

**HUMAN RESOURCE INFORMATION SYSTEMS AND LEARNING
ORGANIZATION IN CHARTERED UNIVERSITIES IN KENYA**

NJOROGE JANE WAMBUI

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DECLARATION

This research project is my original work and has not been presented for a degree in any other university.

Signature _____ Date _____

JANE WAMBUI NJOROGÉ

D61/76065/2012

Declaration of Supervisor

This project has been submitted for examination with my approval as the University supervisor.

Signature _____ Date _____

PROF. PETER K'OBONYO

Department of Business Administration,

School of Business

University of Nairobi

DEDICATION

I dedicate this project to my family for their unending support and love throughout the study period. To my lovely husband Samson, thank you for the endless support you gave to me. My sons; Wesley and Louis, I carried you when doing my exams and you were so peaceful. Thank you for your understanding and standing with me.

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ACRONYMS AND ABBREVIATION

CRM:	Customer Relationship Management
ERP:	Enterprise Resource Planning
HRIS:	Human Resource Information System
HRM:	Human Resource Management
OL:	Organizational Learning
SMES:	Small and Medium Enterprises

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ABSTRACT

The main purpose of the study was to establish the relationship between Human Resource Information Systems (HRIS) and Learning Organization at the selected chartered universities in Kenya. The study adopted descriptive design to determine the relationship between human resource information system and learning organization at the selected chartered universities in Kenya by 2011. The target population comprised seven public and five private chartered universities; the total number was twelve universities. Data for the study was primary obtained by use of a survey tool. It was collected using a questionnaire. The filled questionnaires were checked for completeness and then coded and the data analyzed. A correlation model for establishing presence and magnitude of dependence using significance levels was applied to establish the relationship between Human Resource Information Systems (HRIS) and learning organization. The findings of the study established that human resource information system is used in the selected chartered universities in Kenya; the institutions have adopted HRIS in computer based training; the impact on adoption and implementation of HRIS involved the regulatory as an environmental impact on adoption and implementation of human resource information system and an effective HRIS provides information on just about anything the company needs to track and analyze about employees, former employees, and applicants. The study made recommendations that a functional Human Resource Information System should create an information system that enables an assimilation of policies and procedures used to manage the firm's human capital as well as the procedure necessary to operate the computer hardware and software applications; most chartered universities in Kenya have decentralized structure, number of branches, regional campuses and numerous employees these institutions should introduce a certain level of human resource information system in human resource department. Human Resource Information System, like other information systems should be flexible and adaptable to changes.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Organizations have recently found us in a competitive environment characterized by market globalization, a greater complexity and increasing changes, which reinforces the need for flexibility and differentiation. Consequently, traditional sources of competitive advantage such as subsidized markets, both physical and financial assets and even technology have been pushed into the background in favour of knowledge since they tend to be increasingly easily available to everyone on equal terms, in open markets. In order to survive and obtain advantages in this environment, it is necessary for the organizations to be able to innovate and assimilate new knowledge, which allows them to take a different approach. Learning and creativity become necessary in order to guarantee the sustainability of competitive advantage. Being aware of this, many organizations build technical infrastructures that allow the retrieval and distribution of knowledge while at the same time the firm concentrates on aspects such as strategy, quality control and stock control. However, the reason why most companies fail is due to excessive focus on technical problems at the expense of human resources (Winter, 2000).

The role of human resources management in learning organization's has been discussed by a number of researchers and practitioners. In a permanent changeable and intensive environment, the main tasks of human resource management are to monitor measure and intervene in construction, embodiment, dissemination and use of knowledge by employees. Harrison (1999) noted that the daily task of human resource development

involves building of a learning organization as: assisting employees in creating and using knowledge; establishing appropriate networks; and engaging in double-loop learning.

Human resource management (HRM) issues have been a major concern for managers at all levels, because they all meet their goals through the efforts of others, which require the effective and efficient management of people (Dessler et al., 1999). The HRM activities, for example, planning, recruiting, selection, and training just to mention but few place enormous responsibilities on supervisors and managers alike. HRIS provides management with strategic data not only in recruitment and retention strategies, but also in merging Human Resource Information System into large-scale corporate strategy.

The information collected from Human Resource Information System (HRIS) provides management with decision-making tool. Through proper Human Resource management, firms are able to perform calculations that have effects on the business as a whole. Such calculations include health-care costs per employee, pay benefits as a percentage of operating expense, cost per hire, return on training, turnover rates and costs, time required to fill certain jobs, return on human capital invested, and human value added. It must be noted though, that, none of these calculations result in cost reduction in the Human Resource function (Dessler et al., 1996). The aforementioned areas however, may realize significant savings using more complete and current data made available to the appropriate decision makers. Consequently, Human Resource Information System are seen to facilitate the provision of quality information to management for informed decision-making. Most notably, it supports the provision of executive reports and

summaries for senior management and is crucial for learning organizations that see their human resource as providing a major competitive advantage.

1.1.1 Human Resource Information System

Information technology extremely infuses human resource management in this global networking era. Digital possibilities have been challenging the traditional ways of delivering Human Resource Management services within business and public organizations for more than a decade now (Bratton, 2003). In addition the performance of Human Resource manipulates success in today's economy. Human Resource Management organizations now days are becoming strongly dependent on Human Resource Information System (Lippers & Michael Swiercz, 2005; Tansley, Jerram & Hill, 2011). Human Resource Information System is defined as a system which is used to acquire, store, manipulate, retrieve and distribute pertinent information about an organization's Human Resource. The two important resources in organizations are people and information these two can significantly affect the overall performance of a business, the business success naturally requires the management of both (Mile & Snow, 2007).

DeSanctis (1986) defined the term Human Resource Information System as “a specialized information system within the traditional functional areas of the organization, designed to support the planning, administration and decision. Kavanagh et al. (2012) argued that the definition of DeSanctis (2008) narrows the scope to the Human Resource position and neglects the adoption and deployment of the information systems in the corporate organization. Although Human Resource Information System includes hardware and software, it also includes people, forms, policies and procedures, and data.

Recently, the focus of Human Resource Information System has shifted to more strategic applications of an organization like recruitment, performance and compensation management, self-service technologies and Human Resource planning in alignment with the organization's planning.

The Functions of Human Resource Information System enable the information system in taking of procedures and policies used to manage the firm's human capital as well as the procedure required to operate the computer hardware and software applications. According to DeSanctis (1986) Human Resource Information System functions include: Integrating the Technologies of Human Resource Information System, make efficiency greater than before, Increased Effectiveness and IT-Enabled Processes. Human Resource Information System administration comprises a distinct supporting function within HR department.

Functional Human Resource Information System must create an information system that enables an assimilation of policies and procedures used to manage the firm's human capital as well as the procedure necessary to operate the computer hardware and software applications (Hendrickson, 2003). While information technology affects Human Resource (HR) practices (Lengick et al., 2003), Human Resource Information System and Human Resource Information System administration comprise a distinct supporting function within Human Resource. Integrating the technologies of Human Resource Information System is a fact that developments in Information Technology have dramatically affected traditional Human Resource functions with nearly every Human Resource function (example, compensation, staffing, and training) experiencing some sort

of reengineering of its processes. However, this process of change has created significant challenges for human resource professionals resulting in the transformation of traditional processes into on-line processes.

1.1.2 Learning Organization

According to Senge (1990) learning organizations are organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole together. The basic rationale for such organizations is that in situations of rapid change only those that are flexible, adaptive and productive will excel. For this to happen, it is argued, organizations need to 'discover how to tap people's commitment and capacity to learn at all levels.

Real learning gets to the heart of what it is to be human; employees are able to recreate themselves. This applies to both individuals and organizations. Thus, for a 'learning organization it is not enough to survive. "Survival learning" or what is more often termed "adaptive learning" is important indeed it is necessary, for a learning organization, "adaptive learning" must be joined by "generative learning", learning that enhances our capacity to create' (Senge, 1990).

The dimension that distinguishes learning from more traditional organizations is the mastery of certain basic disciplines or (component technologies). The five that Peter Senge identifies are said to be converging to innovate learning organizations. They are: Systems thinking, Personal mastery, mental models, building shared vision and team learning. He adds to this recognition that people are agents, able to act upon the structures

and systems of which they are a part. All the disciplines are, in this way, 'concerned with a shift of mind from seeing parts to seeing wholes, from seeing people as helpless reactors to seeing them as active participants in shaping their reality, from reacting to the present to creating the future' (Senge, 1990).

Individuals play a fundamental role in the development of organizational learning since the organization would not exist without them. Therefore, HR systems may contribute to the capacity of the organization to learn by facilitating the development of organization-specific competencies that result in complex social relationships based on the company's history and culture, and generate tacit organizational knowledge (Buckey, 2011). Human resource management can be seen as personnel management with an emphasis on the acquisition, organization and motivation of human resources (Amstrong, 2000).

Most often, as with processes, computer technology is designed to improve effectiveness either in terms of the accuracy of information or by using the technology to simplify the process. This is especially the case where large data sets require reconciliation. Numerous manual reconciliation processes may be executed faster, but also with near perfect accuracy using automated systems. For instance, pension and profit sharing applications, benefits administration, and employee activities are just to mention but a few (Hendrickson, 2003). Using computer technology in these processes ensures accurate results and offer substantial simplification and timeliness over manual processing. Consequently, the vast majority of human resource functions have had some degree of automation applied in order to gain both efficiency and effectiveness.

1.1.3 Human Resource Information System and Learning Organization

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1.1.4 Chartered Universities in Kenya

Higher education institutions in the world are facing new challenges which require reforms in their management and governance styles. The rise of new stakeholders, internal factors, together with globalization and the rapid pace at which new knowledge is created and utilized are among the recent developments which challenge higher education institutions. While they have responded rather slowly in the past, to changing circumstances, there is now an urgent need for them to adjust rapidly in order to fulfill their missions and the needs of other stakeholders (Jowi, 2003).

Kenya placed considerable importance on the role of education in promoting economic and social development after the achievement of independence in 1963 (Sifuna, 1998). This resulted in the rapid expansion of the education system to provide qualified persons for the growing economic and administrative institutions, and to undertake some reforms

to reflect the aspirations of an independent state (Court & Ghai, 1974). There are thirty nine chartered universities in Kenya, twenty two of which are public and seventeen private. The twenty two public universities have a total of nine constituent colleges; The University of Nairobi is the oldest university in Kenya.

Over the last four decades, the social demands with respect to higher education in Kenya have clearly intensified. This has been exemplified by the rise in enrolments in public and private universities, the proliferation of more private universities and the establishment of private wings (self-sponsored programmes) in the public universities. Student enrolment in public universities in Kenya increased very rapidly between 1964 to date, with the current student enrolment in Kenya's universities standing roughly at 55,200 (Sifuna, 1998). With the additional students in the parallel degree programmes, the numbers are now much higher. The dawn of a global knowledge society with information-driven economies and expansions in international higher education markets is placing new demands on them to search for more innovative approaches in academic course provisions; revenue generation; uncertain educational quality; institutional governance, and human resource management and to address longstanding difficulties caused by rapid enrolments; financial constraints; frequent labour strife and brain drain.

1.2 Research Problem

Human resource information system is established to enable the information system in taking procedures and policies used to manage the firm's human capital as well as the procedure required to operate the computer hardware and software applications. For the employees, human resource information system provides the possibility of independent

access to data, which often means working in one software window as well as keeps automatic tracking and reminder to business obligations and events. In some organizations it also lets the employees attend internal training courses via the web in order to develop their personal skills and knowledge. As a result, it encourages employees to make decisions and initiatives on the basis of information obtained in the human resource information system (Buckley et al., (2004).

At the level of involvement chartered universities in Kenya have been operating, any threats to their ability to adapt to the environmental changes would no doubt be of great concern both to the government, private sector and the general public. The economy of the country largely depends on the institutions to produce a pool of well-trained human resource to serve in the market. Notwithstanding this enormous contribution, faced by the pressure to keep operating costs low, are likely to overlook critical aspects of human resource with the hope that no serious threats materialize. This oversight is invariably risky and could result in devastating impact to the institutions and country at large. The economy would inevitably be shaken. If we consider that most chartered universities in Kenya have decentralized structure, number of branches, regional campuses and numerous employees it is obvious that this institutions must introduce a certain level of human resource information system in human resource department. Performing tasks manually or partially computer-integrated in these conditions is very slow and expensive.

Environment of higher education is facing relentless and rapid change. Those in universities management and leadership positions are finding it essential that they understand shifting demographics, new technologies, and the commercialization of

higher education, the changing relationships between institutions and governments and the move from an industrial to an information society. In the developing world, universities are facing challenges in managing its human resources especially in creating the human capital necessary to keep pace with the knowledge revolution.

Some studies have been undertaken to show of the benefits of human resource information system (Buckley et al., 2004). The analyses showed conservative savings due to reduced employee turnover, reduced staffing costs, and increased hiring-process efficiencies. That was attributable to the use of automated system. However, he does not explore the contribution of human resource information system towards learning organization.

Ngai et al. (2004) presented a comprehensive literature review of human resource information systems and reported the results of the survey on the implementation of human resource information system in Hong Kong. However, Ngai et al does not explore the various contributions of human resource information system in facilitating smooth organizational change and adoption to the changing environment.

Florkowski (2006) studied 'the diffusion of human-resource information-technology innovations in us and non-us firms. However, these studies cannot be extrapolated to cover the Kenyan context because of the differences in the operating environment as well as the relative sizes of the enterprises.

Several studies have also been done in Kenya. For instance (Mbogo & Okutoyi, 2003) studied the human resources management as a determining factor in organisational

learning. Besides the fact that the study focused on a human resource, the context was generalised. Macharia (2011) studied the role of human resource information systems (human resource information system) in strategic human resource management. Her study was, however, focused on the strategic role and in SMES. Kirui (2012) studied the role of information systems in human resource management. The study focused on the manufacturing industries.

The researcher has not found any published research on human resource information system and learning organization for the chartered universities in Kenya. This study seeks to determine whether there is a relationship between the human resources information system and learning organization in the Kenyan chartered universities. The study will be guided by the following research question” what’s the relationship between human resource information system and learning organization in chartered universities in Kenya?”

1.3 Research objective

To establish the relationship between Human Resource Information Systems (HRIS) and learning organization at the chartered universities in Kenya

1.4 Value of the Study

The importance of this study derived from the importance of human resource, it is the backbone of every organization. Long term continuity of business is the guarantee required for a stable economy. Thus the greatest value of the study will be its contribution

to the practice of management in the contemporary higher education environment which in turn contributes to the growth of the economy.

To the universities the study will be beneficial in understanding the importance of using Human Resource Information System in becoming a learning organization. The work can form a solid foundation of existing knowledge derived from large institutions, hence the results can be implemented in other smaller institutions seeking to become learning organization. Researchers and academicians in the field of human resource will find the study useful as a guide for carrying out further studies.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of the related literature on the subject under study presented by various researchers, scholars and authors. First is the discussion of the theoretical foundation, concepts Human Resource Information System, followed by a review of the concept of learning organization, Human Resource Information System and learning organization is then presented. The materials are drawn from several sources which are related to the study objectives.

2.2. Theoretical Foundation

2.2.1 Organizational Learning Theory

According to Argyris & Schon (1998), organizational learning (OL), is a product of organizational inquiry. Their approach to organizational learning theory is based on the understanding of two (often conflicting) modes of operation: espoused theory, this refers to the formalized part of the organization. Every firm will tend to have various instructions regarding the way employees should conduct themselves in order to carry out their jobs (e.g. Problem solving). These instructions are often specific and narrow in focus, confining the individual to a set path. The theory in use refers to the loose, flowing, and social way that employees solve problems and learn.

2.2.2 Systems Theory

A system may be defined as a set of social, biological, technological or material partners co-operating on a common purpose. System theory is a philosophical doctrine of describing systems as abstract organizations independent of substance, type, time and

space. Systems theories are connected to both ontological and epistemological views. The ontological view imply that the world consist of “systems” or “integrative levels”. The epistemological view implies a holistic perspective emphasizing the interplay between the systems and their elements in determining their respective functions. It is thus opposed to more atomistic approaches in which objects are investigated as individual phenomena. Systems theory developed especially from biology, in which it is difficult to understand the functions of, for example, the sexual reproduction of flowers separate from the functions of the insects. Systems theory exists in different versions and is related to some other fields.

2.3 Human Resource Information System

The concept of Human Resource Information System is not new. Tansley (1990) published the following definition: a Human Resource Information System is a system used to acquire, store, handle, analyze, sort and distribute relevant information concerning human resources in an organization. Hendrickson (2003) adds that it is not limited to technical aspects (computer equipment's, software applications) but includes also individuals, procedures, policies and necessary data to manage human resource function. Use and appropriation are underlined, but certain confusions emerge concerning the technology infiltration in human resource function. According Harisson and Deans(2003), Human Resource Information System includes various facets from employee information, applicant alignment; recruiting; equal employment opportunity/affirmative action; position control; performance management; compensation; payroll; benefits; training; to square development/skill inventory and human resource planning.

Almost all human resource processes can be done using HRIS on a daily basis which can benefit the organization in several ways Hendrickson (2003). For instance, as an implication of Human Resource Information System the automation of tasks and process reduce the use of resources (financial, material and human). Reduction of human resource costs; less usage of paper as well as to assist managers in HR process are some of the examples of reduction of resource usages. According to Hendrickson (2003) Human Resource Information System benefits an organization in their human resource processes by increasing the efficiency and effectiveness and provides self-service human resource (i.e. computer based training, online recruitment). In addition, Human Resource Information System produces data as a byproduct and has front-end web applications which can transfer part of human resource data management to employees and line-managers.

Employees can enter and update data by themselves which create more accuracy of data and saves time and costs. Ulrich (2001) mentioned some important facts of Human Resource Information System are effective human resource decision making and strengthening organization's character reducing process and administration cost, speeding up transaction processing, reduce information errors and improve the tracking and control of human resource actions. Furthermore, Shrivastava, (2004) mentioned that Human Resource Information System not only helps the management and human resource department but also assists the employees in several ways. Human Resource Information System is able to increase the overall decision making efficiency for the management of an organization. It helps the human resource department to possess single data base of all employees in the company with all necessary information and opportunities of different

reports plus, Human Resource Information System eliminates the paper forms that are much slower and has a higher likelihood of errors caused by human factor.

The importance of Human Resource Information System can be seen all-around, such as operational assistance in collecting, storing and preparing data for reports, simplifying and accelerating the processes and controlling the available data, reducing labor costs for human resource departments, and providing timely and diverse information to the management of the organization, based on which it is possible to make quality strategic decisions related to human capital (Argyris & Schön, 1996).

According to Mile, Snow and Mandy (2007), Rapid computing technology has allowed more transactions to occur with fewer fixed resources. Typical examples are payroll, flexible benefits administration, and health benefits processing. Though technologies of early mainframes provided significant efficiencies in these areas, the difference is that the record processing efficiencies that were once only available to large firms are now readily available to any organization size (Ulrich, 2001).

2.4 Learning Organization

Organizational learning can be defined as a dynamic process of creation, acquisition and integration of knowledge aimed at the development of resources and capabilities that allow the organizations a better performance. This definition includes three basic assumptions. One of main assumptions is that organizational learning is a process whose goal is to improve the development of the organization by means of new initiatives (technological, productive or commercial). This requires a move from simply putting

more knowledge into databases to leveraging the many ways that knowledge can migrate into an organization and impact business performance (Cross & Baird, 2000). Among the benefits of organizational learning it is worth mentioning, first, that it establishes a link between the organization and the environment which allows a proactive behavior rather than a reactive one.

Learning implies an improvement in response capacity through a wider understanding of the environment (Winter, 2000). This behavior helps to diminish its sense of complexity and avoids stagnation of strategic decisions. The revision of the different works on the subject allows us to identify four different dimensions or phases: knowledge acquisition through external sources or internal development, distribution by means of which knowledge is spread among the members of the organization, interpretation, in which individuals share and incorporate aspects of their knowledge, which are not common to all of them, achieving a shared understanding as well as co-ordination in decision making, and finally organizational memory which tries to store knowledge for future use, either in organizational systems designed for this purpose or in the form of rules, procedures and other systems. Senge (1995) mentions the five disciplines that he goes on to identify as personal mastery, mental models, shared vision, team learning and systems thinking which are the keys to achieving this sort of organization.

2.5 HRIS and Learning Organization

The work of an employee in the human resource department is very suitable for computer processing. Many of these activities are the transaction processes, routine, recurring daily, weekly, monthly. A study of a pharmaceutical company showed that just before the

Human Resource Information System introduction 71% of employees in the human resource departments conducted the transactional and administrative tasks. In other words, it is time consuming to perform tasks such as checking worksheets (carnet), updating various information about employees (change of addresses, phone numbers, different status, etc.) and tracking data and employees for the benefits (insurance, contributions, etc.).

Effective human resource, in order to provide competitive advantages, requires adequate updated information on current employees, as well as potential employees in the labour market. Information Technology evolution has improved the technique of collecting this information through the development of Human Resource Information System systems (Kavanagh Mohan, 2009). Human Resource Information System includes systems and processes that connect the function of human resource management and information technology. Enterprises often choose to introduce this information system after the successful implementation of ERP (Enterprise Resource Planning) and CRM (Customer Relationship Management) solutions, aiming to improve the processes associated with making decisions about employees. Nicholas et al. (1996) stated that Information technology has enabled the broad implementation of Human Resource Information System applications and help companies to improve efficiency in general by increasing the efficiency of human resource management.

Vujovic (2005) noted the specific dimension with the view that modern business requires intensive use of knowledge based on multidisciplinary approach, while education should provide the acquisition of new skills, such as finding relevant information, encouraging

creative thinking, effective communication, teamwork etc. We already have companies where employees, in addition of official duties, acquire new knowledge and these organizations are called learning organizations. Hendrickson (2003), made a first step in accepting the employee in the form of human capital. It was in the period 1945-60. However, that has not led to the substantial changes in the functioning of the Human Resource Information System

Human Resource Information System, like other information systems must be flexible and adaptable to changes. They have to follow the development of the organization in order to satisfy all existing and new needs. On the other hand, if the company does not follow trends in the field of information and communication technology, it can have a problem with inefficient or insufficiently effective Human Resource Information System (obsolete or unfit to the company needs). Consequently, it will affect the overall business, especially in large enterprises with complex organizational structure.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents methods to be used in carrying out the study. The research methodology is presented in the following order, research design, target population, data collection methods, instruments of data collection and finally the data analysis method and tools.

3.2 Research Design

This study adopted descriptive design to determine the relationship between human resource information system and learning organization at the chartered universities in Kenya. The design was chosen because the data was cross sectional involving several organizations; also the data was collected at a given point in time.

3.3 Population of the Study

The study targeted the established chartered universities in Kenya by 2011. Currently there are twenty two chartered public universities and seventeen private chartered universities in the country, (Commission for university education, 2013). The target population comprised seven public and five private chartered universities; the total number is twelve universities. The study is limited to the established chartered universities by 2011 due to lack of readily available data among the new chartered institutions.

3.4 Data Collection

Data for the study was primary. It was collected using a questionnaire. The respondents were the heads of human resource department in the universities. The questionnaire had three human resource main parts. The first part was used to gather general information for each respondent. The second part focused on determining the level of human resource information system and the third part focused on the institutional direction as a learning organization. The questionnaire was in various types of questions some being closed questions while others were open-ended and respondents gave their opinions. The questionnaires were dropped at the institutions by the researcher and collected after a span of one week.

3.5 Data Analysis

The filled questionnaires were checked for completeness and then coded and the data analyzed. Considering the quantitative nature of the data collected, it was summarized and classified using descriptive statistics such as mean, standard deviation, frequency distribution and percentages.

Then inferential statistics was done to show the nature and magnitude of relationships established between independent, intervening and the dependent variable using regression analysis to make inferences from the data collected to a more generalized conditions. Each inferential analysis was linked to specific research questions that were raised in the study. This study is an empirical study, therefore was concerned with external validity only.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter is a presentation of results and findings obtained from field responses and data, broken into two parts. The first section deals with the general information, while the other sub-section presents findings of the analysis, based on the objectives of the study as explored by the questionnaires where both descriptive and inferential statistics have been employed.

4.2 Response Rate

The study targeted twelve chartered universities. However, out of the twelve targeted, responses were duly received from ten of them translating to a response rate of 83.3%. Despite persistent follow-up, there was no positive response from two of the targeted respondents. However, the response rate achieved is above the 70% threshold. The section begins by presenting the demographic information of the companies studied before presenting the detailed results and analysis of the responses that are specific to adoption of business continuity planning.

4.3 Demographic Information

The study sought to find out the demographic information of the respondents. The findings of the study are discussed in the subsections below.

4.3.1 Type of the Institution

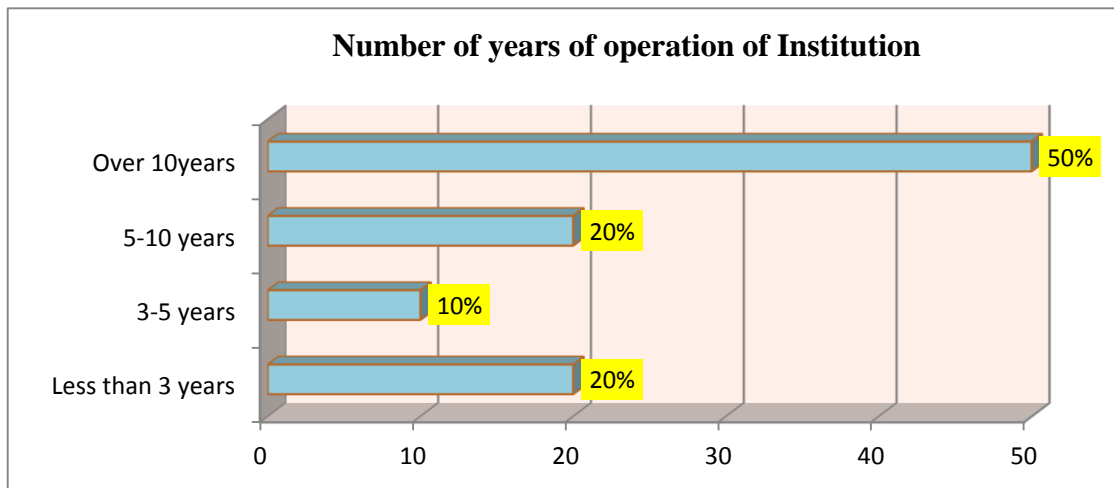
The study sought to determine the type of the institution the respondents are currently in. The results were presented in the figure below. From the findings the majority of the

respondents 58.3% indicated that the type of the institution was chartered public university while 41.7% were chartered private university in Kenya.

4.3.3 Number of Years in Operation of the Institution

The study sought to determine the number of years the institution has been operating as a chartered university. The results are presented in the Figure 4.2.

Figure 4.1: Number of years of operation of institution



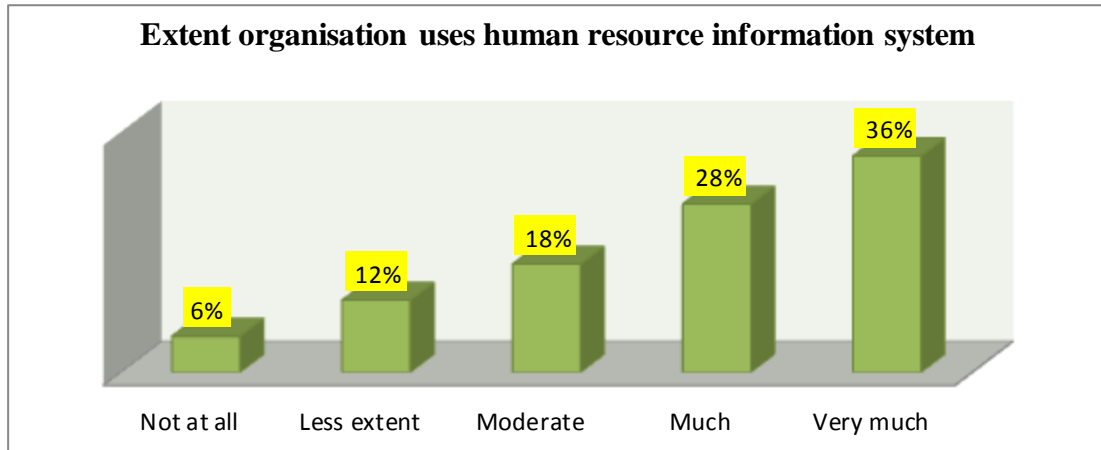
Source: Author, 2014

The findings in Figure 4.1 show that the majority of the respondents (50%) gave the number of years of operation the institutions had been in operation was over 10 years. 20% indicated that the number of years the institution had been in operation was for 5-10 years. The study deduced that the selected universities had been in operation a period long enough to give information on human resources information systems and learning organisation in chartered universities in Kenya.

4.4 Human Resource Information Systems

The study sought to determine the extent to which the institutions use human resource information system. The findings are presented in the figure 4.2.

Figure 4.2: Extent organization uses human resource information system



Source: Author, 2014

The findings in the Figure 4.2 show that the majority of the respondents 36% indicated that the organization uses human resource information system to a great extent, to an average extent and this accounted for 28%, 18% indicated a moderate extent, 12% to a less extent while 6% indicated that the organization does not use. The study deduced that human resource information system is used in majority of the chartered universities in Kenya.

4.4.1 Extent of use of HRIS in human resource tasks

The study sought to determine the use of human resource information system in carrying out human resource management tasks in the institutions. The respondents were asked to rate the extent of HRIS in human resource management tasks in a five point Likert scale.

The range was to a great (5) to least (1). The scores of not at all (N.A) and less extent (L.E) have been taken to present an impact less used equivalent to mean score of 0 to 2.4 on the continuous Likert scale ($0 \leq \text{N.A/L.E} < 2.4$). The scores of moderate extent (M.E) had an equivalent to a mean score of 2.5 to 3.4 on the continuous Likert scale: ($2.5 \leq \text{M.E} < 3.4$). The scores of great and very much extent (V.M.E) had an equivalent to a mean score of 3.5 to 5.0 on a continuous Likert scale; ($3.5 \leq \text{V.M.E} < 5.0$). A standard deviation of >1.5 implies a significant difference as shown in Table 4.1.

Table 4.1: Extent of HRIS use in human resource tasks

Statement	Mean	Std. Dev
Compensation and reward management	3.42	.1963
Computer based training	3.65	.1854
Career management	3.58	.1832
Human resource development	3.61	.1248
Selection of new employees	3.84	.2565
Payroll management are computerized	3.68	.1457
Decision making	3.53	.1354
Information sharing	3.59	.1875
Strategy formulation	3.63	.1575
Online recruitment	3.81	.1546
Human resource m strategy implementation	3.64	.1467
Work place learning	3.48	.1398
Commitment management	3.29	.1724
Performance appraisal	3.59	.1573
Commitment management	3.42	.1874
Performance management	3.62	.1494

Source: Author, 2014

The analysis confirmed that the extent of HRIS in human resource tasks is to a much extent used in the institutions, training with (Mean = 3.65) , career management (Mean = 3.58), human resource development (mean= 3.61) selection of new employees (Mean =3.84), payroll management are computerized (mean =3.68); decision making (Mean=

3.53); information sharing with (Mean = 3.59), strategy formulation (Mean= 3.63), online recruitment (Mean = 3.81), human resource and strategy implementation (Mean = 3.64), performance appraisal (Mean of 3.59) and performance management (Mean of 3.62). The analysis confirmed that HRIS is used in human resource tasks in the institutions. Table 4.1 above shows the findings.

4.4.2 Impact on Adoption and Implementation of HRIS

The study sought to determine the level of impact on adoption and implementation of human resource information in the institutions. The findings were presented in the Table 4.2. The respondents were asked to rate the level of impact on adoption and implementation of human resource information in the institutions in a five point Likert scale.

Table 4.2: Impact on adoption and implementation of HRIS

Factor	Mean	Std. Dev.
Regulatory environment	3.56	.2184
Financial capability	3.58	.2541
(in)-appropriate prioritization	3.64	.2144
Management attitude & focus	3.71	.2357
Knowledge of need for HRIS	3.63	.2748
Technical capacity	3.84	2.148

Source: Author, 2014

From the findings in the Table 4.2, majority of the respondents agreed that; regulatory environment has an impact on adoption and implementation of human resource information system (Mean=3.46), financial capability (mean= 3.58) and; (in)-appropriate prioritization (Mean= 3.64); management attitude & focus (Mean=3.71), knowledge of

need for human resource information system (mean = 3.63), technical capacity (Mean= 3.84).

4.4.3 Other Comments on Human Resource Information System

The study sought to determine other comments from respondents on human resource information system in these institutions. The respondents indicated that Human Resource Information System helps in recording employee personal and job-related information; it keeps records detailing job requirements; it facilitates planning by matching employees with the jobs for which they are best qualified; and, with security features and tracking of data required for regulatory compliance, it satisfies laws for the protection of personal data and generates reports for submission to government agencies.

Another HRIS trend is the use of online surveys. This allows the institutions to get fast information on their employees, policies, procedures, competition, and anything else they decide to survey. This also gives employees a sense of belonging and contributing to their company. Online employee surveys usually have an 80 percent return ratio, which is much higher than paper surveys.

Employees are becoming more self-sufficient in the workplace because of HRMS and the growth of technology. They are able to make several phone calls in order to speak with the one person who knows the answer to their questions. Answers are readily available, usually on the company intranet. This also frees up HR to focus on more profitable activities for the company, such as recruiting and employee development.

4.5 Learning Organization

The study sought to determine the extent to which the institution created a framework that facilitates learning. The findings were presented in the Table 4.3.

Table 4.3: Means and standard deviation for statement's representing indicators of learning organization

Statement	Mean	Std. Dev
Culture that supports continuous employee learning	3.64	.1578
Culture that supports critical thinking	3.52	.1546
A system that facilitates risk-taking by implementing with new ideas	3.58	.1412
Mistakes are allowed	3.62	.1438
Employee contribution are valued	3.54	.1566
A system of dissemination of the new knowledge human resource throughout the organization	3.63	.1244
A system that allows one to learn from experience	3.69	.1871
Experimentation is allowed	3.71	.1859

Source: Author, 2014

From the findings in Table 4.3 respondents agreed that there is a culture that supports continuous employee learning with (Mean =3.64), culture that supports critical thinking (Mean= 3.52) , a system that facilitates risk-taking by implementing with new ideas (Mean = 3.58) , mistakes are allowed (Mean =3.62) employee contribution are valued had a (Mean =3.54), a system of dissemination of the new knowledge human resource throughout the organization (Mean of 3.63), a system that allows one to learn from experience had (Mean = 3.69) and experimentation is allowed (Mean of 3.71)

4.5.1 Characteristics exhibited by organization

The study sought to establish the extent to which the organization exhibits the following characteristics. The findings were presented in the Table 4.5.

The respondents were asked to rate the extent to which the organization exhibits the following characteristics in a five point Likert scale.

Table 4.4: Means and standard deviation for ratings in characteristics of a learning organization

Characteristics	Mean	Std. Dev
System thinking(everything works together as one)	3.68	.4841
Personal mastery(empowered individuals)	3.59	.8745
Mental modeling (learning from alternatives)	3.52	.1574
Building shared vision(common vision for future)	3.64	.3854
Team learning(organization members think together)	3.53	.4972

Source: Author, 2014

From the findings in the Table 4.4, the respondents rating the characteristics exhibited by learning organization, system thinking had (Mean= 3.68) standard deviation of 0.4841. personal mastery (mean =3.59) and standard deviation of 0.8745; mental modeling (Mean of 3.52) and a standard deviation of 0.1574; building shared vision (Mean = 3.64) and a standard deviation of 0.3854 and team learning (mean = 3.53) and a standard deviation of 0.4972. The study further determined the degree to which the respondents agree/disagree with the given statements. The findings are presented in the Table 4.6.

Table 4.5: Means and standard deviation for ratings on attributes of a learning organization

Statement	Mean	Std. Dev.
Information is shared and is accessible	3.65	.2485
Learning is emphasized and valued	3.69	.2153
Mistakes or failures are not punished	3.78	.2747
People are expected to learn constantly	3.67	.2587

Source: Author, 2014

From the results presented in Table 4.5, the majority of the respondents assessed that information is shared and is accessible (Mean =3.65, S.D 0.2485) learning is emphasized and valued (Mean = 3.69, S.D = 0.2153) mistakes or failures are not punished (Mean = 3.78, S.D = 0.2747) and people are expected to learn constantly (Mean =3.67, S.D= 0.2587).

4.5.2 Change in Organizational Guidelines

The study sought to determine how often the organization changes its guidelines or policies to manage change. The findings were presented in the Table 4.6.

Table 4.6: Means and Standard Deviation for Ratings on Frequency of Change Of Organizational Guidelines

Category	Percentage	Mean	Std. Dev.
Once per year	20%	3.52	.2442
Once per two years	20%	3.51	.2154
Once in more than two year	60%	4.25	.2631
Never	0	0	0

Source: Author, 2014

The study findings presented in Table 4.6 established that majority organizations do change guidelines or policies once more than two years. This accounted for 60% of the response (Mean = 4.25, S.D = 0.2631). 20% response accounted for those who indicated that organizational changes or policies once per year and once per two years respectively. This was represented by (Mean of 3.52, S.D= 0.2442) and (Mean= 3.51, S.D 0.2154) respectively.

4.5.3 Contribution of Human Resource Information system to the growth of institution

The study sought the respondents view on the contribution of human resource information system to the growth of the institutions as learning organizations. The Human Resources Information Systems department oversees the delivery and administration of all human resources information systems, hardware operations, and the development and support Human Resources.

An effective HRIS provides information on just about anything the company needs to track and analyze about employees, former employees, and applicants. With an appropriate HRIS, Human Resources staff enables employees to do their own benefits updates and address changes, thus freeing HR staff for more strategic functions.

HRIS allows employees to exchange information with greater ease and without the need for paper through the provision of a single location for announcements, external web links, and company policies. This location is designed to be centralized and accessed easily from anywhere within the company, which also serves to reduce redundancy within the organization. The institution is able to handle its workforce by looking at two of the primary components: that of payroll and that of HR. A company that takes the time to invest in a HRIS that fits their goals, objectives, mission, and values, is a company that is investing in its future and in its success.

4.6 Correlation Matrix: Relationship between HRIS and Learning Organization

The matrix clearly shows the dependence besides the magnitude of the relationship and reliability of the HRIS and Learning units of measure or variables, with a benchmark of 95% confidence interval and hence at 0.05 significance level.

Table 4.7: Correlation Matrix on HRS and Learning Variables

Variable Measure	HRIS Variables	Learning Organization variables
HRIS Variables	1.00	0.045
Learning Organization variables	0.023	1.00

Source: Analyzed data

From Table 4.7, it is quite clear that HRIS and Learning are interdependent on each other as they measure 0.045 and 0.023 respectively in the correlation output. Pearson Correlation analysis was used to determine both the significance and degree of association between HRIS and Learning Organization the results are presented in Table 4.7.

The variables proved to be reliable in assessing the significance and relationship between the two major variables as they mostly fell at or below 0.05, the standard output expected of an analysis done with 95% confidence interval criterion. The relationships are as indicated and show the magnitude and also the significance with which they impact on corresponding ones, hence giving the researcher crystal clear basis for inferences.

4.7. Discussion of the Findings

The findings found out that human resource information system is used in carrying out human resource management tasks in the institution under the study. The institutions have adopted HRIS in computer based training, Human Resource Information System is used in various facets from employee information, applicant alignment; recruiting; equal employment opportunity/affirmative action; position control; performance management; compensation; payroll; benefits; training; to square development/skill inventory and human resource planning. The findings are in line with Buckley et al., (2004) in their study 'The use of an automated employment recruiting and screening system for temporary professional employees, a case study' showed conservative savings due to reduced employee turnover, reduced staffing costs, and increased hiring-process efficiencies. The researchers revealed that a cumulative savings yielded a return on investment. That was attributable to the use of an HRIS .

The study found that the learning organization culture supports continuous employee learning. Learning organization supports critical thinking and it is a system that facilitates risk-taking by implementing with new ideas. The learning organization allows for mistakes hence it is a system that allows one to learn from experience, employee contributions are valued. HRIS facilitate the provision of quality information to management for informed decision-making. Most notably, it supports the provision of executive reports and summaries for senior management and is crucial for learning organizations that see their human resource as providing a major competitive advantage. The findings are in line with Senge (1990) that learning organizations are organizations where people continually expand their capacity to create the results they truly desire. The

study findings established the characteristics exhibited by organizations as follows: system thinking; personal mastery; mental modeling; build shared vision and team learning. The study deduced that the most common characteristics exhibited by majority of the institutions were system thinking.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

In this chapter, summary of the main study findings is presented. The chapter also covers conclusions and recommendations of the study. The purpose of this study was to establish the relationship between Human Resource Information Systems (HRIS) and learning organization in the chartered universities in Kenya. The following are the summary of the research findings upon which the conclusions and recommendations of the study were made.

5.2 Summary of Findings

The study established that human resource information system is used in majority of the chartered universities in Kenya. The institutions have adopted HRIS in computer based training, various facets from employee information, applicant alignment; recruiting; equal employment opportunity/affirmative action; position control; performance management; compensation; payroll; benefits; training; to square development/skill inventory and human resource planning. The findings established that the impact on adoption and implementation of HRIS depends on environmental factor; financial capability; appropriate prioritization; management attitude & focus and knowledge of need for human resource information system.

The study found that the learning organization culture supports continuous employee learning. Learning organization supports critical thinking and it is a system that facilitates risk-taking by implementing with new ideas. The learning organization allows for mistakes hence it is a system that allows one to learn from experience. The findings are in

line with Senge (1990) that learning organizations are organizations where people continually expand their capacity to create the results they truly desire. The study deduced that the most common characteristics exhibited by majority of the institutions were system thinking.

Finally, the study found that HRIS when adopted facilitates the development of a learning organization. Priority given to HRIS planning by management is the most significant factor explaining the current level of its adoption and usage among the institutions. It also had the highest correlation with learning organization.

5.3 Conclusion

The study made conclusions based on the findings that human resource information system is used in majority of the chartered universities in Kenya. HRIS as a database is geared towards enhancing the capacity of HR management to: absorb new and promising technologies; simplify workflow; optimize precision; stability and credibility of workforce data and simplify the deployment and collection of data. The institutions have adopted HRIS in computer based training, various facets from employee information, applicant alignment; recruiting; equal employment opportunity/affirmative action; position control; performance management; compensation; payroll; benefits; training; to square development/skill inventory and human resource planning. There existed a positive correlation between HRIS and learning organization. The impact on adoption and implementation of HRIS by the management have great contribution in creating a learning organization. HRIS is necessary for any organization striving to become a learning organization.

HRIS has provides improved methods for monitoring and managing employees' use of the Internet in these institutions. This has in turn helped the management to improve productivity, reduce legal liabilities, and control IT costs. The institutions are blocking e-mail that may be offensive in order to reduce legal liabilities. They are also blocking Web sites that are inappropriate for workplace viewing. This has improved productivity by reducing non-productive activities.

5.4 Recommendations

5.4.1 Strategy and Policy recommendations

The study found that although the Human Resource department in the institutions has created a system that enables assimilation of policies and procedures there are still some unexploited means of ensuring better Human resource management. The study found out that the institutions that had adopted HRIS had also developed the characteristics of a learning organization; therefore it's advisable that all chartered universities in Kenya should adapt HRIS in order to grow as a learning organization.

5.4.2 Recommendations for further research

The researcher recommends that further work is also essential in addressing HRIS adoption in co-operate sectors as research is currently lacking in those area. Finally, the researcher also recommends further research on the relationship between factors influencing the adoption of HRIS and perceived effectiveness of HRIS

5.5 Limitation

The most significant limitation of the current study is associated with the use of cross-sectional data, there is the possibility that these relationships between HRIS and learning organization may occur in reverse order. A longitudinal work is needed to conclusively replicate the findings presented here.

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APPENDICES

APPENDIX I: RESEARCH QUESTIONNAIRE

Part a: General Information

1. Name of the institution (optional) _____

2. State the nature of your institution

Chartered public university

Chartered private university

3. What is the current size of your institution network

Network size

Tick (√) applicable option

i. Less than 5 campuses

ii. 6-10 campuses

iii. 11-20 campuses

iv. Over 20 campuses

Part B: Human Resource Information Systems

1. To what extent does your organization use human resource information system?

Please tick your response using the scale 1 to 5, least extent =1 great extent = 5

1	2	3	4	5

2. To what level do you agree with the following statements about the extent of use of human resource information system in carrying out in human resource tasks in your institution? In each case, please tick your response using the scale 1 to 5 , less extent = 1 great extent = 5

Statement	1	2	3	4	5
Compensation and reward management					
Computer based training					
Career management					
Human resource development					
Selection of new employees					
Payroll management are computerized					
decision making					
Information sharing					
Strategy formulation					
Online recruitment					
Human resource m strategy implementation					
Work place learning					
Commitment management					
Performance appraisal					
Commitment management					
Performance management					

3. Rate the extent to which you agree or disagree with the following statements on factors that affect adoption and implementation of HRIS in your institution.

Factor	Very strong	Strong	Neutral	Weak	Very weak
Regulatory environment					
Financial capability					
(in)appropriate prioritization					
Management attitude & focus					
Knowledge of need for human resource information system					
Technical capacity					

4. any other comment on human resource information system in your institution;

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Part C: Learning Organization

5. To what extent has your institution created a framework that facilitates the following?
 In each case, please tick your response using the scale 1 to 5, not at all = 1 very much = 5

Statement	1	2	3	4	5
Culture that supports continuous employee learning					
Culture that supports critical thinking					
A system that facilitates risk-taking by implementing with new ideas					
Mistakes are allowed					
Employee contribution are valued					
A system of dissemination of the new knowledge human resource throughout the organization					
A system that allows one to learn from experience					
Experimentation is allowed					

6. To what extent does your organization exhibit the following characteristics? In each case, please tick your response using the scale 1 to 5, least extent = 1 great extent = 5

Characteristics	1	2	3	4	5
System thinking(everything works together as one)					
Personal mastery(empowered individuals)					
Mental modeling (learning from alternatives)					

Building shared vision(common vision for future)					
Team learning(organization members think together)					

7. Please rate the degree to which you agree/disagree with the following. In each case, please tick your response using the scale 1 to 5, not at all = 1 very much = 5

Statement	1	2	3	4	5
Information is shared and is accessible					
Learning is emphasized and valued					
Mistakes or failures are not punished					
People are expected to learn constantly					

8. How often does your organization change its guidelines or policies to manage change? Please tick your response using the scale 1 to 5, not at all = 1 very much = 5

	1	2	3	4	5
Once per year					
Once per two years					
Once in more than two year					
Never					

9. In Your view does human resource information system contribute significantly to the growth of your institution as a learning organization? Elaborate

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APPENDIX II: A LIST OF SELECTED CHARTERED UNIVERSITIES IN KENYA

Public chartered universities		
1.	University of Nairobi (uon)	Established - 1970
2.	Moi university (mu)	Established - 1984
3.	Kenyatta university (ku)	Established - 1985
4.	Egerton university (eu)	Established - 1987
5.	Jomo kenyatta university of agriculture and technology (jkuat)	Established - 1994
6.	Maseno university (maseno)	Established - 2001 Chartered - 2013
7.	Masindemuliro university of science and technology (MMUST)	Established - 2007 Chartered - 2013

Chartered private universities

Private chartered universities		
1.	University of Eastern Africa, Baraton	1991
2.	Catholic university of eastern Africa (cuea)	1992
3.	Daystar university	1994
4.	United states international university	1999
4.	Strathmore university	2008
5.	Mount Kenya university	2011

APPENDIX III: AN ALL-VARIABLE CORRELATION MATRIX

Variable	Computer-based training	Career management	HR development	Selection of new employees	Payroll computerized	Decision making	Information sharing	Strategy formulation	Online recruitment	HR strategy implementation	Work place learning
statistics	Corr Coeff	Corr Coeff	Corr Coeff	Corr Coeff	Corr Coeff	Corr Coeff	Corr Coeff	Corr Coeff	Corr Coeff	Corr Coeff	Corr Coeff
Computer based training	1	0.056	0.075	0.031	0.032	0.031	0.089	0.067	0.075	0.031	0.032
Career management	0.033	1	0.024	0.03	0.032	0.045	0.075	0.031	0.024	0.03	0.032
Human resource development	0.015	0.04	1	0.025	0.035	0.772	0.024	0.03	0.031	0.025	0.035
Selection of new employees	0.075	0.031	0.081	1	0.056	0.671	0.031	0.025	0.081	0.045	0.056
Payroll management computerized	0.024	0.03	0.089	0.311	1	0.026	0.075	0.031	0.075	0.031	0.032
decision making	0.031	0.025	0.531	0.043	0.911	1	0.024	0.03	0.024	0.075	0.031
Information sharing	0.081	0.045	0.056	0.671	0.021	0.772	1	0.025	0.031	0.024	0.03
Strategy formulation	0.089	0.311	0.871	0.026	0.012	0.024	0.081	1	0.081	0.031	0.025
Online recruitment	0.531	0.043	0.911	0.032	0.212	0.03	0.089	0.311	1	0.081	0.045
HR strategy Implementation	0.032	0.01	0.045	0.044	0.034	0.031	0.531	0.043	0.531	1	0.311
Work place learning	0.772	0.024	0.03	0.031	0.025	0.772	0.024	0.03	0.031	0.025	1

