

An Assessment of the Utilization of Human Resource Information Systems in Selected Universities in Kenya

Kanake Mercy Kananu

School of Human Resource Development, Department of Development Studies, Moi University
P.O. Box 3900 – 30100, Eldoret, Kenya

Micah Onyiego Nyakego (Corresponding Author) PhD student

School of Business and Economics, Department of Management Science, Moi University
P.O. Box 3900 – 30100, Eldoret, Kenya

Abstract

Service Delivery is one of the important key functions of any organization that is involved in Human Resource Management activities. This is clearly demonstrated by the numerous strategies that organizations are putting in place in order to satisfy demands of their customers. Human Resource Information Systems (HRIS) is one such strategy that has gained popularity in application by many organizations. Though most of these strategies have propelled organizations in fulfilling their objectives, lack information on HRIS exists in Kenya. The study objectives were to: examine the HRIS usage in universities in Kenya and establish the application of HRIS in universities. The study used survey research design. The targeted population of 88 was drawn from Departments of Human Resource, ICT and Finance from the two Universities. The three departments were purposively selected since they were directly involved with HR matters. The entire population participated in the study since it was small and manageable. The researcher used questionnaires and an interview schedule to collect data from the respondents. Collected data was analyzed descriptively and presented through tables. From the findings, it was established that the institutions used both the automated and the manual HRIS. HRIS was found to be commonly used for payroll and record management. Besides, HRIS was also found to be used for recruitment, promotions and skills inventory. The study therefore recommends that the management of Kenyan Universities should allocate adequate resources for the implementation and maintenance of the system. HR managers should play a proactive role to support HRIS implementation in their organizations. It is also recommended that since the Universities in Kenya have adopted different types of Human Resource information systems, these systems need to be integrated and exchange data in order to increase availability and readiness of information to support top management on decision making.

Keywords: *Human Resource Information Systems, Universities in Kenya, Service Delivery, ICT*

1.0 Introduction

Human resource management has become more complex due to the fast growth in specialized occupations, the need to train and promote highly skilled employees and the growing variety of benefits programs. Likewise, the use of technology in HR has expanded spectacularly and is continuing to change HR management activities with executives, managers, and employees (Mathis and Jackson, 2010). Human Resource Information System (HRIS) is a concept concerning the utilization of Information Technology (IT) development and characteristics for effectively managing the Human Resource Management (HRM) functions and applications (Ikhlas & Zaid, 2010). HRIS is considered as a systematic procedure for collecting, storing, maintaining, and recovering data required by the organizations about their human resources, personnel activities and organizational characteristics (Kovach et al., 2002). HRIS helps organizations by automating most of the human resource planning functions through the collection, management, and reporting of information for decision-making. It also enables integration of organizational information about human resources in areas such as finance and production (Tansley & Newell, 2006). In a similar manner HRIS is also a major MIS sub-function within the personnel areas of many large corporations (DeSanctis, 2003). The MIS area plays an advisory role in HRIS and must coordinate planning of systems design and enhancements across all functional areas (DeSanctis, 2003).

The major goal of introducing HRIS systems is to replace systems used in finance, manufacturing, and administration with a single platform of interconnected modules that serve the previously listed functions

(McNurnin & Sprague, 2006). Fully integrated HRIS ought to interface with other systems to enhance the communication between departments such as payroll system with accounting system. Since the system deals with employees' personal data, which are sensitive, it should ensure data security while transferring information from one place to another. HRIS enhances communication between employers and employees and builds strong relationship with unions and management committees (Armstrong, 2006). Therefore, the use of a HRIS would reduce HR costs by automating information and reducing the need for large numbers of HR employees; by helping employees to control their own personal information; and by allowing managers to access relevant information and data, conduct analysis, make decisions, and communicate with others without consulting an HR professional (Awazu & Desouza, 2003; Ball, 2001).

Over the past two decades, a number of studies on HRIS have been carried out in developed countries. These studies have concentrated on the type of applications that predominate in HRIS (Martinsons, 1997; DeSanctis, 2003). Martinsons (1997) clarified the uses of HRIS as per the sophistication. He described the use of HRIS for administrative purpose i.e. in employee record-keeping, payroll, payroll benefits etc. in HR as "unsophisticated" (Martinsons, 1997). Another study on UK companies (Kinnie & Arthurs, 1996) revealed that the most frequent uses of HRIS were in operational areas of employee records, payroll, pensions and employment contract administration. Further, another survey in UK (Ball, 2001) found that current employee details and organizational salary details were the most frequently applied areas. Later, Ngai and Wat (2006) found that in Hong Kong companies, the two major applications of HRIS are providing general information and payroll service.

Many studies have shown that companies have started using sophisticated HRIS like training and development, performance management, compensation management and corporate communication (CedarCrestone, 2006; De Alwis, 2010; Saharan & Jafri, 2012). CedarCrestone (2006) in their surveys on US companies broadened the scope of HRIS applications: They found that administrative HRIS was the most popular application (62%), there was an increasing use of strategic applications i.e. talent acquisition services (61%), performance management (52%), or compensation management (49%). De Alwis (2010) in his study on Sri Lankan industry shows that the most commonly used modules in HR department are training and development, recruitment and selection and performance appraisal and are being utilized by all the companies. Furthermore, HRIS can be used to support strategic decision making, to evaluate programs or policies, or to support daily operating concerns (Gardner, Lepak, & Bartol, 2003; Kundu *et al.*, 2007).

However, most organizations hesitate to apply HRIS since they are unaware of the attached benefits to their organizations (Ngai & Wat, 2006). The most common benefits of HRIS include improved accuracy, the provision of timely and quick access to information, and the saving of costs (Teze, 1973; Will and Hammond, 1981; Lederer, 1984; Ngai & Wat, 2006). Likewise, Beckers and Bsat (2002) stated five reasons, which justify why organizations should use HRIS. These reasons related to the facts that HRIS helps organizations: 1) to increase competitiveness by developing and enhancing HR procedures and activities; 2) to generate or create a greater and a range of many HRM reports; 3) to shift the role of HRM from transactions to (SHRM); and 4) to reengineer the whole HRM/personnel department in organizations.

HRIS is quite in use in corporate communication (Saharan & Jafri, 2012). The most popular future applications of HRIS had been predicted as training and development, career development and performance appraisal/management (Teo *et al.*, 2001). It appears that there is emerging trend towards strategic applications of HRIS. The possible reason could be that most of the organizations which are using HRIS want to explore possibilities of strategic HRIS applications over the next few years (Teo *et al.*, 2001).

In universities and other institutions of higher learning, Ikhlas & Zaid, (2010) citing Rawat (2008) states that the efficiency and effectiveness – quality of an HRIS will enable universities to format a profile of their staff – their strengths and weaknesses, so they will know what they have in the personnel sense. Accordingly, they will be able to structure appropriate development promotion training and recruitment hence ensuring that institutions have the right personnel in all its sectors at the right time and in the right numbers. Rawat (2008) also argues that nowadays higher education institutions face a significant task; improving learning environments at the same

time, reducing administrative operating cost. Moreover, the ability to effectively budget for and managing different types of employees, recruiting and retaining skilled members requires full integration of HR data with student information systems. Therefore, with so many demands, higher learning institutions need a powerful business solution that will help them in managing student, graduates and employment information and financial data. Therefore, application of HRIS system in higher learning institutions provide the utmost updateability use of resources, speed, compatibility, updateability, accessibility, data integrity, privacy and security (Rawat, 2008)

Despite the widespread application of HRIS over the years and afore stated benefits, the implementation of human resource information systems continues to be face challenges. As noted by Strohmeier(2001), the main factors that cause failure of information technology systems are mainly human as opposed to materialistic or malfunction of the actual systems. Ngai & Wat (2006) in a study on human resource information system implementation found out that many organizations have problems when implementing new technologies including human resource information system due to many barriers. These barriers include lack of sufficient capital and skills, cost of setting up and maintaining the system, lack top management support and commitment, lack of human resource knowledge by system designers and lack of applications for human resource users (Kovach & Cathcart, 1999).

Lack of planning from the overall organizational level to the department level made coordination of plans between MIS and the HRIS area difficult to achieve. DeSanctis (2003) in his study shows that still some organizations struggle to integrate HRIS with overall IS, with 33% of firms not coordinating personnel department plans with corporate strategic plans. The management issues associated with HRIS may also be encountered in other functional areas of the organization where information systems are developing independence from the corporate MIS area (DeSanctis, 2003).

While it is important to integrate HRIS with other information systems and technology innovation in the organisation along with applications of HRIS in implementing HR policies and practices that support business strategy of organization that make use of HRIS (McNurnin & Sprague, 2006), Wang (2005) argues that once integration is achieved, security and privacy issues rise further posing a challenge in the acquisition, implementation and integration of HRIS with other functional departments in an organization.

Although HRIS helps constitute activities involved in human resource management, in Kenya, not all organizations consider investing in it. Most public and private institutions of higher learning have weaknesses in human resource service delivery because of the continued use of manual human resource systems. This explains the limitations faced during acquiring, storing, manipulating, analyzing, retrieval and distribution of critical human resource information in these institutions. This study sought to examine the types of HR systems used in universities in Kenya and their respective uses.

1.1 Statement of the problem

Universities in Kenya are facing many challenges due to lack of policy frameworks to guide the adoption of human resource information systems technology to realize their full potential. Most Kenyan universities are yet to acquire and implement automated HR systems. Absence of a well-established human resource information system to serve human resource has led to poor record keeping, delayed personal data aggregation, poor talent management and poor staff files management which in turn has continued to hinder human resource service delivery in Kenyan Universities. The undependable HR manual systems may explain why significant decisions are not based on accurate and timely information which compromises performance of these institutions. This has also led to massive losses of personnel information as well as loss of millions of money in form of salaries for otherwise redundant or even non-existent employees.

Limited research has been undertaken in this area, much of it has been in the context of non-training institutions. It is perceived that majority of Kenyan universities are still facing the problems associated with implementation of human resource information systems hence are unable to realize their full potential in carrying out their core mandate. However, the extent to which this problem affects service delivery in Kenyan universities is unknown.

The aim of the current study therefore was to fill this knowledge gap by establishing the types of HR systems used in Kenyan universities and their respective uses.

1.3 Research Objective

The study objectives were to:

- i. Examine the HR systems used in universities in Kenya
- ii. Establish the uses of the HR systems in universities in Kenya

1.4 Justification for the Study

Human Resource Information System being relatively new field of study a lot of research is required to enhance proper understanding of the field which will enhance its adoption and proper utilization. Despite many years of research on IT innovations, organizational use of HRIS remains scarce and our understanding of HRIS use is still limited. Worse still recent studies on critical factors in adoption of HRIS have been undertaken in other countries neither of these studies has been done in the Kenyan universities.

The study is important to Kenyan universities policy formulators as managers in the universities will benefit from the study as it will indicate to them the true picture regarding HRIS uses, effects, challenges associated with implementation and devise ways of improvement. The level of employee preparedness for adoption of HRIS by gaining insight into level of computer literacy among employees working in the human resource departments and their perception towards Human Resource Information Systems adoption.

1.5 Scope and Limitations of the Study

According to the Commission for University Education in Kenya (Status of Universities, 2014), there were 22 public chartered universities, 9 constituent colleges, 17 private chartered universities and 13 institutions with letters of interim authority in Kenya. The researcher, however, sampled only 2 universities (a public and a private university) to represent the rest of the universities. The researcher also selected staff from the ICT, Finance and HR departments to represent the views of all staff from the institutions.

Given the varying opinions of the respondents, the researcher was unable to control the honesty of the respondents with regards to how they gave responses to the research questions. However, the written responses were reinforced with the oral interview responses where the researcher probed the respondents for more clarifications on issues that were not clear regarding the use of HRIS in their institutions. Also, there was little research done on human resource information systems in public and private universities in Kenya and obtaining adequate literature on the same for review was a challenge.

2.0 Materials and Methods

2.1 Study Area

The research was carried out in Egerton University, a public university, and Kabarak University, a private university in Nakuru County, Kenya.

2.2 Research Design

This study used the survey method, incorporating a self-administered questionnaire and face to face interviews. According to Stebbins (2001), survey research is a methodological approach that is primarily concerned with discovery and with generating or building a theory. In this context exploration might be thought of as a perspective, 'a state of mind, a special personal orientation' towards approaching and carrying out social inquiry. In this study, the researcher perceived that majority of Kenyan universities are still facing the problems associated with implementation and usage of human resource information systems hence are unable to realize their full potential in carrying out their core mandate. It is for this reason that the researcher used the exploratory design.

2.3 Target Population

The study population included staff from the departments of Human resource, finance and ICT in Egerton and Kabarak Universities. The population constituted all general staff, Administrators and Secretaries. The target population was distributed as per the Table 1.

Table 1: Target population

Department	Universities		Total
	Egerton	Kabarak	
HR	30	12	42
Finance and Accounts	10	16	26
ICT	10	10	20
Total	50	38	88

Source: Staff Establishment Documents, 2013 (Egerton & Kabarak University)

2.4 Sample Size and Sampling Technique

Given the size of the target population which was small and manageable, the researcher conducted a census of the whole population (88 respondents) in this study. According to Kothari (2004), a census study occurs if the entire population is very small or it is reasonable to include the entire population.

Critical case purposive sampling technique was employed to select departments of HR, ICT and Finance since these are the departments which are involved in managing the Human Resource and ICT related matters in these institutions. It is a type of purposive sampling technique that is particularly useful in exploratory qualitative research, research with limited resources, as well as research where a single case (or small number of cases) can be decisive in explaining the phenomenon of interest (Patton, 2002). It is this decisive aspect of critical case sampling that is arguably the most important and one that influenced its choice by the researcher for this study. Patton (1990) highlighted that purposive sampling is based on the researcher's judgment of the status (whether decisive or not) of the case under investigation. Further, Patton, (2002) argues that for one to know if a case is decisive, he/she should consider the following statements: "If it happens there, it will happen anywhere"; or "if it doesn't happen there, it won't happen anywhere"; and "If that group is having problems, then we can be sure all the groups are having problems". Whilst such critical cases should not be used to make statistical generalizations, it can be argued that they can help in making logical generalizations. However, Patton (2002) observes that such logical generalizations should be made carefully.

2.5 Data Collection Instruments

The study utilized both self-administered questionnaire and interview schedule for data collection. The self-administered questionnaires consisted of 2 sections. The first section requested for general information about the respondents while the second section gathered data objectively. This enabled the researcher to collect all relevant information from the respondents. The interview schedule was used because it is flexible in composition and gave the researcher the ability to ensure that the same general areas of information were collected from each interviewee (McNamara, 2009). It provided more focus than the conversational approach, but still allowed a degree of freedom and adaptability in getting information from the interviewee. The interview guide was developed from literature and based on the research aims and objectives.

2.6 Validity and Reliability of the Instruments

The data collection instruments were tested for their reliability and validity. A pilot study was conducted to test the questionnaire for reliability. The questionnaires were given to 26 members of staff of Moi University main campus and 10 to Catholic University, Eldoret campus, both in Uasin-Gishu County. Changes were made following the pilot study. Validity of the instrument was also obtained by talking to expert's, academicians, practitioners, supervisors and consultants in the field of human resource management. These were required to comment on the relevance of the questions/items in the instrument using the Content Validity.

2.7 Data Collection Procedure

Before embarking on the data collection process, the researcher sought authority for conducting research from the National Council for Science and Technology (NACOSTI) and the two universities where the research was

to be conducted. The researcher, with the researcher made use of one research assistant who assisted in distributing and collecting the questionnaires before and after they were filled within the stipulated timeframe. The researcher performed a test analysis on the questionnaires so as to gain insights onto the actual situation on the use of HR systems on the ground. This informed the researcher's scope of the interview questions during the face-to-face interviews.

The researcher then administered face-to-face interviews to 6 participants from the 2 universities. This helped to explain, or elaborate the quantitative results obtained from the questionnaires. The rationale for using this approach is that the quantitative data and their subsequent analysis provided a general understanding of the research problem. The qualitative data and their analysis refine and explain those statistical results by exploring participants' views in more depth.

2.8 Data analysis

Quantitative data was analysed using descriptive statistics and was presented as percentages through tables. Similarly, qualitative data was analysed using inferential statistics and presented through narratives.

3.0 Results and Discussion

A total of 82 questionnaires were issued and 79 were collected for analysis. This corresponded with a 96.34% response rate, which was valid for the study.

3.1 Distribution of Respondents

From the findings, 58.23% of the respondents were from the public university while 41.77% were from the private university. Further, 45.57% of the respondents belonged to the HR department of the 2 universities, 31.65% were from the Finance departments while 22.78% were from ICT departments. Table 1 illustrates these findings.

Table 2: Categories of Respondents per University and Department

		Type of University				Total	
		Public		Private		f	%
		f	%	f	%		
Respondents' Department	Human Resource	26	32.91	10	12.66	36	45.57
	Finance	10	12.66	15	18.99	25	31.65
	ICT	10	12.66	8	10.13	18	22.78
Total		46	58.23	33	41.77	79	100.00

Source: Field Data, 2014

3.2 Human Resource Information Systems used in Universities in Kenya

The respondents were asked to state the type of HR system used in their places of work. 30.43% of the respondents from the public university and 33.33 of the respondents from the private university indicated that their institutions used purely the automated HRIS. This corresponded to an average of 31.65% of the total respondents. Also, 69.57% of the respondents from the public university and 66.67% of the respondents from the private university indicated that their institutions used both the automated HRIS and the manual HRIS. Table 2 summarises this information.

Table 3: Type of HR System Used in the Universities

HR System Used	Type of University				Total	
	Public		Private		f	%
	f	%	f	%		
HRIS	14	30.43	11	33.33	25	31.65
Both	32	69.57	22	66.67	54	68.35

Field Data, 2014

The findings from this study it is evident that the two universities used both the manual and automated HRIS. From the interview schedules, it was established that the HR systems were partially computerized due to a number of factors, key of them being rigidity towards change within the institutions. This is evidenced by the responses the researcher got from the interview schedules.

“..Some people are not happy when they have to change the organization structure. They resist the system because it changes the way they work. ...I think I am satisfied with the outcome of this system. It makes my working easier...” (P1-A7& P1-A4, Oral Interview, Egerton University, 11 March 2014).

Further, the interviewees also confirmed that during the system implementation, they were supposed to convert the existing data into digital data by entering all the records in the manual files into the system. However, due to their small number and lack of training, this was not possible, hence the resistance. One of respondents explained:

“..One of the problems of this system is lack of people to input the data into the system. Since they have to input the data from the files you can see here. Therefore, no reserved people do this task. Moreover, someone who can operate this system must have to be trained and get certificate..”(P2-A4, Oral Interview, 18 March 2014)

3.3 Uses of HRIS in HR service delivery in the University

The researcher sought to find out the scope of use for the HR systems found in the universities. It was established that the common uses for the HR system were recruitment, skills inventory, employee training, screening of positions, ranks and promotions, Payroll Management and Records Management. Table 4 summarizes this information.

Table 4: Uses of HRIS in HR Service Delivery in Universities in Kenya

Uses of HRIS	Type	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)
Recruitment	Both	30.4	15.2	30.4	20.3	3.8
	Public	26.1	15.2	32.6	21.7	4.3
	Private	36.4	15.2	27.3	18.2	3
Skill Inventory	Both	18.2	15.6	16.9	42.9	6.5
	Public	15.9	13.6	15.9	47.7	6.8
	Private	21.2	18.2	18.2	36.4	6.1
Training	Both	13.9	26.6	29.1	25.3	5.1
	Public	15.2	23.9	26.1	30.4	4.3
	Private	12.1	30.3	33.3	18.2	6.1
Positions, Ranks & Promotions	Both	7.7	14.1	35.9	32.1	10.3
	Public	6.7	15.6	35.6	31.1	11.1
	Private	9.1	12.1	36.4	33.3	9.1
Payroll	Both	2.5	5.1	10.1	44.3	38
	Public	2.2	4.3	10.9	41.3	41.3
	Private	3	6.1	9.1	48.5	33.3
Employee Records Management	Both	3.8	6.3	26.6	26.6	36.7
	Public	4.3	2.2	28.3	28.3	37
	Private	3	12.1	24.2	24.2	36.4

Source: Field Data, 2014

Majority of the respondents disagreed (41.3%) that the public university uses HRIS for recruitment, 32.6% were neutral and minority (26%) were agreement while in private university majority of the respondents (51.6%) disagreed that the university uses recruitment in optimum level, (27.3%) were neutral, and minority (21%) were in agreement. This trend is against what is happening in developed countries where as noted by Manzini & Grindley, (1986) companies are now using software to recruit, screen, and pretest applicants online before hiring them. In agreeing with this trend Oz (2009) argues that currently due to the growing number of job applicants many organizations refuse to receive paper applications and resumes. Therefore, it is no wonder that some companies may accept such documents via email, but that others accept only forms that are filled out and submitted on-line.

Majority of the respondents (54.5%) stated that they were in agreement that HRIS maintains skill inventory in public university, (29.5%) were in disagreement and (15.9%) were neutral. While in private university majority (42.5%) were in agreement, (39.4%) were in disagreement, and minority (18.2%) were neutral.

Concerning the use of HRIS in training and development subsystem at an optimum level in the public university majority (39.1%) indicated they were in disagreement, (34.7%) of the respondent were in agreement and (26.1%) were neutral. while in the private university majority (42.4%) indicated they were in disagreement, (33.3%) were neutral and minority (24.3%) were in agreement. As noted by Oz (2009), in most organizations in both the manufacturing and service sectors, multimedia software training is rapidly replacing training programs involving classrooms and teachers. Such applications include interactive, three dimensional simulated environments. Training software emulates situations in which employees act and includes tests and modules to evaluate a trainee's performance. In addition, to the saving in trainer's time there are other benefits. The trainee

is more comfortable because he or she controls the speed at which the sessions run. The software lets the trainee go back to a certain point in the session if a concept is missed. Also the software can emulate hazardous, situations, thereby testing employee performance in a safe environment. Developments in IT enable organizations to reduce the costs of training drastically as one can move the training materials and exams to a central website so employees can share and personalize learning. Using a web browser, they can find the materials they need, bookmark selected web pages, leave the training session when they wish, and come back to finish it later (Oz, 2009).

Respondents were further asked to state whether HRIS was used for succession planning in public university majority (42.2%) indicated were in agreement, (36.4%) were neutral and (22.3%) were in disagreement. while in private university majority (42.4%) indicated they were in agreement, (36.4%)neutral (21.2%) were in disagreement. This finding concurs with one observation from an administrator from Egerton University who stated that:

“HRIS has helped in identifying and developing internal people with the potential to fill key leadership positions in the university. Succession planning increases the availability of experienced and capable employees that are prepared to assume these roles as they become available” (P1-A1, Oral Interview, Egerton University, 11 March 2014).

Majority of the respondents (82.6%) were in agreement that public university uses HRIS payroll subsystem at an optimum level, (10.9%) were neutral, and minority (6.5%) were in disagreement. While in the private university majority (81.8%) indicated they were in agreement (9.1%) were neutral and (9.1%) were in disagreement. In addition all (100%) the respondents from Egerton University mentioned that:

“.. we are able to apply for imprests and leave online,... this system has actually minimized the use of papers here, imagine you only need to have an IP number and check how many days you have for your leave, remaining days request and get approval instantly.” (P1-A7 Oral Interview, Egerton University, 11 March 2014).

Other respondents from Kabarak University stated that:

“... We are able to access our pay slips online” (P2-A2, Oral Interview, Kabarak University, 11 March 2014).

Majority (65.3%) of the respondents in the public university stated that the organization used HRIS record management subsystem at an optimum, (28.3%) were neutral and minority (6.5%) were in disagreement. while in the private university, majority (60.6%) were in agreement, (24.2%) were neutral and few (15.1%) stated that they were in disagreement. According to Manzini & Grindley (1986) record management basic personnel module is normally the first to be created since it is the cornerstone of the basic information to be found in the system. It includes information such as the name, Identity number, date of entry, job classification, location, job specifications and descriptions, salary comparison data, address, telephone numbers among others. HR department must keep personnel records to satisfy both external regulations and internal regulations, as well as for payroll and tax collection and deposit, promotion consideration, and periodic reporting. Many HRISs are now completely digitized (including employees' pictures) which dramatically reduces the space needed to store records, the time needed to retrieve them and the costs of both (Oz, 2009). This is the case in Kenyan Universities.

The HRIS according to the respondents was mostly used for payroll subsystem at an optimum level (82.3%) and (63.3%) said HRIS was used for record management subsystem at an optimum level. HRIS uses on service delivery in the University was rated on average at $61.12 \pm 13.3\%$, with a min of 31.67% and Maximum 88.33%. The rating was 62.5 ± 13.6 min=33.3, max=88.3 in the Public University as compared to 59.3 ± 12.9 min=31.7,

max 85 in the private university. $t(71) = 1.034$, $p=0.304$. The least uses of HRIS were for recruitment and selection (24.1%) and Training and Development (32.9%).

3.4 Conclusion

The findings of this study revealed that the universities used both the manual and automated HRIS. The specific uses were for recruitment, inventory of the various skills, training and position, ranking and promotions, record management and payroll services.

3.5 Recommendations

Based on above findings and discussions on the assessment of Human Resource Information Systems on service delivery, the researcher recommends that the management of Kenyan Universities allocates adequate resources for the implementation and maintenance of the system. HR managers should play a proactive role to support HRIS implementation in their organizations.

It is also recommended that since the Universities have adopted different types of Human Resource information systems, these systems need to be integrated and exchange data in order to increase availability and readiness of information to support top management and the operational level.

References

- Awazu, Y., & Desouza, K. C. (2003). Knowledge Management. *HR Magazine*, 48 (11), 107.
- Ball, S. (2001). The use of Human Resource Information System: a survey. *Personnel review*, 30(6), 677-693.
- CedarCrestone. (2006). Workforce Technologies and Service Delivery Approaches Survey. *9th annual edition*.
- Commission for University Education, Kenya (2014). *Status for Universities: Universities Authorised to Operate in Kenya*. <http://www.cue.or.ke/services/accreditation/status-of-universities>
- Creswell, J. W. (2009). *Qualitative, Quantitative, and Mixed Methods Approaches* (3rd ed.). India: sage.
- De Alwis, A. C. (2010). The Impact of Electronic Human Resource Management on the Role of Human Resource Management. *E + M Ekonomie A Management*, 4, 47-60.
- DeSanctis, G. (2003). Human Resource Information Systems: A current Assessment. *MIS Quarterly*, 10(1), 15-26.
- Dessler, G. (2005). *Human Resource Management*. USA: Prentice Hall.
- Dorel, D., & Bradic-Martinovic, A. (2011). *The role of Information Systems in Human Resource Management*.
- Gardner, S. D., Lepak, D. P., & Bartol, K. M. (2003). Virtual HR: The Impact of Information Technology on the Human Resource Professional. *Journal of Vocational Behavior*, 63(2), 159-179.
- Kinnie, N., & Arthurs, A. (1996). Personnel Specialists' Advanced Use of Information Technology. *Personnel Review*, 25(3), 3-19.
- Kombo, D., & Tromp, L. (2006). *Proposal for Thesis writing*. Nairobi Paulines Publication Africa.
- Kossek, E., Young, W., Gash, D., & Nichol, V. (1994). Waiting for Innovation in the Human Resources Department: Godot Implements a Human resource Information System. *Human Resource Management*, 33(1), 135-159.
- Kothari, C. (2004). *Research Methodology: Methods and Techniques* (2 ed.). New Delhi: New Age International Ltd.
- Kovach, K. A., & Cathcart, C. E. (1999). Human Resource Information Systems (HRIS): Providing Business with Rapid Data Access, Information Exchange and Strategic Advantage. *Public Personnel Management*, 28(2), 275-281.
- Kovach, K. A., Hughes, A., Fagan, P., & Maggitti, P. (2002). Administration and advantages of HRIS. *Employment Relations Today*, Summer, 43-48.
- Kundu, S., & Kadian, R. (2012). Applications of HRIS in Human Resource Management in India: A Study. *European Journal of Business and Management*, 4, 34-41.
- McNamara, C. (2009). *General Guideline for Conducting Interview*. Retrieved from <http://Managementhelp.org/evaluation/interview.htm>.
- Martinsons, M. (1997). Benchmarking Human Resource Information System in Canada and Hong Kong. *Information and Management*, 26(6), 305-316.
- Mathis, R., & Jackson, J. H. (2010). *Human Resource Management*.
- McNurnin, B. C., & Sprague, J. (2006). *Information Systems Management in Practice*. Upper Saddle River: Pearson Education Inc.

- McNamara, C. (2009). *General Guideline for Conducting Interview*. Retrieved from <http://Managementhelp.org/evaluation/interview.htm>.
- Mugenda, A. (2008). *Social Science Research: Theory and Practices*. Nairobi: Applied Research and Training services Publication.
- Ngai, E. T., & Wat, F. K. (2004). *Human Resource Information Systems, a review and empirical analysis*.
- Ngai, E. W., & Wat, F. K. (2006). Human Resource Information Systems. *A Review and Empirical Analysis*, 297-314.
- Oz, E. (2009). *Management Information Systems* (5th ed.). U.S.A: Course Technology Cengage Learning.
- Patton, M. (1990). *Qualitative Evaluation and Research Methods*.
- Rawat, M. (2008, December). Application of Human Resource Information System (HRIS) In Higher Education- Holistic Approach. *Trusting Islam, Knowledge and Professionalism in ECER Development Conference*, 15-17.
- Reddic, C. G. (2009). Human Resources Information Systems in Texas City Governments: Scope and Perception of its Effectiveness. *Academic Search Premier, EBSCOhost*, 38(4), 19-34.
- Saharan, T., & Jafri, S. (2012). Valuation of HRIS Status an Insight of Indian Companies' Perspectives. in Kundu, S.C., Punia, B.K., Narwal, K.P. and Singh, D. (Eds), *Business Management: Key Research Issues*. Excel Books, 113-127.
- Strohmeier, S. (2007). Research in e-HRM: Review and Implication. *Human Resource Management Review*, 2007(12), 19-37.
- Tansley, C., & Newell, S. (2006). Project Social Capital, Leadership and Trust : A study of Human Resource Information Systems Development. *Managerial Psychology*, 22(4), 350-365.
- Tashakkori, A., & Teddlie, C. (2011). *Handbook of Mixed Methods in Social and Behaviour Research*. Sage Publication Inc.
- Teo, T., Soon, L., & Fedric, S. (2001). Adoption and Impact of Human Resource Information System (HRIS). *Research and Practice in Human Resource Management*, 101-117.
- Wang, Z. (2005). Organisational Effectiveness Through Technology Innovation and HRM strategies. *Manpower*, 26(6), 481-487.

The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage:

<http://www.iiste.org>

CALL FOR JOURNAL PAPERS

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

Prospective authors of journals can find the submission instruction on the following page: <http://www.iiste.org/journals/> All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

MORE RESOURCES

Book publication information: <http://www.iiste.org/book/>

Academic conference: <http://www.iiste.org/conference/upcoming-conferences-call-for-paper/>

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digital Library, NewJour, Google Scholar

