagree	4 Agree	5 Strongly Agree
Planning					
Organizing					
Influencing					
Controlling					
Decision Making					

In your opinion what other roles would you add to the above?

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SECTION C: FACTORS THAT SHAPE ICT ADOPTION, USE, AND OUTCOMES

3. To what do you understand the factors that shape ICT adoption, use, and outcomes? Please rank between 1-5 (5 being the highest).

Not at all (1)	Small Extent (2)	Not Sure (3)	Some Extent (4)	Large extent (5)

4. To what extent do you agree that the following are the factors that shape ICT adoption, use, and outcomes? Please rank between 1-5 (5 being the highest).

	1 Strongly Disagree	2 Disagree	3 Neither agree nor disagree	4 Agree	5 Strongly Agree
Conceptualization of and influences on adoption					
Intra-organizational norms and agendas					
Emotions					
Organizational culture					
Institutional forces					
Materiality					

In your opinion what other factors would you add to the above?

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SECTION D: CONSEQUENCES OF ICT ADOPTION AND USE

5. To what do you understand the consequences of ICT adoption and use? Please rank between 1-5 (5 being the highest).

Not at all (1)	Small Extent (2)	Not Sure (3)	Some Extent (4)	Large extent (5)

6. To what extent do you agree that the following are the consequences of ICT adoption and use? Please rank between 1-5 (5 being the highest).

	1 Strongly Disagree	2 Disagree	3 Neither agree nor disagree	4 Agree	5 Strongly Agree
Adoption, acceptance, and adaptation					
Organizational assimilation					
Conflict					
Structure					
Organizational environment					
Performance					

In your opinion what other consequences would you add to the above?

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SECTION E: ICT CHALLENGES FACED BY STATE CORPORATIONS

7. Challenges are inevitable in the adoption of ICT by state corporations. To what extent do you agree with the above statement in relation to ICT by state corporations? Please rank between 1-5 (5 being the highest).

Not at all (1)	Small Extent (2)	Not Sure (3)	Some Extent (4)	Large extent (5)

8. To what extent would you consider the following to be the challenges faced by state corporations in the process of ICT adoption? Please rank between 1-5 (5 being the highest priority)

	1 Strongly Disagree	2 Disagree	3 Neither agree nor disagree	4 Agree	5 Strongly Agree
High costs of systems					
Employee training					
Public literacy level					
dynamic nature of technology					
Lack of public access to ICT services due to high internet charges					
Systems instability					
Employee training					

In your opinion what other challenges would you add to the above?

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**SECTION F: STRATEGIES FOR BETTER ADOPTION ON OF INFORMATION AND
COMMUNICATION TECHNOLOGY**

Please state any strategies that you would consider important in the adoption of ICT by state corporations

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