EFFECT OF HUMAN RESOURCE INFORMATION SYSTEMS ON PERFORMANCE OF CLEANING SERVICES COMPANIES IN NAIROBI COUNTY

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ABSTRACT

The proposed study focused on the effect of Human Resource Management Information Systems and performance of cleaning services companies in Nairobi County. The specific objectives of the study were; to determine the effect of e-record keeping system on performance of cleaning services companies in Nairobi County, to assess the effect of e-personnel administration system on performance of cleaning services companies in Nairobi County. The study was anchored on three theories namely; Unified Theory of Acceptance and Use of Technology which is the main theory and other supporting theories which were Diffusion of Innovation Theory and Resource Based-view Theory. Descriptive survey research design was employed to answer the research questions. The target population was 128 cleaning service companies. The study used census sampling technique. Primary data was used and was collected using questionnaire. Quantitative data was collected and was analyzed using SPSS version 25. Descriptive statistical was computed which include mean, standard deviation, frequencies and percentages. The findings were displayed in tables and figure. The study also computed correlation and regression analysis to test the relationship between the dependent and the independent variables. The study concludes that e-record keeping system has a positive and significant effect on performance of cleaning services companies in Nairobi County. In addition, the study concludes that e-personnel administration system has a positive and significant effect on performance of cleaning services companies in Nairobi County. Further, the study concludes that e-recruitment system has a positive and significant effect on performance of cleaning services companies in Nairobi County. It was recommended that the management of cleaning services companies in Nairobi County should work towards ensuring full adoption of electronic record keeping hence facilitating information retrieval. In addition, study recommends that the management of cleaning services companies in Nairobi County should ensure proper communication channels, succession planning and demand & Supply of manpower.

Key Words: *E-Record Keeping System, E-Personnel Administration System, Cleaning Services, Performance*

Background of the Study

Importance of human resource information system (HRIS) in organizations today is no longer debatable (Rees, 2016). This insight in an organization is a crucial aspect in the general performance of firms to enable them to continually enhance their performance by reducing expenses, enhancing quality, production and marketing speed. According to Schuler and Jackson (2019), HRIS is concerned with minimizing costs of the organization when performing work assignments. Organizational Performance is one of the major goals of any institution worldwide in their pursue for greatness (Weeks, 2017).

In the developed world such as the United States of America (USA), Germany and Britain, performance is considered as an integral part for the management to continue governing the institution (Stone, Deadrick, Lukaszewski & Johnson 2015). Kemei (2016) notes that companies are becoming globalized creating the need for an integrated system where they would manage their human resources effectively. This has therefore led to the introduction of global HRIS in various multinational organizations resulting to the emergence of different Human Resource Management Information System (HRIS) opportunities, benefits and challenges (Opiyo, 2015).

Firms are currently employing the use of e-business Information and Communication Technology (lCT) systems together with internal and external communications to enhance their performance (Akoyo & Muathe, 2017). Since the year 2000, there has been significant growth in the use of internet which led to a 24/7 hour society (Chukwunonso, 2017). This led to the creation of new jobs in e-commerce and opened a new potential for employees to work from home pushing organization's to contemplate on new strategies for survival, while jobs were lost in outdated areas like shops.

Regionally, several scholars have provided various outlooks of human resource management practices. In Nigeria for instance, Manzoor (2016) explains the need for human resource management practices among small manufacturing firms in Lagos and stated that most of the firms relied on few experts who are required to give instructions to the other workers on how and what to do. In such cases, when the experts left the firms under any of the reasons, the firms could drop in performance due to change/reduction in production quality, lack of production of certain products and inadequate expertise experience.

In South Africa, Stefanovic, Rankovic and Prokic (2017) identified human resource management practices as a key factor that promoted employee retention through its ability to groom employees into more valuable and resourceful organizational resources. According to Stefanovic et al. (2017), human resource management practices entail the imposition of leadership and managerial skills to the employees so as to increase their ability to take positions of other colleagues who may at one time leave the organization. Through this, the gap of having positions within an organization failing to be run appropriately due to absence of a specific employee are reduced.

Kenya's Vision 2030 entails three pillars which are the Economic, Social and Political are affixed on continuity in governance reforms; macroeconomic stability; enhanced wealth creation for the poor and equity (Tsuma, 2017). The Economic Pillar entails the expectations of the ICT market and seeks to increase the wealth of all regions of the country and all Kenyans through the attainment of a 10% GDP growth rate by 2017 (Republic of Kenya, 2018).

Olanipekun (2015) argues that organizations must come up with ways of sustaining their business performance, competitive advantage and increasing their probability to survive in

today's cutthroat business environment. Stone, *et al.* (2015) observed that the principal goals of HR in organizations are to attract, select, motivate, and retain talented employees in their roles.

In Kenya, efforts have been made to align the country with modern emerging technology. The Government acknowledges ICT as a driver towards economic and social development (Kenya Ministry of Information report, 2018). This position was from evaluation of the benefits of ICT since the enactment of the National ICT Policy 2006. The human resource information systems implementation team for Capacity Kenya (CK) has championed the use of human resource information systems in Kenya since 2009 and in 2010 saw a collaboration with the Ministries such as Ministry of health and sanitation, finance, and lands to ensure all HR data for hiring, training, transferring and retiring health workers are electronically entered into human resource information systems (Midiwo, 2015).

Statement of the Problem

The cleaning sector is an important segment of service industry that helps organizations to have a conducive environment for achieving their mission (Warui, 2016). However, being a labor intensive sector, Trivedi and Muduli (2019) explained that their human resource function is faced with recruitment challenge that contribute to employee retention as a recruitment outcome. The cleaning service companies in Kenya are faced with high turnover rates of employees, lack of accountability, lack of professional staff and poor record keeping. Most of the companies have shut down or are in the verge of collapsing. In addition, majority (67%) lacked proper records of their employees and their clients (Opiyo & Abok, 2017).

Abualloush, Bataineh and Aladwan (2016) asserted that to effectively enhance performance, firms should keep a breast with technological innovations, further they need to comprehend the changes in technology and ability presented by HRIS (Republic of Kenya, 2018). Towards this end, organizations all over the world are striffing to reduce cost of operations and to enhance their performance. This therefore, makes it important for organizations to come up with alternative means to ensure their operation costs are kept at a minimum (Midiwo, 2015). According to Kristine and Wiblen (2018), HRIS links the human resource management functions with information technology and therefore improve cost efficiency and minimize risks relating to human resource functions such as training, management, recruitment, data entry and tracking of human resource requirements.

There are several studies that have been conducted on HRIS. However, majority of these studies have been conducted in American, European or Asian countries (Kavangah & Thite 2017; Troshani, Jerram & Hill, 2017; Khan, Ikhlaq and Mujtaba, 2016; Weeks, 2017; Nagendra & Deshpande 2018; Sigh, 2018; Stone *et al.,* 2015*,* Khashman, 2016; Gupta, 2017). The studies conducted in Kenya (Muriithi, Gachunga & Mburugu, 2018; Midiwo, 2015; Sadiq, Khan, Ikhlaq & Mujtaba, 2016) were carried out in different sectors i.e. banking sector and Public Universities in Kenya. Most of these studies have concentrated on cross country and sector level and none focused on the four elements of HRIS that is e-record keeping system, e-personnel administration system, e- recruitment and e-training collectively and particularly on cleaning services companies hence creating a contextual and knowledge gap that this study seeks to fill.

Research Objectives

i. To determine the effect of e-record keeping system on performance of cleaning services companies Nairobi County.

ii.   To assess the effect of e-personnel administration system on performance of cleaning services companies in Nairobi County.

LITERATURE REVIEW

Theoretical Review

Unified Theory of Acceptance and Use of Technology

Venkatesh, *et al* (2003), developed the Unified Theory of Acceptance and Use of Technology (UTAUT) Theory by putting together eight technology acceptance models which include Theory of Planned Behavior, Socio-Cognitive Theory Diffusion of Innovations, Theory of Reasoned Action, Motivation Model, Technology Acceptance Model and Model of Personal Computer (PC). This theory tries to explain user objectives in terms of technology and their behavior. Muathe (2016) adopted this theory in a research he carried out on adoption of information and communication technology (ICT) in health facilities in Kenya. Tsuma (2017) also adopted this theory in a study on Influence of e-recruitment practices on employee retention in multinational corporations in Nairobi County.

UTAUT identifies four key constructs which include expected effort, facilitating conditions, social influence and expected performance that are key factor of technology acceptance and use behavior. Gender, age, experience, and voluntariness constructs are postulated to enhance the relationship between use and user acceptance (Venkatesh *et al.,* 2003). Studies by Oshlyansky, Cairns and Thimbleby (2017) show UTAUT as a useful instrument in elucidation of use and innovations acceptance among various cultures, programing it as a strong theory in comparison to other technology acceptance theories.

According to Tsuma (2017), the theory provides managers with a framework to measure the likelihoods of success as a result use of technology and to understand drivers of approval of technology thus design mediations against possible resistance. The theory is relevant to this study since it's based on the prediction of the human resource practices once technology is adapted. The UTAUT theory therefore informs this study through defining the reasons behind the adoption and continued use of e-record keeping system, e-personnel administration system, e- recruitment and e-training systems which are aimed at enhancing performance. Additionally, the theory predicts the potential adoption of e-record keeping system, e-personnel administration system, e- recruitment and e-training practices to the firm. Further, studies have shown that for organizations to successfully gain top notch technology administration, the right IT solution is key.

Technology Acceptance Model

Technology Acceptance Model (TAM; Davis, 1989) has been one of the most influential models of technology acceptance, with two primary factors influencing an individual's intention to use new technology: perceived ease of use and perceived usefulness. The technology acceptance model is the information systems theory that shows how users come to accept and use technology broadly it emphasize that the intensity of an individual intention to use a technology can be explained jointly by his or her perception about the technologies usefulness and attitude towards the technology in the firm (Chau & Hu, 2014). The model suggested that when organization users are presented with a new technology, a number of issues influence their decision about how and when they used the technology, perceived usefulness and perceived ease of use (Bagozzi, Davis & Warshaw, 2016).

King and He (2016) concluded in a statistical meta-analysis of the technology acceptance model as applied in various fields analyzed 88 published studies that provided sufficient data to be credible. The results showed that TAM was a valid and robust model that has been largely used, but which potentially has wider implications in organizations. The original TAM according to (Fu et al., 2016) was developed using the setting of MIS usage within firm's boundaries, where availability of technological resources, training of staff, MIS experience and expectations of users were homogeneous to some extents.

TAM would be used to guide in the conceptualization of the adoption of information systems in cleaning service companies. As guided by the theory, adoption would be used to measure in terms of the actual usage of IT in human resource management functions mainly in performance management within the firm.
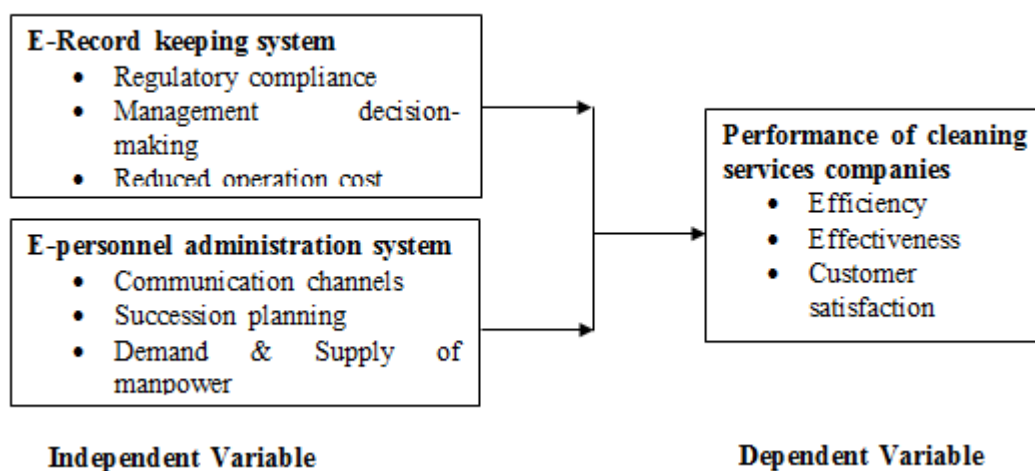
Conceptual Framework

Figure 1: Conceptual Framework

E-Record Keeping System

Man now living in an age associated with advanced information technology through the joint use of the electronic systems of computers and modern communications systems, the information revolution. And that the information sources available to the beneficiaries are many and varied, but it is useless unless it is utilized. With what the modern world has witnessed tremendous growth in the volume of information produced or published, became only benefit from it by conventional means useless due to widening the distance between the source of this information and its beneficiaries (Proof 2016).

Electronic records keeping system is both the electronic management of paper records and electronic records. Naturally, nowadays, the type of the records is different than that it was in the past (U'mi & Zawiyah 2019). Many documents exist in electronic form while in the past existed in paper form. However, the necessity, the usefulness and the aim of the records management remains the same and this is to boost and to enhance the business process and it is part of the culture of organi1ation performance (Xie, 2016).

One of the most important challenges facing the business community is the management, conservation and retrieval of information from the vast amount of documents and paper files, which are increasing on a daily basis. Therefore, modern organization, especially in

developed countries; have developed theories and methods of keeping Archive result the process through which the experience over the past decades; and this was accompanied by qualitative and quantitative development of the evolution of legislation governing keeping the archive and its uses. During the last decade new non-traditional methods to save documents and necessary documents have emerged and archived by using the computer's memory) digital memory) and the evolution of this new method with the development of conservation machine and capacity digital memory and the evolution of shorthand, save and retrieve information and documents software.

Johnston and Bowen (2015) define the term Electronic records keeping System as an electronic system for managing paper records in a records centre or registry. This system can also be used for managing electronic records, i.e. computerized records. Electronic record systems have shown benefit for organizational performance. It provides people with the records that are needed easily and quickly (Johnston & Bowen, 2015). The storage and the use of the produced records offer many opportunities to the organization that adopts the use of these record keeping systems.

E-Personnel Administration System

Personnel administration is a special kind of interpersonal relationships between the employee and the employer. Until the 20th century the term industrial relations (IR) has been used to describe this relationship, a concept advocated by the western scholars. According to Oluchi (2016) Personnel administration is a process that firms utilize to successfully manage all relations with staff, eventually to attain the firms' objectives.

Personnel administration works towards incorporating all the matters in the employer–employee relationship in the workplace which include recruitment, uniform opportunities, training and development as well as organizational structure. Chapman and Goodwin (2017) equally add that the HRM department plays a crucial part in this process by training and coaching supervisors and chief executive officers on how to successfully create and foster interactions with employees and in assessing and monitoring those interactions to assess whether goals are achieved. Supervisors and top firm managers are considered the main bridge between company employees and their firm (Ntalianis, 2016). Cohesive departments are only established through good relationships together with strong and sensitive leadership (Chapman & Goodwin, 2017).

Past studies showed that a healthy employee-employer relationship positively influenced firm performance (Ngari & Agusioma, 2017 & Tzafrir, 2015). If relationships are strong, then the probability of employees being content with their jobs is high and consequently leading to high productivity (Daniel, 2017). Storey (2018) and Ntalianis (2016) believe that small-sized firms tend to experience better employee-employer relationship compared to large organizations. Keeping in touch with hundreds or thousands of personnel is an overwhelming responsibility (Gillenson & Sanders, 2015). However, Scott (2018) argues that it is the organizational structure adopted E-personnel administration system employer-employee relations would be more effective.

Under the mechanistic structure, employees tend to display constrained patterns of interactions with the management. Whereas under an organic structure employees tend to relate better with their employers and this results to improved employee performance and later improved firm productivity. However, Gomez and Rosen (2017) concluded that trust is the main mechanism of organizational co-ordination and this leads to improved internal flow of communication and thus improved employee and firm performance. Furthermore, the best

method to bridge staff's productivity gap is by building a good employer-employee relationship (Daniel, 2017). Singh and Kumar (2017) assert that high performing organizations have been identified to have common employee relationship practices. These practices include open communication, trust, effective conflict resolution mechanisms and team work. Hence this study aims at finding out how employee relations practices applied by insurance firms in the Kenya influence firm performance.

Performance of Cleaning Services Companies

Performance is a significant growth indicator for any organization and for this to be achieved, it depends on various measures among them effectivess and efficiency. Organizational performance is described as the way in which a firm accomplishes its market-based objectives and additionally its financial objectives (Chesire & Kombo, 2015; Omayio 2017). Organizational performance means attainment of ultimate objectives of the organization as set out in the strategic plan (Kamau, 2015). Organization should therefore possess competent personnel as well as good use of their resources to spear head the attainment of organizational objectives and success (Khashman, 2016).

According to Kamau (2015), organizational performance may be determined in terms of accounting measures, operational measures, market based measures, and survival measures. Accounting measures are those that rely upon financial information reported in income statements, balance sheets, and statements of cash flows. Accounting measures can be further subcategorized into profitability measures, growth measures; leverage, liquidity and cash flow measures; and efficiency measures. Profitability measures include values and ratios that incorporate net income or a component of net income such as operating income or earnings before taxes.

Growth measures include values and ratios that present some indication of organizational growth. Growth has been conceptualized both in the context of resources and from a business operations perspective (Kaplan & Norton, 1992). Typical accounting-based growth measures include absolute or percentage change in total assets, operating assets, sales, total expenses, and operating expenses. Leverage, liquidity and cash flow measures include values and ratios that represent the organization's ability to meet its financial obligations in a timely manner and provide a cash return to capital providers. Performance in communication companies is determined by either non-financials or financial measures. The most commonly used financial measure in service companies is Average Return Per User (ARPU) (Ikonya, 2015; Investopedia, 2015).

According to Bartuševičienė and Šakalytė (2017), organizations measure their performance in terms of effectiveness with their key focus directed towards achievement of their mission, goals and vision. Consequently this can obtained through best use of resources to achieve the desired output. Customarily the high performing organizations have established strong human resource standards and a strong upper management. As a result of high organizational expectations, right people are appointed to fulfill vacancies who are cognizant of the performance measures and the significance to achieve excellence in their responsibilities and duties. As a result of high level of employee participation in the organizational processes, the organization is able to tap staff who are committed and this in return reduces the costs which are brought about with the hiring and training processes Committed employees who are devoted to the organization are equipped with the necessary skills, knowledge and experience that enable the organization come up with unique solution for customers.

Empirical Literature Review

Kittanah and Amman (2016) researched on the impact of electronic documents management on performance. The aim of this research was to study the impact of electronic documents management on performance. To accomplish this objective, the researcher prepared a questionnaire composed of two parts. The first part concerned with collecting demographic data, while the second part was concerned with collecting data and information regarding the impact of electronic documents management on performance. The collected data were entered to the computer through the Statistical Package for Social Sciences (SPSS). The results showed positive attitude of the sample unit regarding electronic management of documents and performance. The results showed no correlation between electronic document management and performance, so the study recommended the enhancement of employees to learn more about electronic document management at their work.

The study of Ameen (2016), entitled: Knowledge management and records management" (Similarities and integration) applied study the documents of the Faculty of Arts, Cairo University. The study was aimed at outlining the similarities between the concept of knowledge management and the concept of records management from both theoretical and practical sides. The results shows a relationship between records management and knowledge management, the results also showed documents contain the records available in the college archives on a large amount of historical, administrative, legal and research valuable information. The results showed that there is a kind of neglect in the method of storing documents. Results also showed that there is no regulation for archiving documents OF the college or university.

Racheal, (2018) researched on the impact of electronic records management system on organizational performance a case study of Iganga district local government. The specific objectives of the study were to establish the benefits of electronic records management System. The researcher used a descriptive research design with quantitative methods and sampled 25 respondents purposively using the sample size determination The researcher used self-administered questionnaires of both open ended and close ended questionnaires. The study finding revealed that improvement of efficiency and productivity was the main benefit of electronic record management system.

Marutha and Ngulube (2018) studied electronic records management in the public health sector of the Limpopo province in South Africa. The objective of this study was to establish how electronic records were managed and the current medical recordkeeping practice. Qualitative and quantitative methods were triangulated. Purposive sampling and stratified random sampling methods were applied to select participants for interviews and questionnaires respectively. Data was collected using questionnaires, observation and interviews. The study discovered that records management negatively affected timely and effective health care services, which resulted in long patient waiting times and patients being treated without medical history. The study recommended the introduction of an electronic records management system that is capable of capturing and providing access to a full patient record and tracking paper record movement, such as Electronic Document and Records Management System (EDRMS).

Kananu (2018) carried out an assessment of human resource information systems on service delivery in Kenyan universities: a comparative study of public and private universities. The study used sequential explanatory Research Design. The population of the study consisted of 40 International Non-Governmental Organizations operating in Nairobi under the health sector. Arising from research findings from the two institutions, HRIS was found to be

commonly used for payroll and record management. The findings revealed that there were a number of benefits associated with adoption of HRIS which included easy access of staff information, improved data management, and improved data input process among others. It was also noted that application of HRIS was hampered by numerous challenges although with appropriate strategies these could be mitigated upon. Despite the investment of HRIS in the surveyed universities, there is tremendous amount of unrealized HRIS potential in services delivery. This study differs from the current study in that it only focuses on international non-governmental organizations in Nairobi.

Kemei (2016) carried out a study on the influence of HRIS utilization on employee performance on private Universities in Kenya; a case study of United States International University-Africa. The study used a descriptive research design. The study adopted a quantitative approach on the influence of human resource information system utilization on employee performance. The internet is an attractive platform for recruiting applicants and performing several other essential business functions. This study differs from the current since it's carried out on the influence of HRIS utilization on employee performance on private Universities in Kenya therefore its findings cannot be generalized.

Kogo and Kimencu (2018) carried out a study on organizational capabilities and performance which adopted a descriptive research design. Sampling was done using stratified random sampling and simple random sampling technique to come up with a size of 375 respondents. Proper linkage between human resources and organizational performance will enable the human resource managers to design programs that will bring forth better operational results to attain higher organizational performance. Technological capability is the ability to manage three resources namely; Information Technology (IT) infrastructure, human skills in working with IT, and organization's ability to manipulate IT. This study differs from this one since it has focused on insurance companies whereas this one focuses on cleaning service companies.

RESEARCH METHODOLOGY

This study used descriptive research design. There are 128 cleaning service companies in Nairobi County. Therefore, the target population was the 128 top management employees in these companies. For this study, there was no sampling as census approach was adopted since the population is small. According to Yin (2015), census is ideal when the population is so small. This study used 128 respondents who are top managers in cleaning service companies in Nairobi.

The study used primary data. Primary data was collected using questionnaire. The questionnaire was self-administered to the respondents using the drop and pick later technique. Therefore, the researcher dropped them to the respondent, give them one week to complete, and then pick them at a later date.

The result helped the researcher to correct inconsistencies arising from the instruments, to ensure that they measure what is intended. The pre-test questionnaires were distributed randomly to 5 (10%) selected respondents. The appropriate size for pilot test is 1-10% of study sample size (Dikko, 2016).

Qualitative data was analyzed using SPSS Statistics version 25. Mean, standard deviation, and mode was also used in analyzing the data. Pearson correlation was used to determine the relationship between the variables. Also multiple regressions was used to analyze the data.

RESEARCH FINDINGS

Out of 128 questionnaires which were distributed, 120 were duly filled and returned. The drop-off and pick-up-later method yielded a high response rate of 93.75%. According to Greenfield and Greener (2016) a response rate of 75 per cent is adequate for analysis, for making conclusions and making inferences about a population.

Descriptive Statistics Analysis

E-Record Keeping System

The first specific objective of the study was to determine the effect of e-record keeping system on performance of cleaning services companies Nairobi County. The respondents were requested to indicate their level of agreement on various statements relating to e-record keeping system and performance of cleaning services companies Nairobi County. A 5 point Likert scale was used where 1 symbolized strongly disagree, 2 symbolized disagree, 3 symbolized neutral, 4 symbolized agree and 5 symbolized strongly agree. The results were as presented in Table 1.

As shown in the results, the respondents agreed that e-record keeping system has enables capturing and tracking paper record movement. This is shown by a mean of 3.951 (std. dv = 0.862). In addition, with a mean of 3.744 (std. dv = 0.953), the respondents agreed that the cost of operations have reduced because of adoption of E-Record keeping system. Kittanah and Amman (2016) revealed that improvement of efficiency and productivity was the main benefit of electronic record management system.

The respondents also agreed that their company has gone paperless and all the documents are kept in soft copies. This is supported by a mean of 3.737 (std. dv = 1.074). With a mean of 3.717 (std. dv = 0.958), the respondents agreed that E-record keeping makes information retrieval easy. Marutha and Ngulube (2018) indicated that e-record keeping facilitates information retrieval in the organization.

The respondents also agreed that e-record keeping ensures availability of information informs decisions made by our company. This is supported by a mean of 3.572 (std. dv = 1.009). In addition, as shown by a mean of 3.537 (std. dv = 0.928), the respondents agreed that it is easy to retrieve past records. The study of Ameen (2016) indicated that e-record keeping ensures security in stored information which can be used for future reference and also facilitates retrieval.

Table 1: E-Record Keeping System

	Mean	Std. Deviation
E-record keeping makes information retrieval easy	3.717	0.958
Our company has gone paperless and all the documents are kept in soft copies	3.737	1.074
It is easy to retrieve past records	3.537	0.928
e-record keeping system has enables capturing and tracking paper record movement	3.951	0.862
Availability of information informs decisions made by our company	3.572	1.009
The cost of operations have reduced because of adoption of E-Record keeping system	3.744	0.953
Average	**3.710**	**0.964**

E-Personnel Administration System

The second specific objective of the study was to assess the effect of e-personnel administration system on performance of cleaning services companies in Nairobi County. The respondents were requested to indicate their level of agreement on various statements relating to e-personnel administration system and performance of cleaning services companies in Nairobi County. The results were as presented in Table 2.

As shown in the results, the respondents agreed that e- personnel administration system helps in the establishment of disciplinary record of employees. This is shown by a mean of 3.855 (std. dv = 0.873). In addition, with a mean of 3.841 (std. dv = 0.916), the respondents agreed that e- personnel administration system can be used in the establishment of attendance history of employees in the workplace. The respondents also agreed that e- personnel administration system helps to streamline and outline skills required for a particular job. This is supported by a mean of 3.755 (std. dv = 0.909). Kananu (2018) revealed that e-personnel administration improves skill needed for better performance

With a mean of 3.717 (std. dv = 0.805), the respondents agreed that E-reassign helps employees to know duties and responsibilities they are supposed to undertake in time. The respondents also agreed that E- personnel administration of duties leads improved performance. This is supported by a mean of 3.710 (std. dv = 1.005). In addition, as shown by a mean of 3.655 (std. dv = 0.981), the respondents agreed that E- personnel administration system ensures timely departmental transfers in times of deficit. From the results, the respondents agreed that e- personnel administration system makes sure duties reach employees in time. This is supported by a mean of 3.620 (std. dv = 0.885). In addition, with a mean of 3.544 (std. dv = 0.989), the respondents agreed that E- personnel administration system can be used to determine seniority of jobs. Kogo and Kimencu (2018) indicated that e-personnel administration system leads to improved performance.

Table 2: E-Personnel Administration System

	Mean	Std. Deviation
E- personnel administration system helps to streamline and outline skills required for a particular job	3.755	0.909
E- personnel administration of duties leads improved performance	3.710	1.005
E- personnel administration system can be used to determine seniority of jobs	3.544	0.989
e- personnel administration system makes sure duties reach employees in time	3.620	0.885
E-reassign helps employees to know duties and responsibilities they are supposed to undertake in time	3.717	0.805
E- personnel administration system ensures timely departmental transfers in times of deficit	3.655	0.981
E- personnel administration system helps in the establishment of disciplinary record of employees	3.855	0.873
E- personnel administration system can be used in the establishment of attendance history of employees in the workplace	3.841	0.916
Average	**3.712**	**0.920**

Inferential Statistics

Correlation Analysis

The present study used Pearson correlation analysis to determine the strength of association between independent variables (e-record keeping system, e-personnel administration system, e-recruitment system and e-training system) and the dependent variable (performance of cleaning services companies). Pearson correlation coefficient range between zero and one, where by the strength of association increase with increase in the value of the correlation coefficients.

From the results, there was a very strong relationship between e-record keeping system and performance of cleaning services companies in Nairobi County (r = 0.901, p value =0.000). The relationship was significant since the p value 0.000 was less than 0.05 (significant level). The findings are in line with the findings of Kittanah and Amman (2016) who indicated that there is a very strong relationship between e-record keeping system and performance of cleaning services companies.

Moreover, the results revealed that there was a very strong relationship between e-personnel administration and performance of cleaning services companies in Nairobi County (r = 0.890, p value =0.000). The relationship was significant since the p value 0.000 was less than 0.05 (significant level). The findings are in line with the findings of Kananu (2018) who indicated that there is a very strong relationship between e-personnel administration and performance of cleaning services companies

Table 3: Correlation Coefficients

		Performance	E-Record Keeping	E-Personnel Administration
Performance	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	120		
E-Record Keeping	Pearson Correlation	.901**	1	
	Sig. (2-tailed)	.000		
	N	120	120	
E-Personnel Administration	Pearson Correlation	.890**	.297	1
	Sig. (2-tailed)	.000	.060	
	N	120	120	120

Regression Analysis

Multivariate regression analysis was used to assess the relationship between independent variables (e-record keeping system, e-personnel administration system, e-recruitment system and e-training system) and the dependent variable (performance of cleaning services companies)

The model summary was used to explain the variation in the dependent variable that could be explained by the independent variables. The r-squared for the relationship between the independent variables and the dependent variable was 0.850. This implied that 85% of the variation in the dependent variable (performance of cleaning services companies) could be explained by independent variables (e-record keeping system, e-personnel administration system, e-recruitment system and e-training system).

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.922[a]	.850	.854	.10482

a. Predictors: (Constant), E-Record Keeping System, E-Personnel Administration

System, E-Recruitment System and E-Training System

The ANOVA was used to determine whether the model was a good fit for the study. F calculated was 392.794 while the F critical was 2.450. The p value was 0.001. Since the F-calculated was greater than the F-critical and the p value 0.001 was less than 0.05, the model was considered as a good fit for the study. Therefore, the model can be used to predict the influence of e-record keeping system, e-personnel administration system, e-recruitment system and e-training system on performance of cleaning services companies.

Table 5: Analysis of Variance (ANOVA)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	132.028	4	33.007	392.794	.001[b]
	Residual	9.668	115	.084		
	Total	141.696	119			

a. Dependent Variable: Performance of Cleaning Services Companies
b. Predictors: (Constant), E-Record Keeping System, E-Personnel Administration
System, E-Recruitment System and E-Training System

The regression model was as follows:

$$Y = 0.334 + 0.391X_1 + 0.421X_2 + \varepsilon$$

According to the results, e-record keeping system has a significant effect on performance of cleaning services companies $\beta_1 = 0.391$, p value= 0.002). The relationship was considered significant since the p value 0.002 was less than the significant level of 0.05.

The results also revealed that e-personnel administration system has a significant effect on performance of cleaning services companies $\beta_1 = 0.421$, p value= 0.000). The relationship was considered significant since the p value 0.000 was less than the significant level of 0.05

Table 6: Regression Coefficients

		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
(Constant)		0.334	0.069		4.841	0.004
E-Record	Keeping	0.391	0.097	0.392	4.031	0.002

System					
E-Personnel Administration	0.421	0.097	0.422	4.340	0.000

Conclusions

The study concludes that e-record keeping system has a positive and significant effect on performance of cleaning services companies in Nairobi County. The study found that e-record keeping system (regulatory compliance, management decision-making and reduced operation cost) influence performance of cleaning services companies in Nairobi County. This implies that improvement in e-record keeping system (regulatory compliance, management decision-making and reduced operation cost) will lead to improvement in performance of cleaning services companies in Nairobi County.

In addition, the study concludes that e-personnel administration system has a positive and significant effect on performance of cleaning services companies in Nairobi County. The study found that e-personnel administration system (communication channels, succession planning, demand & Supply of manpower and conflict resolution mechanisms) influence performance of cleaning services companies in Nairobi County. This implies that improvement in e-personnel administration system (communication channels, succession planning, demand & Supply of manpower and conflict resolution mechanisms) will lead to improvement in performance of cleaning services companies in Nairobi County.

Recommendations

The study found that e-record keeping system has a positive and significant effect on performance of cleaning services companies in Nairobi County. This study therefore recommends that the management of cleaning services companies in Nairobi County should work towards ensuring full adoption of electronic record keeping hence facilitating information retrieval.

In addition, the study found that e-personnel administration system has a positive and significant effect on performance of cleaning services companies in Nairobi County. This study therefore recommends that the management of cleaning services companies in Nairobi County should ensure proper communication channels, succession planning and demand & Supply of manpower.

Suggestions for Further Studies

This study focused on the effect of human resource information system on performance of cleaning services companies in Nairobi County. Having been limited to of cleaning services companies in Nairobi County, the findings of this study cannot be generalized to other cleaning services companies in Kenya. The study therefore suggests further studies on the influence of human resource information system on performance of cleaning services companies in other parts of the country.

Further, the study found that the independent variables (E-Record Keeping System, E-Personnel Administration System, E-Recruitment System and E-Training System) could only explain 85% of performance of cleaning services companies. This study therefore suggests further research on other factors affecting performance of cleaning services companies in Kenya.

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