EFFECT OF HUMAN RESOURCE INFORMATION SYSTEM ON THE QUALITY OF HUMAN RESOURCE FUNCTIONS IN TELECOMMUNICATION INDUSTRY IN KENYA (CASE STUDY OF SAFARICOM K LTD)

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Abstract

Human Resource functions increasingly started to deploy human resource information systems in their daily work. Human Resource Information System was primarily seen as Management Information System sub functions within Human Resource areas intended to support the "planning, administration, decision making, and control activities of human resource management. The General objective of this research was to evaluate effect of human resource information system on quality of human resource management function among telecommunication companies in Kenya. To achieve this objective, the study used primary data which was collected using semi structured questionnaires containing both closed and open ended questions to allow variety. The researcher found that e-recruitment process helps in building and developing a flexible work force to suit the organization's changing and demanding needs. Therefore the researcher recommends Organizations should adjust the duration of practicing e-training to their employees to build up their confidence in whatever that they undertake. Embracing e-training rather than the common traditional training will boost the organizations' performance

Keywords: *Human Resource Information Systems, Human Resource Functions, Employee Productivity*

Regional Perspective of Human Resource Information System

Africa has been experimenting with Technology since the 1960's; it is now time to fully embrace it with the rest of the world as a way of life and especially to manage Human resources. Unfortunately, HR function in Africa has not been proactive in its use of technology to provide integrated services or to communicate more effectively Troshani *et al*., (2011). This is because some organizations still rely on sending of parcels and other manual means of communication. The few initiatives made have by and large originated from IT experts. There is need for HR to proactively embrace Technology to elicit responses and fulfill

changing expectations within organizations (Ball, 2011). It is with these perspectives in mind that this paper explores literature and a case study to show how usage of internet technologies has improved HR functions and applications within organizations in the developed world with the insinuation that the same would happen if Africa promoted the use of Technology in HRM. Like in Europe and the America, HR in Africa needs to turn to the available information and communications technologies (ICT) and social media technologies to rationalize or even transform HR's internal operations (Obeidat, 2009).

Communications technologies may lead to the virtualization of HR by reducing substantially the

numbers of specialists required to deliver HR services whilst simultaneously improving the quality of these same services Troshani *et al.*, (2011). Resource constraints, human, physical, and financial, are at the crux of the failure to address many of the issues with organization performance. For example, over the past couple of years, the South Sudan organizations have been working to boost its membership so that they can efficiently deliver. This has been compounded by lack of suitable human and financial resources beyond Juba to provide a sustainable follow-up or to work proactively to prevent conflict and build a capacity and enabling environment for peace. Sadri and Chatterjee (2008), established that organizations lack the ideas on effects of HRIS on organization performance and adequate financial resources from government and that this is the main cause of all secondary problems affecting the organizations.

The HR managers should use new technologies such as intranet as a support tool in improving communication with other managers. It will enable them work remotely to provide needed information wherever they may be. A HRIS is made up of various elements and if one element does not function properly, it could well cause the function of the entire system to fail. When all elements work correctly and the system works properly it should benefit the organization. Similarly, the HRIS is usually a part of the organization's larger management information system, which would include accounting, production and marketing functions, to name just a few. The special function of HRIS is to gather, collect and help analyze the data necessary for the human resource department to do its job properly Akhtar *et al.*, (2008).

The HR function's limited knowledge of technology is an obstacle to creating and implementing a workable HR technology strategy (Ball, 2011). The severe lack of IT skills among HR professionals that have limited technological capabilities will make it more difficult to have even a basic global HRIS (Greengard, 2005). As HR

aims to transform to a more efficient and strategic function, it must learn how to leverage technology and use it as a competitive advantage. If strategy is the real driver behind technology, HR Managers actively pursuing a global strategy was able to guide the organization, the system and the vendors to create new solutions. And HR Executives who are accountable for the success of the global businesses must support the global HRIS effort (Sommer, 2006).

Local Perspective of Human Resource Information System

Kenya has been trying to catch up with the rest of the world (Vernon, 2006). Kenya has a long serving comprehensive HRIS in the health sector in sub-Saharan Africa. It has electronically linked databases, accurate and timely information of workforce. The information has been used by various stakeholders including policy makers, health managers, and professional regulators. The HRIS has helped the many organizations in Kenya to improve its payroll efficiency and reduced duplication of work and employees (Thompson & Fedric, 2007).

However, HRIS has not received a protective response to the use of technology integrated services or effective communication in Kenya. Many organizations in the country are still reliant on manual ways of communication including sending of parcels. Organizations need to embrace HRIS fully to fulfill the changing needs of the company including employee productivity, which in the long run leads to better organizations. Kenya needs to turn to the available information and communications technologies (ICT) and social media technologies to rationalize or even transform HR's internal operations (Ball, 2011). The companies trying to implement the system in Kenya are faced by human, physical, financial and resource constraints that prevent them for addressing the employee performance issues (Troshani, Jerram & Rao, 2011). According to Sadri and Chatterjee (2008), there is a gap in

companies lacking the ideas on effects of HRIS on employee productivity. Technologies such as the intranet facilitated by HRIS should be used to support effective communication between employees and management. This enables the provision of information remotely at any convenient place in the country (Kirui, 2012).

Safaricom Limited Company

Safaricom Limited Company started its global systems for mobile communications (GSM) operations on 16th May of 2002 when it actually became a public company with limited liabilities and ceased being a private company under the companies Act. It had been established in 3rd of April 1997 (Safaricom, 1998). Safaricom is a leading provider of converged communication solutions that also operates on matters of voice, video and data requirements as pointed out on the company's homepage. Safaricom provides broadband high-speed data to its clientele through its 3G network. Safaricom is a service-providing company specializing in telecommunications. It is considered to be amongst the top performers in the industry in Kenya. With a highly competitive thriving telecommunications market that Kenya has to offer; it is of utmost importance for the telecommunications companies to take into consideration the level of its customers" satisfaction. Safaricom has already made a name for itself in the Kenyan market hence an interesting choice for the author who is a subscriber and a shareholder of the firm.

Statement of the Problem

Although people are organization's most important asset, there are also significant gaps in the human resource processes that need to be carefully managed if the organization in Kenya has to stay on top of the competition. The gaps include the consequences of recruiting people with wrong skills, inadequately training and developing them, losing them prematurely, developing ineffective or misguided payment structures and failing to consider succession planning. These are challenges that organizations in Kenya have to overcome.

Despite the fact that Safaricom Company has adopted the use of HRIS to automate their human resource functions from the manual system, there have been problems on accuracy and timely data from the majority of its employees. Furthermore, Safaricom Company has been faced with a lot of challenges including lack of updated reward system, an inefficient bio-data system, which affects decisions on HR functions (Ambira & Kemoni, 2011). With the ongoing development of knowledge, economy and information technology use in the telecommunication sector, the realization of human resource information systems use with Safaricom Company has not been comprehensively investigated (Cheruto, 2005).

A number of studies have been done on human resource information system in the corporate sector. Muturi (2003), studied the development of human resource information system in the banking industry in Kenya; Nyakoe (2007), investigated the extent of use of information communication technology in human resource management in large manufacturing firms in Kenya; Kanini (2008), looked at the implementation of strategic information systems in commercial banks in Kenya.

In summary, there is lack of clarity from the existing literature as to how HRM e-recruitment, HRM e-reporting, e-performance appraisal and e-Training affect the Quality of HRM function of telecommunication companies in Kenya. This study will therefore seek to establish the effect of HRIS on the quality of the HRM function among Telecommunication companies in Kenya.

Specific Objectives

i. To determine the effect of e-recruitment on the quality of the HRM function among Telecommunication companies in Kenya.

ii. To assess how e- succession affect the quality of the HRM function among Telecommunication companies in Kenya.

iii. To determine effect of e-performance appraisal on the quality of the HRM function among Telecommunication companies in Kenya.

iv. To find out how e-training affect the quality of the HRM function among Telecommunication companies in Kenya.

Significance of the study

This study will offer important insights to management of Safaricom Kenya Ltd on how HRIS data on staff performance and productivity can be used to assess and review the company's strategic plans by identifying gaps and patterns and how to bridge them. The results will demonstrate the benefits and influence of HRIS in the effectiveness of organizations thus provide a competitive advantage. This study offers insightful information to ICT department on how to implement a successful information system to manage HR activities, it will also assist in bridging the gap on skills required to retrieve this information in real time. As producers and consumers of HRIS, the results of this study will assist the HR Department adopt, if not improve, on the decision making process and hence be the trend setters in the market.

Research Methodology

The research design used in this study was descriptive research design. Quantitative research was used to provide numerical measurement and analysis of uptake of HRIS system within the Safaricom K. limited service provider to ascertain the impact of technology adoption within HRM department. The method was chosen since it is more precise and accurate since it involves description of events in a carefully planned way. The study utilized a sample size of 131 respondents who were selected from Senior HRM managers, branch managers and middle level managers working in Safaricom K. Ltd. Questionnaire was

used as the research instrument to gather the relevant information needed for the study.

Descriptive statistics

E-Recruitment descriptive statistics

E-recruitment is the practice of using technology and in particular Web-based resources for tasks involved with finding, attracting, assessing, interviewing and hiring new personnel. The purpose of e-recruitment is to make the processes involved more efficient and effective, as well as less expensive. Online recruitment can reach a larger pool of potential employees and facilitate the selection process. Companies make use of the internet to reach a large number of job seekers and hire the best talent for the company at a less cost, as compared to the physical recruitment process. Organizations can support more efficient and cost-conscious collection, storage, sharing, and exchange of data. The intranet serves as an information hub for the entire organization. Recruitment in information system is automated in that applicants can enter their details making the process more efficient. The response to the applications is automatic hence speeding up the communication process. In a bid to determine the influence of e-recruitment on the quality of HRM functions in the telecommunication industry, the researcher posed various statements to understand the extent to which they agreed or disagreed to them and this was summarized in table 1 where **(SD)** Strongly Disagree **(D)** Disagree **(N)** Neutral **(A)** Agree **(SA)** Strongly Agree.

Table 1: E-Recruitment Descriptive Statistics

Statement	SA (%)	A (%)	N (%)	D (%)	SD (%)	Mean	SD
The organization has a policy which guides in e-recruitment activities	28	29	17	17	7	3.55	1.260
The staffs are made aware of existing Vacancies through online platform	19	32	22	27	8	3.67	1.267
The employees are involved in making decisions regarding e-recruitment of staff	23	28	20	26	3	3.53	1.176
E-recruitment has provided opportunity to improve your performance.	19	37	18	25	2	3.71	.827
E-recruitment is used in assessing employees' commitment to organizational goals and objectives	20	37	19	25	0	3.50	1.073
The e-recruitment system encourages employees to work hard.	38	39	12	12	0	4.03	.987

The organization has a policy which guides in e-recruitment activities was the first statement posed to the respondents. The researcher wanted to determine the availability of various e-recruitment policies. Majority (34, 28%) of the respondents strongly agreed with the statement while 29% of the respondents agreed. About 17% each were neutral and disagreed respectively. Only 7% of the respondents strongly disagreed. The response had a mean of 3.55 and a standard deviation of 1.260 which had an indication that the organization had policies in place which guided the e-recruitment activities. This finding showed that in the telecommunication sector in Kenya, their recruitment is done electronically which in return enhances HRM quality in the organizations. On the other hand, the researcher wanted to determine how the respondents agreed or disagreed on the fact that the staffs were made aware of existing vacancies through online platform. Majority 32% of the respondents agreed, this was followed by 27% who disagreed while 22% of the respondents were neutral. About 19% of the respondents strongly agreed and only 8% strongly disagreed. The result equally had a mean of 3.67 with a standard

deviation of 1.267. This finding indicate that most staff were not made aware electronically on the existing vacancies preferably because they did not require the information because they were already staffs and therefore the information was made for those who had not secured positions in the organization. On the other hand, the researcher asked if the employees are involved in making decisions regarding e-recruitment of staff. Majority (28%) of the respondents agreed while 26% disagreed. This was followed by 23% of the respondents who strongly agreed while 20% were neutral. About 3% of the respondents strongly disagreed. The findings also indicated a mean of 3.53 with a standard deviation of 1.176. This finding depicts a fact that in this organization, employees were involved in decision making regarding the e-recruitment of staff. This indicated that in both organizations, recruitment was made easy by ensuring that all the staff was involved in making decisions regarding recruitment in the organizations.

The Study focused on finding how e-recruitment had provided opportunity to improve the employee performance. Effective e-recruitment policies and practices are recognized as making significant contribution to improvement of employee performance. The research shows that it is not just placing suitable candidates into jobs, it is also about building and developing a flexible work force to suit the organization's changing and demanding needs. By digitizing the recruitment process, it is easier than ever to find qualified employees that are across town or even across the globe. This can allow an organization to appeal to a wider candidate pool so that it is able to find top talent and there is never a reason to settle for a barely qualified candidate. In this regard, majority of the respondents (37%) agreed while 25% of them disagreed. About 19% of the respondents strongly agreed while 18% of them were neutral. About 2% of the respondents strongly disagreed. The finding also shows that the response had a mean of 3.71 with a standard deviation of 0.827 which is a slight

deviation from the mean. This was an indication that e-recruitment had provided an opportunity for the organization to improve performance.

E-recruitment is used in assessing employees' commitment to organizational goals and objectives. Majority (37%) agreed while 20% strongly agreed. About 25% of the respondents disagreed while 19% were neutral. This is one of the major advantaged of e-recruitment. It provides an opportunity for assessing an employee's commitment to organizational goals and objectives. Finally, the researcher asked if the e-recruitment system adopted in their organization was effective in encouraging employees to work hard. By reviewing numerical data based on past hires, present performance, and turnover data, an organization can gain superior insights into correlations that may allow it to make better hiring decisions. When a company has optimized the use of analytics in recruitment, it may be able to increase retention rates, productivity, and overall efficiency which in return encourage employees to work hard in ensuring that the organization achieves its desired objectives. In this regard, majority (39%) of the respondents agreed, 38% of them strongly agreed. About 12% each were neutral and disagreed respectively.

In a bid to identify the relationship between e-recruitment and the quality of HRM functions in the telecommunication sector in Kenya, the researcher conducted a correlation test and the results were shown in table 2.

Table 2: Correlation analysis between E-recruitment and quality of HRM

		e-recruitment	Quality of HRM
e-recruitment	Pearson Correlation	1	.196[*]
	Sig. (2-tailed)		.033
	N	119	119
Quality of HRM	Pearson Correlation	.196[*]	1
	Sig. (2-tailed)	.033	
	N	119	119

Correlation is significant at the 0.05 level (2-tailed)

Correlation analysis is used to describe the strength and direction of the linear relationship between two variables. A Pearson product-moment correlation coefficient was used to determine the relationship between the e-recruitment and the quality of human resource management in telecommunication sector in Kenya. The correlation reported in the Table 4.3 is positive and the value of 0.196 which is significantly different from 0 because the p-value of 0.033 is less than 0.05. The correlation was significant at 0.05 significant level. This indicated that e-recruitment was significant and had a positive correlation to the quality of Human Resource Management functions in the telecommunication industry in Kenya.

E- Succession planning Descriptive statistics

E-Succession planning is a process for identifying and developing new leaders, who can replace old leaders when they leave, retire or die. E-succession planning increases the availability of experienced and capable employees that are prepared to assume these roles as they become available. Taken narrowly as replacement planning for key roles is the heart of succession planning. E-succession planning helps the organization to formulate the organizational strategic business plan and multiple strategies for growth of business and develop the ability of employees to softly tackle the continuous changing of environmental demands. HR Department of organization try to strengthen the

morale of people working in organization and boost up the commitment level of employees.

Succession planning on the other is a process whereby an organization ensures that employees are recruited and developed to fill each key role within the company. Through an organization's succession planning process, it has an ability to recruit superior employees, develop their knowledge, skills, and abilities, and prepares them for advancement or promotion into ever more challenging roles. Actively pursuing e-succession planning ensures that employees are constantly developed to fill each needed role. As an organization expands, loses key employees, provides promotional opportunities, and increases sales, its e-succession planning guarantees that it has employees on hand ready and waiting to fill new roles. The function of the e-succession planning analysis is to identify the strengths and weaknesses of all of the employees identified as potential successors. Most importantly, this step in an organization seeks to highlight significant gaps that future successors may have, in terms of training, skills, experience, personality traits and other factors, that may impede their ability to succeed in the new role. In this regard, the researcher posed statements to respondents in a bid to understand the extent they agreed or disagreed with them and the results were summarized in table 3 where **(SD)** Strongly Disagree **(D)** Disagree **(N)** Neutral **(A)** Agree **(SA)** Strongly Agree.

Table 3. E-Reporting Descriptive Statistics

Statement	SA (%)	A (%)	N (%)	D (%)	SD (%)	Mean	SD
e-succession planning for specific top management positions is very important in companies as to have a smooth transition of responsibilities	15	43	27	13	2	3.75	1.079
E-Succession plan for specific top management positions is clearly identified and communicated to employees in my company.	13	54	12	14	6	3.55	1.079
Companies' e-succession plans are reviewed on an annual basis to ensure that all critical positions are covered.	20	33	18	19	9	3.83	1.259
e-Succession planning ensures that the organization retains effective, certifiable and proven skills, and make sure that it has in place the human capital it needs	20	35	19	18	6	3.94	1.198

E-succession planning for specific top management positions are very important in companies as to have a smooth transition of responsibilities was the first statement posed to the respondents. Majority (43%) of the respondents agreed, 15% strongly agreed, 17% of them were neutral, 23% disagreed while 3% strongly disagreed. This elicited a response with a mean of 3.75 which was skewed towards agreeing to the statement with a standard deviation of 1.079. In this regard, e-succession planning was integral in ascertaining the company's future employee base. The researcher also wanted to determine whether E-Succession plan for specific top management positions was clearly identified and communicated to employees in their organizations. An overwhelming majority (54%) agreed, 13% strongly agreed, 12% were neutral, 14% disagreed while the remaining 6% strongly disagreed. The finding also had a mean of 3.55 and a standard deviation of 1.079. On the other hand, the researcher wanted to determine if the companies' e-succession plans were reviewed on an annual basis to ensure that all critical positions are covered. Majority of the respondents (33%) agreed, 20% strongly agreed, 18% of them were neutral, 19% disagreed while the rest 9% strongly disagreed. The finding had a mean of 3.83 and a standard deviation of 1.259. This indicated an almost equal extent of agreeing and disagreeing on

the statement which showed that to some extent, organizations failed to review their e-succession plans annually. Finally, e-Succession planning ensures that the organizations retain effective, certifiable and proven skills, and made sure that it had in place the human capital it needs. Majority of the respondents (35%) agreed, 20% of them strongly agreed, 19% were neutral, 18% strongly disagreed while the rest 6% strongly disagreed. Equally, the finding shows a mean of 3.94 with a standard deviation of 1.198 and indication that e-Succession planning ensured that the organization retains effective, certifiable and proven skills, and make sure that it has in place the human capital it needs

In a bid to determine the relationship between e-succession planning and the quality of HRM functions in the telecommunication industry in Kenya, the researcher conducted a correlation analysis as shown in table 4.

Table 4. Correlation between E-succession planning and quality of HRM functions

		E-Succession Planning	Quality of HRM
E-Succession Planning	Pearson Correlation	1	.315**
	Sig. (2-tailed)		.000
	N	119	119
Quality of HRM	Pearson Correlation	.315**	1
	Sig. (2-tailed)	.000	
	N	119	119

**. Correlation is significant at the 0.01 level (2-tailed).

Table 4 indicates that there is a correlation between e-succession planning and quality of human resource functions which is significant at 0.01 significant level. This was shown by a correlation coefficient of 0.315. It therefore indicated that e-succession planning is important in enhancing quality human resource management functions in organizations. Organizations can benefit from the principles of identifying crucial job skills, knowledge, social relationships and organizational practices and passing them on to prepare the next generation of workers, thereby ensuring the seamless movement of talent within the organization which in return enhances quality in HRM functions in the telecommunication industry.

E-Performance Appraisal descriptive statistics

Electronic performance appraisals include tools supervisors can use to evaluate workers based on a variety of criteria and allow the user to rank different categories using an objective system. They can be part of a company intranet or served on a software program the user fills out. The programs can reside on one computer in the human resources office or allow users to login from their own computers, with access terminated once the form is filled out for privacy and security. In its most primitive form, an electronic performance appraisal can be created and delivered using email. This study determines that Electronic performance appraisals allow a company to use one rating system for all employees, putting all the forms into a main database that allows the business to rank or cross-reference employees. They might be quicker to fill out than a paper form, which can require having a supervisor answer questions from a human resources team member. Depending on the program, the appraisals can be customized by each company, including adding text boxes for employees and supervisors to leave explanations and notes.

In a bid to determine how e-performance appraisal influences the quality of Human Resource Management functions, the researcher posed various statements to understand the extent to which they agreed or disagreed to them and the results were summarized in table 5.

Table 5. E-performance appraisal Descriptive statistics

	SA (%)	A (%)	N (%)	D (%)	SD (%)	Mean	SD
Employees take part in the formulation of the e-performance appraisal system	35	40	11	11	3	3.95	1.064
The e-performance appraisal system recognizes employee achievement and Performance objectively	16	39	19	18	8	3.77	1.178
The e-performance appraisal of the company is fair and objective	22	35	18	15	10	3.68	1.226
E-performance appraisal has provided opportunity to improve your performance.	21	33	17	19	10	3.67	1.209
e-performance appraisal is used in assessing employees' commitment to organizational goals and objectives	23	41	17	14	4	3.56	1.110
The e-performance appraisal system is effective in encouraging employees to work hard	22	36	19	14	9	3.58	1.191
Appraisal outcomes have given you opportunity to eliminate weak areas in performance.	24	40	18	13	5	3.35	1.132

Employees take part in the formulation of the e-performance appraisal system was the first statement to the respondents. Employees like to receive feedback; they want to know how they are doing in a bid to ensure the organization attains its objectives either in the short run or long run. Quality performance feedback on an ongoing basis is the lifeblood of the performance appraisal process in organizations. This research demonstrate a consistent disconnect between employee and manager perspectives about the degree and nature of performance feedback. Employee surveys consistently show that employees desire more frequent, specific and timely feedback than the typical manager provides. When employees do not receive direct feedback regarding her alleged shortcomings and areas to improve, they feel short changed. In fact large number of employees does not believe that managers have the requisite skills to provide appropriate feedback. More so, employees can be aggravated when feedback sessions are superficial, rushed or even interrupted. In this case, majority (40%) agreed with the statement, followed by 35% who strongly agreed. About 11% each were neutral and disagreed

respectively. Only 3% of the respondents strongly disagreed.

On the other hand, respondents were asked if the e-performance appraisal system recognizes employee achievement and performance objectively. Majority (39%) agreed, 16% strongly agreed while 19% were neutral. About 18% disagreed and 8% of them strongly disagreed. Then the researcher was prompted to wanting to know if the e-performance appraisal of Safaricom was fair and objective. Results indicated that majority of the respondents (35%) agreed, 13% strongly agreed, 18% were neutral, 24% disagreed while 10% strongly disagreed. This indicated that managers used e-performance appraisal mechanisms which were agreed and disagreed in an almost equal manner. Employees in most cases realize when managers of their organization are not giving them accurate e-performance appraisal ratings. Many managers don't want to deal with conflict, so they often give employees undeserved high ratings which the researcher call leniency tendency. Another mistake managers make is to give employees average ratings. Sometimes managers impose unreasonably high performance standards, which can demoralize and discourage employees. So, while consistently high ratings rob employees of the intrinsic achievement and satisfaction for a job well done, harsh ratings reduce motivation by setting impossible performance standards.

Equally, the researcher asked if e-performance appraisals had provided the opportunity to improve the employee performance. Majority (33%) of the respondents agreed, 11% strongly agreed, 17% of them were neutral, 29% disagreed while 10% strongly disagreed. Effective and timely feedback on e-performance appraisal to employees is a critical component of a successful performance management program and should be used in conjunction with setting performance goals in an organization. If effective feedback is given to employees on their progress towards their goals, employee performance will improve greatly and

this will lead to easy achievement of organizational goals. Employees need to know in a timely manner how they're doing, what's working, and what's not so that they can identify areas to improve.

E-performance appraisal is used in assessing employees' commitment to organizational goals and objectives. Majority (41%) of the respondents agreed, 13% strongly agreed, 17% were neutral, 24% disagreed while the rest 4% strongly disagreed. On the other hand, the researcher asked if the e-performance system adopted in their organization was effective in encouraging them to work hard. Majority (36%) agreed, 12% strongly agreed, 19% were neutral, 24% disagreed while 9% strongly disagreed. Finally, the researcher asked if e-performance appraisal outcomes had given the respondents an opportunity to eliminate weak areas in their performance. Majority of the respondents (40%) agreed, 14% strongly agreed, 18% were neutral, 23% disagreed while the rest 5% strongly disagreed.

To test the relationship between e-performance appraisal and the quality of Human Resource Management functions, the researcher therefore conducted a correlation analysis and the results were summarized in table 6.

Table 6. Correlation between e-performance appraisal and quality of HRM function

		e-performance appraisal	Quality of HRM
e-performance appraisal	Pearson Correlation	1	.158*
	Sig. (2-tailed)		.087
	N	119	119
Quality of HRM	Pearson Correlation	.158*	1
	Sig. (2-tailed)	.087	
	N	119	119

*Correlation is significant at the 0.05 level (2-tailed).

E-performance appraisal and quality of HRM functions in telecommunication industry are positively correlated. This can be shown from table 6 which indicated a correlation coefficient of 0.158. On the other hand, e-performance appraisal is significant in the contribution it creates to the quality of HRM functions of an organization. It therefore depicts that without e-performance appraisals, the quality of HRM functions in the organization will be compromised.

E-Training Descriptive statistics

E-training is the act of offering various forms of trainings in the organization electronically. It is also known as e-learning. It involves various methods which includes systemized feed-back system computer based operation network and computer assisted instructions. This method increases the possibilities for how, when and where employees can engage in lifelong learning. Institutions provides both traditional work-place and remote instruction, sees the benefit in reversing the traditional lecture/offsite homework model to a model in which workers experience lectures or other instructional material remotely or electronically, but solve problems in a work-place setting. This paradigm allows workers to consume educational materials as quickly or slowly as they wish, while working through problems in large but well-monitored groups. In a bid to understand the effect of e-training on the quality of HRM functions, a cross tabulation was done on if respondents had any form of e-training since they joined the organization and if they had, the researcher wanted to know how they were selected for the e-training. Table 7 has a summary of the results.

Table 7. Cross tabulation on presence of e-training and form of selection for e-training

		Have you had any form of e-training since you joined the organization?		Total
		Yes	No	
If "yes" to the question above, how were you selected for e-training?	On joining the company	37	1	38
	Supervisors recommendation	15	0	15
	Compulsory for all employees	19	0	19
	Upon employee request	2	0	2
	Performance appraisal	27	1	28
	N/A	0	17	17
Total		100	19	119

Employees are organizations' biggest asset since they get the required work done so that the organization can meet its business objectives. Effective training designed specifically for the organization can provide employees with essential next-generation skills while bringing with it a host of business benefits. Results from table 7 indicate that majority of the employees (37) received e-training on joining the company. This meant that immediately an organization did recruitment, it had to ensure the new staff obtained the necessary trainings so as to suit to the organization's activities. On the other hand 27 respondents indicated that they received trainings when the organization was doing its performance appraisals. Performance Appraisal is the systematic evaluation of the performance of employees and to understand the abilities of a person for further growth and development. Performance appraisal is generally done in systematic ways which include the supervisors measure the pay of employees and compare it with targets and plans, the supervisor analyses the factors behind work performances of employees and the employers are in position to guide the employees for a better performance. On the other hand, about 19 respondents indicated that they received e-training as a routine measure by the organization to make it compulsory to the employees while 15 respondents indicated that they received e-training upon supervisors' recommendations. Providing ongoing employee training and development supports succession planning by increasing the availability of experienced and capable employees to assume senior roles as they become available. Increasing their talent pool reduces the inherent risk of employees perceived as irreplaceable leaving the organization. Results also indicate that areas of training that support succession planning include leadership, strategic decision making, effective people management, and role-specific skills.

The question of enhancing e-training frequency in an organization should not be taken lightly. To help answer the question, the researcher asked respondents on how often they received e-training in their organization. Table 4.5 indicated the frequency and further, the researcher discovers that a training needs assessment is useful for making a data-informed decision about how often staff should train. An organization can also consider how the return they receive on investment in training can help guide its decision about how often to train, and what can be found in research literature about learning retention. Training doesn't always have to be a formal, sit-down lecture, and often staff can be engaged with more frequent, but less formal learning opportunities to practice and refresh the skills they learned in the initial training program.

Table 8. How often do you undergo e-training

	Frequency	Valid Percent
Quarterly	26	21.8
Every six months	36	30.3
Once a year	25	21.0
Every two years	32	26.9
Total	119	100.0

The period within which respondents received e-training in their organization differed from quarterly to after every two years which was all represented. Various departments could receive frequent e-training depending on their need. Departments where usually no new job description is introduced, the frequency of e-training takes long while departments where new descriptions are introduced frequently, usually e-trainings are frequently introduced. Results from table 8 indicate that majority (36, 30.3%) of the respondents received e-training after every 6 months while 26.9% of the respondents received e-training after every two years. About 21.8% of the respondents indicate that they received e-training quarterly while the rest 21% received it ones a year. Perhaps the most important facet of knowing who needs training and how often refresher training should occur is having a system in place to conduct an ongoing needs assessment.

Another cross tabulation was conducted on the methods of facilitation at the e-training and their quality to the services offered. Table 9 has the results.

Table 9: Cross Tabulation on method of e-training facilitation and its quality

		How will you rate the quality of the e-training programme/s for which you have participated				Total
		Average	Good	Very good	Excellent	
What are the methods of facilitation at the e-training you have attended	Lecture	3	16	11	9	39
	Demonstrations	0	2	5	2	9
	Discussions	1	10	9	2	22
	Presentation	4	10	8	4	26
	Seminar	3	6	11	3	23
Total		11	44	44	20	119

Lectures are generally used to teach new knowledge and skills, promote reflection, and stimulate further work and learning. For those who indicated that they received e-training through lectures, majority of them (16 Respondents) indicated that it was good while 11 respondents indicated that it was excellent. For those who said that e-training was offered in form of demonstrations, only 5 respondents said that it was good while 2 respondents said that it was excellent. On the other hand, 10 respondents said that discussions were good and another 10 respondents indicated that presentations were good. About 11 respondents were of the opinion that seminars were very good. Many organizations therefore are transforming their training and development programs to the e-training domain. But choosing the right methods for their business based on their needs is still a challenge. Choosing the right e-training programs depends upon many factors like proper need analysis, target audience analysis, task analysis, topic analysis, and evaluation methods. Choosing the right delivery methods directly impact effectiveness and cost benefit for the organizations.

In a bid to understand the relationship between e-training and performance appraisal, a correlation analysis was conducted on the two variables and table 10 had a summary of the results.

Table 10. Correlation between E-training and Quality of HRM

		e-training	Quality of HRM
e-training	Pearson Correlation	1	.163*
	Sig. (2-tailed)		.003
	N	119	119
Quality of HRM	Pearson Correlation	.163*	1
	Sig. (2-tailed)	.003	
	N	119	119

Correlation is significant at the 0.05 level (2-tailed).

The bivariate Pearson Correlation conducted produced a sample correlation coefficient, r, which measured the strength and direction of linear relationships between the e-training and quality of HRM functions in the telecommunication industry. By extension, the Pearson Correlation evaluates whether there is statistical evidence for a linear relationship among the same pairs of variables in the population. The relationship between e-training and quality of HRM functions had a positive correlation coefficient of 0.163 indicating that for a good quality of HRM functions in organizations, e-training must be embraced frequently.

Quality of HRM Descriptive statistics

The study sought to describe the quality of HRM. The results were presented in table 11 where **(SD)** Strongly Disagree **(D)** Disagree **(N)** Neutral **(A)** Agree **(SA)** Strongly Agree.

Table 11. Quality of HRM Descriptive statistics

Quality of HR functions	SA (%)	A (%)	N (%)	D (%)	SD (%)	Mean	SD
My organization has a high quality training	29.4	35.3	18.5	14.3	2.5	3.75	1.106
My organization has a high quality development	17.6	26.9	24.4	21.8	9.2	3.69	1.251
My organization carries out HRM on a timely basis	40.3	39.5	18.5	1.7	0.0	4.15	1.149
The HRM function is carried out on a cost benefit basis	21.0	42.9	18.5	17.6	0.0	3.74	0.818
The HRM function is very responsive to HR needs of the firm	21.3	40.8	32.1	5.8	0.0	3.67	1.013

The results in Table 11 Shows that majority of the respondents, 35.3% agreed that their organization had high quality training. 29.4% strongly agreed, 18.5% were neutral, 14.3% disagreed while 2.5% strongly disagreed. On average the respondents agreed as indicated by a mean value of 3.75 and a standard deviation of 1.106. On whether the respondent's organization had a high quality development, 17.6% strongly agreed, 26.9% agreed, 24.4% were neutral, 21.8% disagreed while 9.2% strongly disagreed. On average the respondents agreed as indicated by a mean value of 3.69 and a standard deviation of 1.251.

On whether the respondent's organization carries out HRM on a timely basis, 40.3% strongly agreed, 39.5% agreed, 18.5% were neutral while 1.7% disagreed. On average the respondents agreed as indicated by a mean value of 4.15 and a standard deviation of 1.149. On whether the HRM function was carried out on a cost benefit basis, 21% strongly agreed, 42.9% agreed, 18.5% were neutral while 17.6% disagreed. On average the respondents agreed as indicated by a mean value of 3.74 and a standard deviation of 0.818.

Finally on whether the HRM function was very responsive to HR needs of the firm, 21.3% strongly agreed, 40.8% agreed, 32.1% were neutral while 5.8% disagreed. On average the respondents agreed as indicated by a mean value of 3.67 and a standard deviation of 1.013. This is in agreement with Shari Cauldron (1993) who said that Human resources professionals have two requirements to fulfill when their companies start chasing quality. They must ensure that training, communication and compensation are done well, and the quality function is using quality principles.

Regression Analysis

The researcher conducted a multiple linear regression to find out the influence of the independent variables on the targeted revenue and the results were summarized in table 12.

Table 12. Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.439[a]	.193	.164	2.30090	1.634

a. Predictors: (Constant), e-succession planning, e-training, e-recruitment, e-performance appraisal

b. Dependent variable: Quality of HRM functions

Table 13. ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	144.048	4	36.012	6.802	.000[b]
	Residual	603.531	114	5.294		
	Total	747.580	118			

a. Dependent variable: Quality of HRM functions

b. Predictors: (Constant), e-succession planning, e-training, e-recruitment, e-performance appraisal

Table 13 indicated the model summary. The R value represents the simple correlation and was 0.439 which indicated a high degree of correlation between the dependent and independent variables. The R Square indicates how much the total variation in the dependent variable can be explained by the independent variables. It is also called the coefficient of determination. In this case, it was 0.193 which meant that the independent variables explained 19.3% of the variation in the dependent variable.

Table 13 shows reports how well the regression equation fitted the data (predicted the dependent variable). This Table indicated that the regression model predicted the dependent variable significantly well. The p-value was <0.0001 and it indicated the statistical significance of the regression model that was run. The p-value was less than 0.05 at 5% level of significance, which indicated that the overall regression model significantly predicted the outcome variable (it is a good fit for the data).

In fitting the regression model, the researcher determined the regression coefficients which showed the extent to which each independent variable contributed to the dependent variable and the results were shown in table 14.

Table 14: Regression Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.106	2.422		1.283	.202
	e-recruit	.188	.068	.235	2.768	.003
	e-train	.104	.060	.146	1.712	.090
	e-perfapp	.134	.076	.152	1.777	.078
	e-succpla	.384	.099	.330	3.864	.000

a. Dependent Variable: dependent

The fitted model was as shown below:

$$Y = 3.106 + 0.188X_1 + 0.104X_2 + 0.134X_3 + 0.384X_4$$

Where:

Y = Quality of HRM functions

X_1 = e-recruitment

X_2 = e-training

X_3 = e-performance appraisal

X_4 = e-succession planning

Table 14 shows the t-statistics column which is associated with a 2-tailed p-values in the significant column used in testing whether a given coefficient is significantly different from zero. In using a significant level of 5%, the constant was found to be insignificant as its p-value, 0.202, was greater than 0.05. On the other hand, E-Recruitment was found to be significant in establishing the effect of human resource information system on the quality of HRM function among telecommunication companies in Kenya. This was because the P-Value of 0.003 was lower than the 0.05. Equally, E-Succession planning was also found to be significant and therefore, had an effect on HRM function among telecommunication companies in Kenya. E-Performance and E-Training were not significant as their P-Values were greater than 0.05.

Summary of the major findings

The purpose of this study was to determine the effect of human resource information system on the quality of HRM function among telecommunication companies in Kenya. The following are the findings of the study in summary and order of the Objectives.

E-recruitment on the quality of the HRM function

On the effect of e-recruitment on the quality of the HRM function. The purpose of e-recruitment is to make the processes involved more efficient and effective, as well as less expensive. Online recruitment can reach a larger pool of potential employees and facilitate the selection process. Companies make use of the internet to reach a large number of job seekers and hire the best talent for the company at a less cost, as compared to the physical recruitment process. The researcher found that it is not just placing suitable candidates into jobs, it is also about building and developing a flexible work force to suit the organization's changing and demanding needs. By digitizing the recruitment process, it is easier than ever to find qualified employees that are across town or even across the globe. This can allow an organization to appeal to a wider candidate pool so that it is able to find top talent and there is never a reason to settle for a barely qualified candidate. A Pearson product-moment correlation coefficient was used to determine the relationship between the e-recruitment and the quality of human resource management in telecommunication sector in Kenya. The correlation was positive and the value of 0.196 which is significantly different from 0 because the p-value of 0.033 is less than 0.05. The correlation was significant at 0.05 significant level. This indicated that e-recruitment was significant and had a positive correlation to the quality of Human Resource Management functions in the telecommunication industry in Kenya.

E-Training on the quality of the HRM function

On the effect of e-training on the quality of the HRM function, the researcher found that this method increases the possibilities for how, when and where employees can engage in lifelong learning. Institutions provides both traditional work-place and remote instruction, sees the benefit in reversing the traditional lecture/offsite homework model to a model in which workers experience lectures or other instructional material remotely or electronically, but solve problems in a work-place setting. This paradigm allows workers to consume educational materials as quickly or slowly as they wish, while working through problems in large but well-monitored groups. . Effective training designed specifically for the organization can provide employees with essential next-generation skills while bringing with it a host of business benefits. On how often respondents underwent e-training, the study found that majority were trained after every 6 months and preferred lecture method. The relationship between e-training and quality of HRM functions had a positive correlation coefficient of 0.163 indicating that for a good quality of HRM functions in organizations, e-training must be embraced frequently.

E-Performance Appraisal on the Quality of the HRM Function

According to the effect of E-performance appraisal on the quality of the HRM function, depending on the program, the appraisals can be customized by each company, including adding text boxes for employees and supervisors to leave explanations and notes. Majority of the respondents agreed that Employees take part in the formulation of the e-performance appraisal system, The e-performance appraisal system recognizes employee achievement and Performance objectively, The e-performance appraisal of the company is fair and objective, E-performance appraisal has provided opportunity to improve your performance, e-performance appraisal is used in assessing employees' commitment to organizational goals and objectives,

The e-performance appraisal system is effective in encouraging employees to work hard and Appraisal outcomes have given you opportunity to eliminate weak areas in performance. E-performance appraisal and quality of HRM functions in telecommunication industry are positively correlated. This can be shown from table 4.9 which indicated a correlation coefficient of 0.158. On the other hand, e-performance appraisal is significant in the contribution it creates to the quality of HRM functions of an organization.

E-succession Planning on the Quality of the HRM function

According to the fact that e-succession planning affect the quality of the HRM function, the study found that actively pursuing e-succession planning ensures that employees are constantly developed to fill each needed role. As an organization expands, loses key employees, provides promotional opportunities, and increases sales, its e-succession planning guarantees that it has employees on hand ready and waiting to fill new roles. Majority of the respondents agreed with the statements; e-succession planning for specific top management positions is very important in companies as to have a smooth transition of responsibilities; E-Succession plan for specific top management positions is clearly identified and communicated to employees in my company; Companies' e-succession plans are reviewed on an annual basis to ensure that all critical positions are covered and e-Succession planning ensures that the organization retains effective, certifiable and proven skills, and make sure that it has in place the human capital it needs. There is a correlation between e-succession planning and quality of human resource functions which is significant at 0.01 significant level. This was shown by a correlation coefficient of 0.315.

Conclusions

The study concluded that in order to maintain business performance and competitive advantage, telecommunication organizations competing in a

global marketplace must recruit the best people they can with the best preferred method of recruitment. For such organizations, recruitment becomes a key component of their overall business strategy. E-recruitment practices have significant differences across the organizational size and respondent category. It is also evident that respondents' category differed in terms of perceived importance of e-recruitment. Employers emphasize more on advantage, effectiveness, information and efficiency as compared to employees. Therefore, the study concluded that organizations e-recruitment helps an organization to improve its quality of HRM functions.

On the other hand the study concludes that e-training involves various methods which includes systemized feed-back system computer based operation network and computer assisted instructions. Most employees received the e-training measures depending on the situation they are faced with. Increasing their talent pool reduces the inherent risk of employees perceived as irreplaceable leaving the organization. Results also indicate that areas of training that support succession planning include leadership, strategic decision making, effective people management, and role-specific skills. Departments where usually no new job description is introduced, the frequency of e-training takes long while departments where new descriptions are introduced frequently, usually e-trainings are frequently introduced.

The study also concluded that electronic performance appraisals allow a company to use one rating system for all employees, putting all the forms into a main database that allows the business to rank or cross-reference employees. Depending on the program, the appraisals can be customized by each company, including adding text boxes for employees and supervisors to leave explanations and notes. This research demonstrate a consistent disconnect between employee and manager perspectives about the degree and nature of performance feedback. Employee surveys consistently show that employees desire more frequent, specific and timely feedback than the typical manager provides. When employees do not receive direct feedback regarding her alleged shortcomings and areas to improve, they feel short changed.

Finally, the study concluded that E-succession planning helps the organization to formulate the organizational strategic business plan and multiple strategies for growth of business and develop the ability of employees to softly tackle the continuous changing of environmental demands. HR Department of organization try to strengthen the morale of people working in organization and boost up the commitment level of employees. The function of the e-succession planning analysis is to identify the strengths and weaknesses of all of the employees identified as potential successors. E-succession planning has a positive correlation with the quality of HRM functions in an organization and therefore an important aspect that the telecommunication industry should practice.

Recommendations

From the above findings, the researcher recommends the following:

The researcher highly recommends adoption of e-recruitment for the purpose of making the processes involved more efficient and effective, as well as less expensive. Online recruitment can reach a larger pool of potential employees and facilitate the selection process. Companies should make use of the internet to reach a large number of job seekers and hire the best talent for the company at a less cost, as compared to the physical recruitment process. On the other hand full adoption of e-training on the quality of the HRM function increases the possibilities for how, when and where employees can engage in lifelong learning hence, boost workforce morale to perform per goals set.

E-procurement can shift transaction processing to the end users who actually use the purchased goods or services, freeing up supply management

personnel for strategic value-creation work and therefore organizations should identify and understand the key tactics and strategies required for e-procurement success. Procurement leaders in an organization should actively solicit support and required investment from top management.

Organizations should adjust the duration of practicing e-training to their employees to build up their confidence in whatever that they undertake. Embracing e-training rather than the common traditional training will boost the organizations' performance.

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