CHALLENGES FACING STATE CORPORATIONS IN KENYA IN THE
IMPLEMENTATION OF HUMAN RESOURCE MANAGEMENT
INFORMATION SYSTEMS

JANE KINYUA

A MANAGEMENT RESEARCH REPORT SUBMITTED IN PARTIAL
FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF
MASTER OF BUSINESS ADMINISTRATION (MBA), SCHOOL OF
BUSINESS, UNIVERSITY OF NAIROBI

OCTOBER, 2012
DECLARATION

This management project is the result of my independent study and has not been submitted for a degree in any other university

_________________________________________  __________________________________
Signed                                      Date

Jane Kinyua

D61/61668/2010

This management report has been submitted for examination with my approval as the university supervisor

_________________________________________  __________________________________
Signed                                      Date

George Omondi

School of Business

University of Nairobi
DEDICATION

This project is dedicated to my husband James Macharia for moral and financial support.
To my daughters Grace Wanjiku and Mercy Wambui for their patience in the course of my study, and to my parents David Kinyua and Ruth Wambui for moral support. To Charles Njuguna for his support and to all my brothers, sisters, friends and colleagues for their support.
ACKNOWLEDGEMENT

I acknowledge my supervisor and the human resource managers of the respondent State Corporations of Kenya for their support during the study.
TABLE OF CONTENTS

Declaration.............................................................................................................................. ii

Dedication .............................................................................................................................. iii

Acknowledgement ............................................................................................................... iv

Table of contents ............................................................................................................... v

Abstract ............................................................................................................................... viii

Chapter one ........................................................................................................................... 1

Introduction ........................................................................................................................... 1

1.1 Background .................................................................................................................... 1

1.1.1 Human Resource Management .................................................................................... 1

1.1.2 Human Resource Management Information Systems .................................................. 3

1.1.3 Challenges in the Implementation of Human Resource Management Information Systems .................................................................................................................................... 5

1.1.4 State Corporations in Kenya .......................................................................................... 6

1.2 Research Problem.......................................................................................................... 8

1.3 Research Objective ........................................................................................................ 10

1.4 Value of the Study......................................................................................................... 10
Chapter Two......................................................................................................................12

Literature Review .............................................................................................................12

2.1 Human Resource Management .................................................................................12

2.2 Human Resource Management Information Systems .............................................14

2.3 Challenges in the implementation of Human Resource Management Information Systems .................................................................................................................................19

Chapter Three.............................................................................................................23

Research Methodology .................................................................................................23

3.1 Research Design........................................................................................................23

3.2 Population..................................................................................................................23

3.3 Data Collection..........................................................................................................23

3.4 Data Analysis ............................................................................................................24

Chapter Four..............................................................................................................25

Data Analysis and Findings.............................................................................................25

4.1 Response rate............................................................................................................25

4.2 Kenyan State Corporation demographics................................................................25

4.3 Challenges facing state corporations in Kenya in the implementation of Human Resource Management Information Systems .................................................................................................................................30
Chapter Five .....................................................................................................................33

Conclusion and Recommendations .................................................................................33

5.1 Conclusion ..................................................................................................................33

5.2 Recommendations .....................................................................................................34

5.3 Recommendation for further research ......................................................................34

References .......................................................................................................................35

Appendices ...................................................................................................................... i
ABSTRACT

The study’s objective was to establish the challenges facing state corporations in Kenya in the implementation of human resource management information systems. Consequently, the researcher undertook a cross sectional census survey which was appropriate because of the investigations of organizations at the same point in time. The population of this study consisted of all state corporations in Kenya and primary data was collected using of a semi-structured questionnaire while secondary data was collected from individual state corporation’s strategic plans, human resource management information systems operational plans and reports. The respondents were heads of human resource function in the State Corporations and questionnaires were administered through electronic mail. Priori coding and descriptive statistics were utilized in analyzing the data collected.

Research findings indicated that majority of the responding human resource managers ranked Information Communication Technology (ICT) adoption and use as the major source of challenge in the implementation of Human Resource Management Information Systems in Kenyan state corporations. Moreover, Kenyan state corporations were effectively facilitated for by providing competent and skilled staff, approving adequate funds, effective time management and information technology support. However, the adoption and use if ICT remains a major challenge in the implementation of Human Resource Management Information Systems in Kenyan state corporations. Based on the study’s conclusions, the researcher consequently makes several recommendations for policy and practice as well as for further research.
CHAPTER ONE

INTRODUCTION

1.1 Background

According Ngai and Wat (2006) the human resource management information system is the composite of databases, computer applications, and hardware and software necessary to collect/record, store, manage, deliver, present, and manipulate data for human resources. Human resource management information system is now used not only for administrative purposes but also for strategic and business decision-making purposes (Kovach et al., 2002). Beadles et al. (2005) notes that in its most basic form human resource management information system is a system used to acquire, store, manipulate, analyze, retrieve and distribute pertinent information about an organization’s human resources. It is often regarded as a service provided to an organization in the form of information. However, the promise is that, as the use of these systems becomes more widespread, higher level forms of human resource management information system will evolve, coupled with various implementation challenges.

1.1.1 Human Resource Management

Hyland and Verreault (2003) indicated that human resource management is a long-established task within an organizations management framework. Through this task the organization meets its obligation to be a good employer; seeks to secure staff
commitment; and develops and manages staff to give of their best to help the organization achieve its vision and mission. The need to respond to changing environment means that the task of managing staff better is more important than ever and it is through a new emphasis on staff management that a customer service and performance oriented culture gradually evolves. They further indicate that human resource management is a planned approach to managing people effectively for performance. It aims to establish a more open, flexible and caring management style so that staff will be motivated, developed and managed in a way that they can and will give of their best to support departments' missions.

According to Gijs et al. (2006) in a rapidly changing business world, the process of defining strategies for the development of the workforce is ongoing. One such strategy is the shift from control to learning. Human resource departments convert these strategies into practical instruments. Increasingly, they use supportive information systems, known as human resource management information systems, to define, maintain and monitor processes that accompany these instruments. They become very massive and complicated. Implementation of the human resource management information systems can take over two years. Investment in training is extensive and can amount to four times the initial cost of a human resource management information system. Consequently, this paper aimed at determining challenges facing state corporations in Kenya in the implementation of human resource management information systems.
1.1.2 Human Resource Management Information Systems

According to Bulmash (2007) human resources management systems can be defined as integrated systems used to gather, store, and analyze information regarding an organization’s human resources. Using human resource management information system technology can help human resource automate and simplify tasks, reduce administration and record keeping, and provide management with HR-related information when required. Sadri and Chatterjee (2003) stated that when the human resource management information system function was computerized, faster decision making can be carried out on the development, planning, and administration of human resource because data can be much easier to store, update, classify, and analyze. In addition, they noted that human resource management information system can strengthen an organization's character.

Dileep (2010) indicate that human resource management information system is an integration of human resource management and information systems. Human resource management information system helps human resource managers perform human resource functions in a more effective and systematic way using technology. Human resource management information system usually a part of the organization’s larger management information system which would include accounting, production and marketing functions. Lengnick-Hall and Moritz (2003) have postulated that human resource management information system will be implemented at three different levels: the publishing of information; the automation of transactions; and, finally, a change in the way human resource management is conducted in the organization by transforming human resource into a strategic partner with the line business. In their view, human
resource management information system evolves from information to automation and from automation to transformation. They note that while human resource management information system has been widely deployed, a transformation of human resource management has occurred in relatively few organizations.

Beckers and Bsat (2002) pointed out at least five reasons why organizations should use human resource management information system. These were that human resource management information system can: increase competitiveness by improving human resource operations; produce a greater number and variety of human resource related reports; shift the focus of human resource from the processing of transactions to strategic human resource management; make employees part of human resource management information system; and reengineer the entire human resource function of companies.

Mayfield et al. (2003) reviewed over five-hundred relevant articles and identified seven primary components of a human resource management information system model. The components of their model are strategic integration, personnel development, communication and integration, records and compliance, human resource analysis, knowledge management, and forecasting and planning. In the article they described the model where these seven components were linked to each other and also to other activities of an organization. However, he noted that the scope and integration of the outlined components give a good picture in regard to the many challenges and issues that managers need to overcome to successfully implement human resource management information system.
1.1.3 Challenges in the Implementation of Human Resource Management Information Systems

According to Beckers and Bsat (2002) the cost of setting up and maintaining a human resource management information system can be high, which is the major obstacle in the implementation of a human resource management information system. Other problems or obstacles to setting up a human resource management information system include: the lack of staff; the lack of budget; problems with time management; the need to work with other departments; and the lack of information technology support.

The lack of staff could be either in terms of the number of staff available and/or the lack of human resource practitioners that are competent in information technology. The lack of a budget indicates that most organizations do not provide for a separate budget to cater for the implementation of human resource management information systems. Time management issues arise when planning and implementation is not undertaken according to a properly set out operational plan, which also needs to stipulate how the human resource department will work with other departments in ensuring that human resource management systems are implemented successfully. Such success can further be underpinned by adequate information technology support in terms of both hardware and software utilization which lacks in most organizations (Beckers and Bsat, 2002).

Malviya et al. (2009) indicated that implementation of computerized human resource functions is a great challenge for the organization. The macro- and micro-factors influencing a business are very dynamic. This leads to requirement of continuous monitoring and accommodating the changes in the implementation strategy accordingly.
The main challenges faced in implementation process is to transfer the huge unstructured and scattered legacy data from various sources to human resource management information system database; to incorporate the upcoming changes, with unpleasant surprises, in the processes and to maintain a high motivational level in the users. In the long process of migration, maintaining the integrity of data and ensuring the continuous updating of the transferred data is the real test. However, a detailed implementation strategy, right from the beginning of project will resolve the problems.

1.1.4 State Corporations in Kenya

In Kenya, Section 2 of the State Corporations Act (1987) 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. According to Njiru (2007), the Kenyan government forms these state corporations to meet both commercial and social goals. They exist for various reasons including: to correct market failure, to exploit social and political objectives, provide education, health, redistribute income or develop marginal areas. The Kenyan government acknowledges that over the years there has been poor performance in the public sector, especially in the management of public resources which has hindered the realization of sustainable economic growth. This led to the development of Kenya Vision 2030 as the country’s development blueprint covering the period 2008 to 2030.
State corporations are constantly bombarded with many ongoing internal and external pressures that influence the necessity for potential changes within the human resource management information systems infrastructure. The organization, therefore, must either take on the challenges of implementing new human resource management information systems or accept whatever the consequences that may be limiting human resource management information systems development. Whereas businesses sector must continuously grow organically to survive, state corporations must constantly adapt to the changes in the marketplace and diversify to meet the changing national demands. This means that the requirements of the human resource management information systems will also change and utilize the power of technology to meet the ongoing needs of the organization (Kashorda et al., 2007).

In effort to achieve the objectives and targets of Vision 2030 and to manage performance challenges in public service, the Kenyan government has been implementing in all Ministries/Departments and state corporations the developed Government Human Resource Management Information System (GHRMIS), as a specific element within performance contracting in public service with an aim of improving service delivery to Kenyans. The major objective of the information system is to establish and monitor internal controls over human resource information. Increasingly, Kenyan state corporations are utilizing human resource management information systems to assist in managing their workforce and in meeting their employer obligations. The effective discharge of these responsibilities is necessary to support the development and implementation of government programs and activities. However, the integration of
technology to support managing a modern workforce can introduce a range of information management risks and challenges (GoK, 2011).

1.2 Research Problem

According Maguire and Redman (2007) for nearly 50 years the development of information systems was almost entirely perceived as a technical discipline. Information systems professionals, with a certain level of help from users, set about developing information systems in the various functional areas of firms. The very fact that increasing numbers of information systems are company-wide means that the repercussions from their implementation are becoming more far-reaching. This is especially true for human resource management information system implementation which is a seamless integration of human resource management processes. Since human resource management information system development efforts can be viewed as multi-stage processes, a comprehensive and interactive approach of requirement definition, system design, system development, quality assurance, testing and careful implementation is very crucial. However, Kashorda et al. (2007) observed that technical issues like slow response time, financial measures, and system quality and user satisfaction play significant role in the successful implementation of human resource management information system in Kenyan state corporations.

In addition to such findings (Kashorda et al., 2007), a lot has been written about the advancements in information technology and the proliferation of human resource management information systems as well as studies undertaken on state corporations in
Kenya over the recent years. For instance, Cheptumo (2010) undertook a study on strategic management practices by the state corporation in Kenya and recommended that the use of information communication technology should be enhanced within Kenyan state corporations. Mathai (2010) assessed performance measurement systems in operational improvement in public sector by undertaking a case study of state corporations in Kenya. In regard to human resource management information systems, Waema (2009) studied the implementation of the human resource management systems in local authorities and indicated that adoption of appropriate technology would enhance the effectiveness of such systems. Doherty and Horne (2002) proposed various frameworks for improving the effectiveness of human resource management information system implementation, whereas Salmela et al. (2000) examined actual human resource management information system planning practices in a turbulent environment.

While previous research is useful in providing insight about human resource management information system implementation challenges, it provides little guidance for the management of ongoing implementation efforts and they do not specifically address human resource management information system implementation challenges in Kenyan state corporations. Consequently, there was need to fill this knowledge gap by undertaking a study that aimed at answering the following research question: “what challenges are facing state corporations in Kenya in the implementation of human resource management information systems?”
1.3 Research Objective

To establish the challenges facing state corporations in Kenya in the implementation of human resource management information systems.

1.4 Value of the Study

The development of human resource management information systems has for many years been regarded as the domain of the technical expert. In what appears to be a growing number of instances, facing state corporations in Kenya in the implementation of human resource management information systems implementation appear to be having numerous challenges in many organizations.

This study will therefore be of value to: State Corporations in Kenya in the implementation of human resource management information systems development and implementation processes. This will contribute significantly to both theory and practice with regard to the challenges faced in the implementation of facing state corporations in Kenya in the implementation of human resource management information systems in Kenyan state corporations;

Human Resource Managers’ by either taking on the challenges of implementing new human resource management information systems or accepting whatever the consequences that may be limiting human resource management information systems development in Kenyan state corporations; and,
Research and academic institutions by providing information and a benchmark for further research on facing state corporations in Kenya in the implementation of human resource management information systems.
CHAPTER TWO

LITERATURE REVIEW

2.1 Human Resource Management

According to Bhatti et al. (2008) business, governments and industry today operate in a world that is increasingly deregulated, uncertain, instantaneous, competitive, data computer rich and Internet connected. In this environment, competing techniques and statistical methods are important tools that can help give an organisation a competitive edge. It has an important role for decision support. A major component of the managerial process involves the monitoring of a variety of time series and taking appropriate action based on their values. The concepts of variation and randomness are very helpful in measuring the deviations from the desired performance standard. Routine decisions have to be made about whether a deviation is a stochastic process of the actual performance as compared to the performance objective and whether it indicates the need for action or intervention. There is also the art of using statistics to one’s advantage in making representations to decision makers and/or clients. It serves to illustrate the importance of statistics in business, commerce, quality and human resource management.

Siew and Sandra (2009) note that increased sophistication and human resource information has led to new models of human resource management being developed in organizations with a greater focus on the integral part that human resource management can play in linking organizational strategy more closely with the people that implement strategy. Lengnick-Hall and Moritz (2003) have identified four archetypal roles for
human resource management practitioners. These roles are identified as human capital stewards, knowledge facilitators, relationship builders and rapid deployment specialists. As a human capital steward, human resource management practitioners ensure that human capital is available, effective and grows in value through brokering the services of knowledge workers. As a knowledge facilitator, human resource management practitioners place emphasis on learning and development, managing knowledge effectively and creating environments conducive to knowledge creation, sharing and dissemination. As a relationship builder, human resource management practitioners focus on creating and sustaining networks and communities of practice between people. Finally, as a rapid deployment specialist, human resource management practitioners develop different ways to combine information, business processes and organizational design to respond to changing markets.

Aghazadeh (2003) indicates that human resource management has to change as the business environment changes. It has to do this as a mixture of responding to changes in that environment and if predicting such changes and making proactive decisions about the nature of human resource management. The future is unpredictable and it is hard to determine what it will bring. It is important to be flexible and to acquire as much knowledge as possible to help cope with these uncertainties. Human resource managers need to synthesize issues relating to their core personnel functions with the general economic and business issues, whilst remaining in touch with technological development. Successful human resource managers and departments have a significant strategic impact on their organizations.
2.2 Human Resource Management Information Systems

According to Sturlington (2009) a human resource information system collects and manages information used in human resource decision-making. Complete human resource management information systems links all human resources data from the time professionals enter pre-service training until they leave the workforce. Typically, the system is computerized and consists of a database for storing the information, software for entering and updating data, and reporting and analysis tools. A simple human resource management information systems may rely on paper forms or on electronic files such as spreadsheets housed in different departments that do not link together, but such a system often does not adequately meet the country’s needs. Putting in place a computerized, integrated human resource management information systems achieves the following objectives: improve the accuracy and availability of human resource data; track people as they move through the health workforce system; decrease the labor required to maintain the human resource management information systems; quickly aggregate and use data; report on and analyze data regularly; and project workforce needs into the future.

Human resource management information system is a concept which utilizes the development of Information Technology (IT) for effective management of the Human Resource (HR) functions and applications. Human resource management information systems enables systematic procedure for collecting, storing, maintaining, and recovering data required by the organizations about their human resources, personnel activities and
organizational characteristics. Human resource management information systems acquires, stores, manipulates, analyzes, retrieves, and distributes information about an organization’s human resources (Kovach et al., 2002).

According to Singh et al., (2011) human resource management information systems help organizations in managing all human resource information. It helps in recording and analyzing employees and organizational information and documents, such as employee handbooks, emergency evacuation and safety procedures. It helps organizations to keep an accurate, complete and updated database that can be retrieved from reports and manuals. The nature of human resource management information systems varies among organizations in relation to their size. In small organizations, it tends to be informal whereas in large organizations, it is more formal and coordinated. There are three major functional components of human resource management information systems: Input function – It enters personnel information into the human resource management information systems. Data entry in the past had been one way, but today, scanning technology permits scanning and storage of actual image of an original document, including signatures and handwritten notes; Maintenance function – It updates and adds new data to the database after data have been entered into the human resource management information systems; Output function – It is the most visible function of human resource management information systems. In order to generate valuable output for computer users, human resource management information systems processes output, makes necessary calculations and formats the presentation.
The current generation of human resource management information systems automates and devolves routine administrative and compliance functions traditionally performed by corporate human resource departments and can facilitate the outsourcing of human resource (Barron et al., 2004). In doing so, human resource management information systems not only make it possible for organisations to significantly reduce the costs associated with human resource delivery, but also to reassess the need for retaining internal human resource capabilities. However, human resource management information systems also provide human resource professionals with opportunities to enhance their contribution to the strategic direction of the firm. By automating and devolving many routine human resource tasks to line management, human resource management information systems provide human resource professionals with the time needed to direct their attention towards more business critical and strategic level tasks, such as leadership development and talent management (Lawler et al., 2003). Human resource management information systems also provide an opportunity for human resource to play a more strategic role, through their ability to generate metrics which can be used to support strategic decision making (Hendrickson, 2003).

The existing literature on human resource management information systems suggests that they have different impacts on human resource across organisations, but provides little explanation for this variation (see Kaufman, 2002; Wheeler et al., 2004; Mukherji, 2002). Early surveys suggested that human resource management information systems were used predominantly to automate routine tasks and “to replace filing cabinets” (Martinsons, 1994). Ball (2001) concluded that human resource had missed the strategic opportunity provided by human resource management information systems. More recent
research shows greater use of human resource management information systems in support of strategic decision making by human resource (Hussain et al., 2007). However, the extent to which human resource management information systems is used in a strategic fashion differs across organisations, with the vast majority of organisations continuing to use human resource management information systems simply to replace manual processing and to reduce costs (Bee and Bee, 2002).

Human resource management information systems efficiency and administrative effectiveness can be described by studies of administrative human resource management information systems, but the overall efficiency and effectiveness of an organization can only be reached through strategic deployment of the information provided by an human resource management information systems. Administrative human resource management information system is used in day-to-day operations and it is usually in the form of records that hold employee information. Administrative human resource is much more efficient when it is used with information technology because human resource professionals are better able to handle large amounts of information efficiently (Brown, 2002).

Wyatt (2002) concluded that it does not take a high progression of e-HR to reach high human resource management information systems performance on the administrative side. The results showed that a properly integrated e-HR system is the key to the evolution of the system. The survey covered all organization sizes, and the measures used included productivity improvements within the human resource organization, cost reductions, return on investment, and enhanced employee communications. They
concluded that by properly implementing an e-HR system an organization should be able to reduce the amount of work for which the human resource department is responsible which would then leave human resource professionals free to concentrate on performing more strategic roles for the organization.

David et al. (2010) analyzed the main traits of efficient firms and the main sources of firm’s efficiency through samples of catalan firms. Firms’ efficiency shows a significant improvement when advanced information communication technology uses are combined with human resource practices. Dileep (2010) indicate that human resource management information system is an integration of human resource management and information systems. Human resource management information systems help human resource managers perform human resource functions in a more effective and systematic way using technology. Human resource management information systems usually a part of the organization’s larger management information system which would include accounting, production and marketing functions.

Joseet (2006) identified the realization that the use of business human resource management information systems in developing and retrieval, recognize the positive influences that these systems have recruiting the process. Better performance is expected from people recruited internally. Ikhlas and Zaid (2010) indicate that the quick response and access to information were the main benefits of human resource management information systems implementation. They also identified the cultural and financial barriers to the implementation of human resource management information systems.
In contrast to administrative human resource management information systems, strategic human resource management information systems is much more difficult to explain and measure because there is no way to be sure that the benefits are a direct result of strategic deployment of an human resource management information systems system. Strategic human resource management information systems consist of tools that assist in decision making. For example strategic decisions may include those associated with recruitment and retaining employees. Much, if not all, of the administrative information held by human resource management information systems can be used to analyze an organization and formulate strategies to increase the value of an human resource management information systems. Some experts also believe that easy access to vital information will become an integrated part of many strategic decision-making process (Kovach et al., 2002).

2.3 Challenges in the implementation of Human Resource Management Information Systems

Shafqat et al. (2006) addressed the challenges in ERP adoption faced by typical business units. The result shows online web-based system attracts the customers. Kristine and David (2010) identified the implementations or upgradation of human resource management information systems has been undertaken with the aim of utilizing human resource management functions. Barriers also associated with the acceptance of new or upgraded human resource management information systems by the user. Maguire (2002) points out that with the development of human resource management information
systems there is always the hope for seamless information systems (IS) implementation and the citizens expects that there will be no interruptions of government services. However, there are many opportunities for things to go wrong during human resource management information systems implementation and state corporations take a number of risks when embarking on this course of action.

Magutu et al. (2010) split into four categories the major challenges faced in the implementation of human resource management information systems and include: Human Challenges - such issues relate to the interpersonal skills of the individuals involved with the project and come into play starting with the pre-planning stage, the approval process, project planning and project implementation through the transition to production status. Burke et al. (2001) suggest that human issues have the biggest impact on the processes as they argue that when implementation is successful, it is because a focused attention was paid to the human issues. The following human issues have been identified: Poor Project Management; Lack of user skills and awareness; Resistance to change; Benign Neglect; Inadequate Staffing; Scope Creep; and Lack of Experience. Operational Challenges - operational factors are those that affect the flow of information transactions within the business. The following operational factors have been identified: Changing Business Processes; and Process Rework. Technical Challenges - Technical factors are those that affect the technological side of an organization. The following technical factors have been identified: Technology Trials; Complying with rules and requirements; Integration and Specific module of information system (IS) not working as expected; and Customizations Required. Financial Challenges - Financial issues are those
that affect the finance side of an organization. Cost overruns have been identified as a major source of information system (IS) implementation challenges.

Moreover, there is also overwhelming empirical evidence of challenges faced in the implementation of human resource management information systems, for instance, Raija and Hlonen (2009) described the role of information systems in the process of combining district organizations which use information system in financial administration, human resource management and social welfare. They explored the role of information systems in decision-making in public sector. The lack of inter-operatability between legacy systems and new information systems was perceived as a huge problem. Matthew and Douglas (2009) analyzed that nature of developing information system in any organization is characterized by multi dimensional and often messy problems, involving technical organizations and personal dimensions.

David et al. (2010) analyzed the main traits of efficient firms and the main sources of firm’s efficiency through samples of catalan firms. Firms’ efficiency shows a significant improvement when advanced information communication technology uses are combined with human resource practices. Joseet (2006) identified the realization that the use of business HRIS in developing and retrieval, recognize the positive influences that these systems have recruiting the process. Better performance is expected from people recruited internally.

Ikhlas and Zaid (2010) indicate that the quick response and access to information were the main benefits of human resource management information system implementation. They also identified the cultural and financial barriers to the implementation of human
resource management information system. Kristine and David (2010) identified the implementations or upgradation of human resource management information system has been undertaken with the aim of utilizing human resource management functions. Barriers also associated with the acceptance of new or upgraded human resource management information system.
CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research Design

Cross sectional census survey was adopted in this study. This design was appropriate because of the investigations of organizations at the same point in time.

3.2 Population

The population of this study consisted of all state corporations in Kenya which were 146 (see appendix I) as listed by the State Law Office (Office of Public Communications, 2011).

3.3 Data Collection

Primary and secondary data was used for the study. Primary data was collected using of a semi-structured questionnaire which will be divided into two sections, A and B. Section A focused on the profile (demographics) of the responding state corporation while section B contained questions aimed at establishing the challenges facing state corporations in Kenya in the implementation of human resource management information systems. The respondents were heads of human resource function in the State Corporations and questionnaires were administered through electronic mail.
Secondary data was collected from individual state corporation’s strategic plans, human resource management information systems operational plans and reports. The strategic plans provided data on the key resource areas, persons responsible and timelines relating to the development and implementation of human resource management information systems, while the operational plans and reports provided specific data relating to the implementation of human resource management information systems within the State Corporations at given specific points in time.

### 3.4 Data Analysis

Priori coding and descriptive statistics were utilized in analyzing the data collected. This was done by utilizing established categories prior to the analysis based upon the respondents’ responses. Different categories were drawn out and coding was applied to the data and analyzed using three major descriptive statistics for each single variable namely: distribution; central tendency; and dispersion. Frequency distribution tables were used to present distribution; Mean was used to estimate central tendency; while standard deviation was used as a more accurate and detailed estimate of dispersion. Analyzed data was then presented using appropriate tables and graphs illustrating the challenges facing state corporations in Kenya in the implementation of human resource management information systems.
CHAPTER FOUR

DATA ANALYSIS AND FINDINGS

4.1 Response rate

Response rate refers to the percentage of subjects who respond to questionnaires. According to Mugenda and Mugenda (2003) a response rate of 50% is adequate for analysis and reporting, whereas a rate of 60% is good and a rate of 70% and over is very good for analysis and reporting. The study’s response rate was at 51% (computed by response/population) which is adequate for analysis and reporting.

4.2 Kenyan State Corporation demographics

This section highlights findings on the demographics of the responding Kenyan test State Corporations. The demographics indicate the duration of time since the corporation was incorporated, the number of staff, the nature of Information Communication Technology (ICT) in use in the organization, and the area where ICT was used in the respective Kenyan state corporations.

Figure 4.1 illustrates the duration of time since the corporation was incorporated. According to the figure, majority of the responding Kenyan state corporations (80%) had been incorporated more than ten (10) years ago while 20% had been incorporated between four (4) to five (5) years ago. This finding indicates that most Kenyan state corporations have been in existence for more than a decade hence, the research findings from these corporations can be said to be reliable in reporting the challenges facing state
corporations in Kenya in the implementation of Human Resource Management Information Systems.

**Figure 4.1: Duration of time since the corporation was incorporated**

Figure 4.2 illustrates the number of staff in various state corporations in Kenya. According to the figure, majority of the responding Kenyan state corporations (60%) had above one hundred (100) members of staff, 20% had between eighty one to one hundred (81 - 100) members of staff and the remaining 20% had between forty one to sixty (41 -
60) members of staff. This finding indicates that majority of Kenyan state corporations stand to benefit tremendously through effective implementation of Human Resource Management Information Systems due to the significantly large staff numbers.

Figure 4.2: Number of staff

Figure 4.3 illustrates the nature of Information Communication Technology (ICT) in use in Kenyan state corporations. According to the figure, majority of the responding Kenyan state corporations (38%) indicated that nature of Information Communication
Technology (ICT) in use was Management Information Systems (MIS), 23% indicated that Business to Customer (B2C) was in use, another 23% indicated that web based automated information systems were in use, while the remaining 15% indicated that Business to Business (B2B) Information Communication Technology (ICT) based applications were in use in their respective Kenyan state corporation.

Figure 4.3: Nature of Information Communication Technology (ICT) in use
Figure 4.4 illustrates the area where ICT was used in the respective Kenyan state corporations. According to the figure, majority of the responding Kenyan state corporations indicated that the area where ICT was used in their respective Kenyan state corporations were finance and accounting, human resource and operations, each at 27% respectively. 13% of the Kenyan state corporations used ICT in marketing while the remaining 7% used it in other organizational departments as well. This finding indicates that ICT is commonly used in three key departments, including human resource, within Kenyan state corporations.

Figure 4.4: Area where ICT was used in Kenyan state corporations
4.3 Challenges facing state corporations in Kenya in the implementation of Human Resource Management Information Systems

This section highlights findings on the duration of time that implementation of the Human Resource Management Information Systems in the respective Kenyan state corporations; the extent to which the various administrative advantages have been realized using Human Resource Management Information Systems; the major source of challenges in the implementation of Human Resource Management Information Systems; and the importance of the various factors in posing challenges in the implementation of Human Resource Management Information Systems in the respective state corporations.

Figure 4.5 illustrates the duration of time that implementation of the Human Resource Management Information Systems in the respective state corporations. According to the figure, majority of the responding Kenyan state corporations indicated that the duration of time Human Resource Management Information Systems was implemented in state corporation was between two to three (2 - 3) years four to five (4 -5) years at 40% each, while 20% of the Kenyan state corporations indicated that Human Resource Management Information Systems was implemented for more than ten (10) years.
Research findings indicated that the human resource managers agreed that the following advantages using Human Resource Management Information Systems had been realized: increased competitiveness by improving human resource operations; production of a greater number and variety of human resource related reports; shifting the focus of human resource from the processing of transactions to strategic human resource management; making employees part of human resource management information system; and reengineering the entire human resource function.
Majority of the responding human resource managers (56%) ranked Information Communication Technology (ICT) adoption and use as the major source of challenge in the implementation of Human Resource Management Information Systems in Kenyan state corporations. This finding indicates that there is ineffectiveness in the way Kenyan state corporations adopt and utilize ICT in the implementation of Human Resource Management Information Systems.

In addition, the human resource managers agreed that there was approval of adequate funds for human resource management information systems budget. They strongly agreed that there was involvement of competent and skilled staff in the implementation of human resource management information systems; there was effective time management in the implementation of human resource management information systems; and that there was effective information technology support in the implementation of human resource management information systems. This research finding indicates that implementation of Human Resource Management Information Systems in Kenyan state corporations is being effectively facilitated for by providing competent and skilled staff, approving adequate funds, effective time management and information technology support. The human resource managers indicated that inadequate user skills and awareness of HRMIS, inadequate staffing, lack of prior experience, integration and specific module of information system (IS) not working as expected and cost overruns were likely to pose challenges in the implementation of Human Resource Management Information Systems in Kenya state corporations.
CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

The researcher drew conclusions based on the study’s objective (in Chapter One) which was to establish the challenges facing state corporations in Kenya in the implementation of human resource management information systems. From the research findings, majority of the responding human resource managers ranked Information Communication Technology (ICT) adoption and use as the major source of challenge in the implementation of Human Resource Management Information Systems in Kenyan state corporations. It can therefore be concluded that despite implementation of Human Resource Management Information Systems in Kenyan state corporations being effectively facilitated for by providing competent and skilled staff, approving adequate funds, effective time management and information technology support, the adoption and use of ICT remains as the major challenge in the implementation of Human Resource Management Information Systems in Kenyan state corporations.

In addition, this conclusion is further supported by research findings which indicated that inadequate user skills and awareness of HRMIS, inadequate staffing, lack of prior experience, integration and specific module of information system (IS) not working as expected and cost overruns are likely to pose challenges in the implementation of Human Resource Management Information Systems in Kenya state corporations.
5.2 Recommendations

Based on the study’s conclusions, the researcher made the following recommendations: Kenyan state corporations should conduct user training which ensures that there is adequate user skills and awareness of the human resource management information systems in use; human resource managers of Kenyan state corporations should select and recruit adequate staff during the implementation of the human resource management information systems; the management of Kenyan state corporations should facilitate for adequate prior experience in the implementation of human resource management information systems through site visits and hiring of experienced staff; human resource managers of Kenyan state corporations should ensure that the integration and specific module of information system (IS) is working as expected during the implementation of human resource management information systems through effective piloting; and human resource managers of Kenyan state corporations should ensure that adequate risk assessment and budgetary allocations are undertaken in order to avoid cost overruns during the implementation of human resource management information systems.

5.3 Recommendation for further research

The researcher recommends that further research should be undertaken to investigate the factors affecting strategic planning and strategy implementation in the implementation of Human Resource Management Information Systems within the Kenyan public sector.
REFERENCES


First International Conference on Interdisciplinary Research and Development.


APPENDICES

LIST OF STATE CORPORATIONS IN KENYA

1. Agricultural Development Corporation
2. Agricultural Finance Corporation
3. Agro-chemical and Food Company
4. Athi Water Services Board
5. Bomas of Kenya
6. Bukura Agricultural Institute
7. Capital Markets Authority
8. Catering & Tourism Training Levy Trustee
9. Chemelil Sugar Company
10. Coast Development Authority
11. Coast Water Services Board
12. Coffee Board Kenya
13. Coffee Development Authority
14. Coffee Research Foundation
15. Commission for Higher Education
16. Communications Commission of Kenya
17. Consolidated Bank of Kenya
18. Cooperative College of Kenya
19. Cotton Development Authority
20. Council of Legal Education
21. Deposit Protection Fund Board
22. Development Bank of Kenya
23. East African Portland Cement Company
24. Egerton University
25. Energy Regulatory Commission
26. Ewaso Ng’iro North Dev. Authority
27. Ewaso Ng’iro South Dev. Authority
28. Export Processing Zones Authority
29. Higher Education Loans Board
30. Industrial and Commercial Development Corporation
31. Industrial Development Bank
32. Insurance Regulatory Authority
33. Investment Promotion Centre
34. Jomo Kenyatta University of Science and Technology
35. Jomo Kenyatta Foundation
36. Kenya Accountants and Secretaries National Examination Board (KASNEB)
37. Kenya Agricultural Research Institution (KARI)
38. Kenya Airports Authority
39. Kenya Airports Authority
| 40. | Kenya Broadcasting Corporation |
| 41. | Kenya Bureau of Standards |
| 42. | Kenya Civil Aviation Authority |
| 43. | Kenya Coconut Authority |
| 44. | Kenya Copyright Board |
| 45. | Kenya Dairy Board |
| 46. | Kenya Education Staff Institute |
| 47. | Kenya Electricity Generating Company |
| 48. | Kenya Ferry Services |
| 49. | Kenya Film Commission |
| 50. | Kenya Forestry Services |
| 51. | Kenya Industrial Estates |
| 52. | Kenya Industrial Property Institute |
| 53. | Kenya Industrial Research Institute (KIRDI) |
| 54. | Kenya ICT Board |
| 55. | Kenya Institute Administration |
| 56. | Kenya Institute for Special Education |
| 57. | Kenya Institute of Education |
| 58. | Kenya Investment Authority |
| 59. | Kenya Literature Bureau |
| 60. | Kenya Marine and Fisheries Research Institute (KMFRI) |
| 61. | Kenya Maritime Authority |
| 62. | Kenya Meat Commission |
| 63. | Kenya Medical Research Institute |
| 64. | Kenya Medical Supplies Agency |
| 65. | Kenya Medical Training College |
| 67. | Kenya National Examination Council |
| 68. | Kenya National Library Services |
| 69. | Kenya Ordinance Factories Corporation |
| 70. | Kenya Pipeline Company |
| 71. | Kenya Plant Health Inspectorate Services (KEPHI) |
| 72. | Kenya Polytechnic University College |
| 73. | Kenya Ports Authority |
| 74. | Kenya Post Office Savings Bank |
| 75. | Kenya Power & Lighting Company (KPLC) |
| 76. | Kenya Railways Corporation |
| 77. | Kenya Re-Insurance Corporation |
| 78. | Kenya Revenue Authority |
| 79. | Kenya Roads Board |
| 80. | Kenya Safari Lodge and Hotels |
| 81. | Kenya Seed Company |
| 82. | Kenya Sisal Board |
| 83. | Kenya Sugar Research Foundation (KESREF) |
| 84. | Kenya Tourism Board |
| 85. | Kenya Tourist Development Corporation |
| 86. | Kenya Water Services |
| 87. | Kenya Wildlife Services |
| 88. | Kenya Wine Agencies Ltd |
89. Kenyatta International Conference Center (KICC)
90. Kenyatta National Hospital
91. Kenyatta University
92. Kerio Valley Development Authority (KVDA)
93. Kenya Institute for Public Policy Research and Analysis (KIPPRA)
94. Lake Victoria North Water Services Board
95. Lake Victoria South Water Services Board
96. Lake Basin Development Authority (LBDA)
97. Local Authorities Provident Fund
98. Maseno University
99. Masinde Muliro University of Scie. & Tech.
100. Moi Teaching & Referral Hospital
101. Moi University
102. Multi-Media University (formerly KCCT)
103. National Aids Control Council
104. National Cereal and Produce Board
105. National Commission on Gender & Dev.
106. National Campaign Against Drug Abuse (NACADA)
107. National Coordination Agency for Population and Development
108. National Oil Company (NOC)
109. National Council for Children Services
110. National Council of Persons with Disabilities
111. National Environment Management Authority (NEMA)
112. National Hospital Insurance Fund (NHIF)
113. National Housing Corporation (NHC)
114. National Irrigation Board
115. National Museums of Kenya
116. National Social Security Fund (NSSF)
117. National Water Conservation and Pipeline Corporation
118. NGO Coordination Bureau
119. Northern Water Services Board
120. Numerical Machining Complex
121. Nyayo Tea Zones
122. Nzoia Sugar Company
123. Pest Control Board
124. Postal Corporation of Kenya
125. Privatization Commission of Kenya
126. Public Procurement & Oversight Authority
127. Pyrethrum Board of Kenya
128. Retired Benefits Authority
129. Rift Valley Water Services Board
130. Rural Electrification Authority
131. School Equipment Production Unit
132. South Nyanza Sugar Company
133. Sports Stadia Management Board
134. Tana and Athi Rivers Dev. Authority
135. Tanathi Water Services Board
136. Tea Board of Kenya
137. Tea Research Foundation
138. Teachers Service Commission
139. Telkom Kenya Ltd
140. University of Nairobi
141. University of Nairobi Enterprise Services
142. Water Appeals Board
143. Water Resources Management Authority
144. Water Services Regulatory Board
145. Water Services Trust Fund
146. Youth Enterprise Development

Source: (Office of Public Communications, 2011).
APPENDIX II: LETTER OF INTRODUCTION

UNIVERSITY OF NAIROBI

SCHOOL OF BUSINESS

P. O. BOX 30197

NAIROBI

20th August, 2012

Dear Respondent,

RE: COLLECTION OF SURVEY DATA

I am a postgraduate student at the University of Nairobi, at the School of Business. In order to fulfill the degree requirements, I am undertaking a management research project on the “challenges facing state corporations in Kenya in the implementation of human resource management information systems.”

This is kindly to request you to participate in this survey by completing the attached questionnaire. The information you provide will be used strictly for academic purposes and will be treated with utmost confidentiality and utilized for academic purposes only. Thank you for your cooperation.

Yours faithfully,

Jane Kinyua.

Reg. No. D61/6168/2010
APPENDIX III: QUESTIONNAIRE

Instructions: Please fill in the response to each question by ticking (√) and inserting your comments appropriately

Section A: Demographic data

1. Name of organization.................................................................

2. How long ago was the organization incorporated?

   0 – 1 year (   )  2 – 3 years (   )  4 – 5 years (   )
   6 – 7 years (   )  8 – 9 years (   )  10 years + (   )

3. What is the number of staff in the organization?

   0 – 20 (   )  21 – 40 (   )  41 – 60 (   )
   61 – 80 (   )  81 – 100 (   )  100 + (   )

4. What is the nature of Information Communication Technology (ICT) in use in the organization (tick as many as are appropriate)?

   Management Information Systems (MIS) (   )
   Business to Business (B2B) (   )
   Business to Customer (B2C) (   )
   Web Based automated information systems (   )

5. Which area is ICT used in the organization (tick as many as are appropriate)?

   Finance and Accounting (   )  Human Resource (   )
   Operations (   )  Marketing (   )
   Other (please specify).................................................................
Section B: Challenges facing state corporations in Kenya in the implementation of Human Resource Management Information Systems

6. When did the implementation of the Human Resource Management Information Systems start in your corporation?

- 0 – 1 year ( )
- 2 – 3 years ( )
- 4 – 5 years ( )
- 6 – 7 years ( )
- 8 – 9 years ( )
- 10 years + ( )

7. Please rate extent to which the following administrative advantages have been realized using Human Resource Management Information Systems in your corporation: (Rating Scale: 1 - Strongly agree; 2 – Agree; 3 – Neither agree nor disagree; 4 – Disagree; 5 – Strongly disagree)

<table>
<thead>
<tr>
<th>Advantage</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased competitiveness by improving human resource operations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Production of a greater number and variety of human resource related reports</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shifting the focus of human resource from the processing of transactions to strategic human resource management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Making employees part of human resource management information system</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reengineering the entire human resource function</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. What is the major source of challenges in the implementation of Human Resource Management Information Systems in your corporation?

- Information Communication Technology adoption and use ( )
- Employee resistance in the adoption and use of information systems ( )
- Insufficient human resource management budgetary allocation ( )
- Inadequate human resource management commitment ( )
- Other (please specify) ..............................................................................................................
9. In a scale of 1 to 5 where; 1- Strongly agree; 2 – Agree; 3 – Neither agree nor disagree; 4 – Disagree; 5 – Strongly disagree), are the following statements true in the implementation of Human Resource Management Information Systems in your corporation?

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involvement of competent and skilled staff in the implementation of human resource management information systems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approval of adequate funds for human resource management information systems budget</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effective time management in the implementation of human resource management information systems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effective information technology support in the implementation of human resource management information systems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. Please rate the importance of the following factors in posing challenges in the implementation of Human Resource Management Information Systems in your corporation: (Rating Scale: 1- Very important; 2 – Important; 3 – Neither important nor unimportant; 4 – Unimportant; 5 – Very unimportant)

<table>
<thead>
<tr>
<th>Factor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of adequate user skills and awareness of the human resource management information systems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inadequate staffing during the implementation of the human resource management information systems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of prior experience in the implementation of human resource management information systems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integration and Specific module of information system (IS) not working as expected during the implementation of human resource management information systems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost overruns during the implementation of human resource management information systems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Thank you.