

The Influence of Human Resource Information System Career Planning and Development on Employee Performance: A Case of the Institute of Accountancy Arusha

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Abstract-

This study sought to examine the influence of human resource information system career planning and development on employee performance: A case of the Institute of Accountancy Arusha. Descriptive survey research design and quantitative research approach were employed. Primary data were gathered through structured questionnaires and secondary data were obtained from various sources including published sources and unpublished sources such as books, research reports, journal articles, dissertations, seminars, magazines, and newspapers regarding the influence of HRIS utilization on employee performance in the Institute of Accountancy Arusha. Descriptive statistics was used to analyze data. Findings revealed that human resource information system career planning and development influenced employee performance at IAA through improving working morale, increasing productivity, performing well the work duties, increasing creativity, ability to make a productive decision in employees' work. It was recommended that human resource information system should be strengthened and improved as to continually influence employee's performance at the Institute of Accountancy Arusha. This can be done by adopting up-to-date (more sophisticated) human resource information systems.

Key Words: Career Planning and Development, Employee Performance, Institute of Accountancy Arusha

1.0 Background of the study

The performance of workers is usually looked at in terms of results. It can also be considered in terms of behavior though (Sohrab and Khuram, 2013). Aguinis (2016) identifies several variables that can be taken into consideration when placing employee performance into perspective. The reasons allow for better results for workers than others. Those output determinants may be "declarative knowledge," "procedural knowledge" and "motivation" (Cudeck, 2014).

Sohrab and Khuram (2016) keep adding that human resources policies have a positive effect on employee performance. The impact will be passed on employee actions due to human resource management, which also indicates a positive association. According to Carlson (2016), five practices have been proposed which affect performance. They include training and development, performance evaluation, setting the level of fair compensation, recruiting package, and morale-keeping. Teseema and Soeters (2014) study designated eight human resources activities, including recruiting and selection methods, hiring practices, training, compensation, performance appraisal of workers, promotion, grievance, and pension or social security, have a significant impact on perceived employee performance.

The first generation of computerized human resource information systems, according to McAdams (2010), required the conversion of manual information records to a computerized system. Human Resource

specialists were then referred to as "personnel workers" and maintained basic reports on key business functions with limited interaction (Kavanagh, Gueutal, and Tannenbaum, 2012); The use of technology in Human Resource (HR) has grown tremendously, and HR management practices continue to change with CEOs, Managers and Employees (Mathis and Jackson, 2015).

Human Resources were incorporated into the core business mission between the 1960s and 80s and at the same time, there was a significant increase in policy and regulatory reporting requirements for employees (Anitha and Aruna, 2013). Human Resource Department became one of the most important consumers of the day's costly computing systems, edging other computer-access task fields. While HRIS systems were computerized and widely established in size and scope during this period, simple record-keeping systems remained (Anitha and Aruna, 2013).

Human Resource Information System (HRIS) refers to a structured method for gathering, processing, preserving, extracting, validating, and disseminating the relevant information an organization needs about its human resources, staff activities, and unit characteristics of the organization (Lippert and Swiercz, 2012). HRIS enables human resource managers to reach goals for human resources. At the functional level, the Human Resource Information System (HRIS) will track the credentials of the staff, candidates, and contingent workers, demographics, performance evaluation, professional development, payroll, recruitment, and retention (Harris and Desimone, 2015). Since data became much easier to store, retrieve, update, identify, and analyze, computerization of HRIS feature allowed faster decision making in the development, planning, and administration of Human resources.

Moreover, the HRIS will improve an organization's efficiency or workers and overall outlook. This can be achieved by tracking information on the skills and backgrounds of an applicant or employee, recruiting, professional development, performance appraisal, payroll, retention, and attrition are key to success at the functional level of Human Resource (Harris and Desimone, 2015). Perry (2016) adds that to increase the efficiency of an organization's workers, they will continuously rely on the HRIS from now on. Globalization has made a significant contribution to allowing human resources to expand their possibilities, experiences, and technology use.

The need for an integrated system where they would handle their human resource roles arose as more businesses became globalized, creating a greater need for it. Globalization has contributed to the implementation of global HRIS in numerous multinational organizations, resulting in different opportunities, advantages, and challenges for HRIS (Opiyo, 2015). HRIS gives HR the ability to become a more effective and strategic role by standardizing the majority of HR processes within the organization, improving the quality and pace of the information available and improving employee satisfaction (Ball, 2011). Such improvements form the basis of an enterprise that is highly competitive. If the program is properly designed, it handles employee data according to the way the organization is managed; hence the need for a multinational corporation to adopt a global HRIS (Troshani et al., 2017).

Specifically, about globalization, rapid technological development has moved organizations to knowledge-oriented units. Trendsetters have shifted and are transforming companies into new businesses that have increased the operational performance of HR departments (Thompson and Fedric, 2017). A global HRIS will put huge quantities of international employee data to strategic use compared with the advantages of traditional regional HRIS. Ideally, the global database is updated automatically by the local databases, ensuring the data is entered correctly, but only once (Obeidat, 2019).

Through implementing consistent data management principles, global HRIS reporting becomes more reliable and efficient as all decision-makers are accessing the same information and have access. One can then use this knowledge for in-depth analysis to enable HR and the company makes better and informed decisions. This is achieved through a clear procedure to capture and retain relevant employee data such as duties, responsibilities, and qualifications (Ball, 2014).

The advances in technology are felt across the globe. Since the 1960s, Africa has been playing with technology and it is time to catch up with the rest of the world. Nevertheless, HRIS has not been given a security response to the use of digital systems or effective communication with technology. Most of them still rely on manual means of communication like parcel delivery. Organizations need to fully embrace HRIS to meet the company's changing needs including employee performance that leads to better organizations in the long run. Africa needs to turn to the ICT and social media technologies available to rationalize or even change the internal operations of HR (Ball, 2014). Companies attempting to implement the system in Africa face human, physical and financial, and resource constraints that prohibit them from resolving the performance issues of employees (Troshani et al., 2011). Chatterjee (2019) however, reported that there is a gap in organizations that lack ideas about the impact of HRIS on employee performance. This study established the influence of HRIS utilization on employee performance with a special focus on the Institute of Accountancy Arusha.

The use of the Human Resource Information System (HRIS) has been promoted as an opportunity for improving employee performance and human resource professionals to become strategic partners with organization management. Furthermore, the HRIS system helps human resources to become more efficient and responsible in providing better information for decision-making (Perry, 2016; Kemei, 2016). Tanzania like other emerging economies has decided to use HRIS to promote employee performance through reducing the manual performance of administrative activities and enabling HR officers to maintain complete, accurate, and up-to-date employees' information by using computerized application software.

Despite the goodness of the HRIS system in the public organization still, there is fraud in the public payroll, delayed public sector promotions, and poor management of employee training and development plans (Matimbwa & Masue 2019; Jorojick, 2015). As a consequence, most public sectors have failed to enable HR officers to maintain complete, accurate and up-to-date employees' information by using computerized application software due to unexpected malfunctions of HRM in the public sector (Matimbwa and Masue 2019; Jorojick, 2015). During the time of this study, the researcher did not find a study at the Institute of Accountancy Arusha on the influence of human resource information system career planning and development on employee performance. Therefore, this study aimed to fill the gap by examining the influence of human resource information system career planning and development on employee performance at the Institute of Accountancy Arusha.

2.0 Literature Review

Theoretical Framework

This study was guided by a model of diffusion of innovations theory. The theory is typically employed in the diffusion of technological inventions over a timeframe by individuals from a social framework. Dearing and Cox (2018) argue that the three fundamental elements of the theory entail the phase of diffusion, innovative features that influence the rate of dispersion. There are five stages through which innovation is seen to progress through and this entails an understanding of the innovation, influence by key individuals, and dedication to adopting, adoption, and affirmation of the choice. The five features of innovation attempt to establish the degree to which performance of the development and their key significance to the clients are expected benefits, operational coherence with organizational values, system simplicity, system trial, and the ability to monitor.

Rogers and Rahim (2021) assert that the trialability of new technologies influences their acceptance and operation since the actual performance is usually more significant than debates about benefits and operational capabilities. Compatibility is key in the case of HRMIS since its adoption is affected by the existence of network aspects. The trialability allows trying out new technology before putting it into its actual use. This is relevant to the early adopters since they rely on available information in comparison to laggards who learn later when technology has already taken roots. Much of the conventional diffusion of new technologies model is founded on studies of how people make decisions on the acceptance of new technology and these limits the use of the model on the study of HRMIS implementation in a business context.

This theory relates to the study under investigation since it shows five stages through which innovation is seen to progress through influence by key individuals, dedication to adopt, adoption, and affirmation of the choice. Therefore, through this theory, the researcher was able to understand the influence of human resource information system career planning and development on employee performance in the Institute of Accountancy Arusha.

Empirical literature review

The objectives of a human resource information system are to keep data accurate and more usable to speed up HR's operations including career planning and development. Mwashila, (2018) studied the influence of career development on academic staff performance in Kenyan public universities in the coast region. The study found that the notion of management gains a new dimension in this fourth digital revolution period in which we began to experience the information age with attention to electronic commerce, e-Government, Internet of Things (IoT), Big Data and Cloud Computing, and one of the success criteria of organizations in materializing their competitive strategies appears to be having well-equipped and qualified human resources of the internet and information age, and using these resources effectively and efficiently.

A study conducted by Savalam and Dadhabai (2018) on measuring HRIS effectiveness pointed out that a contemporary HRIS is especially in career planning and development has a great influence on employee's performance. This is because of the dynamic database about employees' performance and demographic information. HRIS provides information about employees' data, employment, application requirement, job characteristics, selection and staffing, procedures of employment, corporate structure, professional and individual improvement, education costs, performance appraisal, personnel planning, organizing. These data are used for many purposes simple or complex.

Lina, (2019) investigated Human Resource Information System (HRIS): an important element of the modern organization. It was noted that an HRIS is particularly useful for human resource development and career planning for the benefit of both the employees and the organization. The quantity, utility, and accessibility of training and development information made available through an HRIS can allow employees to pinpoint and accurately assess their interests, strengths, and weaknesses and tailor development plan to enhance their human capital and value to the organization. Moreover, much training and development coursework can be delivered effectively and cost-efficiently when integrated with an HRIS.

Furthermore, Qadir and Agrawal (2017) studied the human resource information system (HRIS): re-engineering the traditional human resource management for leveraging strategic human resource management. They found that HRIS has many functions including; recruitment, personal self-service, leave/Absence, payroll, people administration, compensation and benefits, training and development as well as performance evaluation as seen in figure 2.1. The study further indicated that in terms of training and development, HRIS enables it to determine essential competencies needed to implement a chosen strategy, identify the distribution of those competencies currently available, and then assess competency gaps. Furthermore, once the competency gaps have been identified, an HRIS can enable decision-makers to assess alternative means for closing the gaps, such as hiring employees from outside, retraining current employees, or acquiring another organization with the needed competencies.

Moreover, Kaygusuz, Akgemci, and Abdullah (2016) examined the impact of HRIS usage on organizational efficiency and employee performance: research in the industrial and banking sector in Ankara and Istanbul cities found that organizations need an effective Management Information System (MIS) compliant with business processes and human resources in particular, for rapid and timely performance of decision-making, planning, structuring (organizing) and supervision operations by the managers. MIS' interface with human resources is the subsystem Human Resources Information System (HRIS). The study further revealed that through the human resource information system, employee performance in the industrial and banking sector in Ankara and Istanbul cities has been improved to a large extent.

Kemei (2016) on the influence of HRIS utilization on employee performance in private universities in Kenya, a case study of USIU – Africa concluded that when HRIS component function is optimal, employee performance is significantly improved. Employee performance is enhanced when HRIS self-service portal is easily accessible. HRIS improves the communication of information within the organization. He recommends more investment in database storage to equip managers to make better strategic decisions. Adoption of the system should be a priority, thus leading to the fulfillment of organization requirements and commitment of the employee to organization goals.

Mbugua (2015) conducted a study on the “Role of Human Resource Information Systems in Organizational Effectiveness: A Case Study of Kenya Commercial Bank” to assess the influences of computer-based human resources information stems processes on organizational effectiveness among the banking sector organization in Kenya. The study concluded that when the use of HRIS decision-making process becomes the norm and practice in organizations, it results in more improvements towards organizational effectiveness including making the organization generally more effective, resulting in more strategic focus and change orientations, creating a feeling of high satisfaction with the organization services among other important improvements.

On the other hand, Rahimi (2015) investigated the potential effects that the human resources information system has on the quality of work-life in the public sector in Kashan, Iran. This study is conducted within a descriptive-correlation approach the statistical population included 11500 employees working in the public sector in Kashan. From the population, 225 individuals were selected through cluster random sampling as the sample. The instruments employed included the Human Resources Information System (HRIS) Questionnaire which is a close-ended questionnaire with 40 items and 4 elements and the Quality of Work-Life Questionnaire with 24 and 6 elements which is designed based on a 5-level Likert scale. The content and construction validities of the questionnaires were calculated by the researchers and confirmed by the experts in the field. The reliabilities for each phase questionnaires are obtained through Cronbach alpha which indicated .91 for Human Resources Information System and .90 for Quality of Work Life. The data obtained through inferential statistics (correlation, t-test, regression, and structural equation modeling) are calculated through SPSS and Amos. The findings of this study revealed that the human resources information system and quality of work-life are at acceptable levels for the employees under study. The results of the correlation coefficient show that there is a significant and positive relationship between human resources information systems and the quality of life.

Kumar (2018) assessed the extent to which the HRIS enhances organizational efficiency in an interrelated and holistic manner (as determined by its impact on areas of HR, time management, cost management, and managerial satisfaction with the system). A sample of 101 managers was drawn from a Municipality in South Africa using cluster sampling. Data was collected using a self-developed, closed-ended questionnaire comprising of 28 items, the psychometric properties (validity, reliability) of which were statistically assessed using Factor Analysis and Cronbach’s Coefficient Alpha respectively. Data were analyzed using inferential statistics. The results indicate that HRIS significantly enhances overall organizational efficiency and its sub-dimensions (HR functions, time management, cost management, and managerial satisfaction with the system) in an inter-related and holistic manner, though in varying degrees. Hence, the implementation of a proper HRIS has the potential to bring about the operational effectiveness and enhance the realization of the HR and corporate strategy, thereby ensuring organizational effectiveness.

The use of HRIS in emerging economies is a relatively new development in HRM. In Tanzania, HRIS in the public sector has been in place for just less than a decade now. From the various empirical studies highlighted in this chapter, it is clear multiple types of research have been conducted about HRIS in various capacities. However, their researcher did not find studies that specifically searched for the influence of HRIS career planning and development on employee performance particularly in the Institute of Accountancy Arusha. This study, therefore, intends to fill that gap by examining the influence of HRIS career planning and development on employee performance in the Institute of Accountancy Arusha.

3.0 Methodology used

This study employed a descriptive survey design. Orodho (2003) and Kothari (2004) describe “a descriptive survey design as a design that seeks to portray accurately the characteristics of a particular individual, situation or a group”. Descriptive research design encompasses the collection and analysis of quantitative data as an approach to describing the phenomenon. On the other hand, the study used a quantitative research approach. A quantitative approach can be defined as research that explains phenomena according to numerical data which are analyzed using numbers-based methods, especially statistics (Kothari 2004). This approach was used in this study to collect experience and opinion toward the influence of HRIS career planning and development on employee performance.

Primary and secondary data were collected for the study. Primary data refers to the data collected afresh and for the first time and therefore happen to be original (Kothari, 2004). Primary data were collected from employees who make use of HRIS in their day-to day activities since they provide the first-hand information. Secondary data were collected from Institute’s annual reports, minutes of minutes and other Institutes’ special reports. Questionnaires were self-administered to the employees of the IAA. Questionnaires consisted of both open and closed-ended questions. According to Mugenda and Mugenda (2003), unstructured questionnaires permit greater depth of response from the respondents while closed or structured questions are usually easier to analyze. The questionnaire was chosen because data can effectively be collected. The use of the questionnaire allowed greater uniformity in the way questions were asked, ensuring greater compatibility in the response.

The population of this research constituted all employees (i.e., academic staff and non- academic staff) of all departments of the Institute of Accountancy Arusha - main campus. The total number of employees at IAA was 280. Using the Krejcie and Morgan's table, the population of 280 matches with a sample size of 162; the said technique of calculating sample size was suitable because the study covered a large population. The study adopted stratified random sampling techniques. The study used the proportional allocation technique whereby the sample size of a stratum (department) was made proportional to the number of employees present in the department. This was because the numbers of employees in departments differ. The stratified sampling technique was used in this study because it guaranteed that employees from each department could be represented in the sample.

In the current study, data were analyzed using descriptive statistics with the aid of SPSS version 22. Descriptive statistics such as frequencies and percentages was used to analyze the demographic characteristics of respondents while the mean and standard deviation was used to analyze data about the influence of HRIS career planning and development on employee performance in the Institute of Accountancy Arusha. Interpretation of the findings was done using a Five Point Likert Scale as 1.00 - 1.80; Strongly Disagree, 1.81 - 2.60; Disagree, 2.61 - 3.40; Undecided, 3.41 - 4.20, Agree; 4.21 - 5.00, Strongly Agree

4.0 Findings

A total of 155 questionnaires were returned filled after coding was processed for analysis using SPSS version 21. The results are presented in tabular form starting with demographic results of respondents then followed by research questions in sequence order. Interpretation of data has been categorized into two parts. The first part dealt with the demographic characteristics of respondents, the second one dealt with descriptive statistics.

Demographic characteristics of respondents

This section described information collected on gender, age, educational level, and how long respondents have been using the human resources information.

Gender of Respondents	Frequency	Percentage
Male	81	52.3

Female	74	47.7
Total	155	100.0

Source: Field Data (2023)

Respondents who filled the questionnaires varied in terms of gender. Findings revealed that 81 (52.3%) respondents were male whereas 74 (47.7%) respondents were female. Generally, the majority of respondents who filled the questionnaires were male; however, the difference between males and females was minor.

Age of Respondents	Frequency	Percentage
18-24 years	11	7.1
25-34 years	55	35.5
35-44 years	75	48.4
45 years and above	14	9.0
Total	155	100.0

Source: Field Data (2023)

It was revealed that the majority of respondents were aged between 35-44 years of age 75 (48.4%) followed by those aged between 25-34 years of age 55 (35.5%) than those aged above 45 years 14 (9.0%) and few aged 18-24 years 11 (7.1%). This implies that information was generated from respondents with different age groups.

Education of Respondents	Frequency	Percentage
Certificate	2	7.1
Diploma	18	11.6
Bachelor Degree	73	47.1
Masters	52	33.5
PhD	10	6.5
Total	155	100.0

Source: Field Data (2023)

The education level of respondents (workers) of the Institute of Accountancy Arusha as follows: certificate 2 (1.3%), diploma 18 (11.6%), Bachelor degree 73 (47.1%), Masters 52 (33.5%), and Ph.D. 10 (6.5%). This information shows that majority of the respondents were well educated to able to respond to the questions concerning this study without much clarification.

Respondent's duration of using HRIS	Frequency	Percentage
Less than 1 year	12	7.7
1-2 years	56	36.1
3-5 years	69	44.5
Above 5 years	18	11.6
Total	155	100.0

Source: Field Data (2023)

Respondents varied in terms of the duration of using a human resource information system. Findings revealed that those with a duration of less than 1 year were 12 (7.7%), 1-2 years 56 (36.1%), 3-5 years 69 (44.5%), and above 5 years 18 (11.6%). Thus, the majority of respondents have been using human resource

information systems for quite a several years such that are expected to understand its applicability on employees' performance.

Descriptive Analysis of Data

Descriptive analysis of research questions was meant for the determination of the perception of respondents regarding the influence of HRIS career planning and development on employee performance in the Institute of Accountancy Arusha. This was guided by one research question; *how does human resource information system career planning and development influence employee performance at Institute of Accountancy Arusha?* Findings have been resented in the table below;

Respondents' perception on how HRIS career planning and development influence employee performance

SN	Item	N	Mean	Interpretation
1.	HRIS career planning and development has improved my working morale	155	4.25	Strongly Agree
2.	HRIS career planning and development has improved my productivity	155	4.48	Strongly Agree
3.	Through HRIS career planning and development I perform well my duties	155	4.28	Strongly Agree
4.	Through HRIS career planning and development, my working interest has improved	155	4.27	Strongly Agree
5.	Through HRIS career planning and development, I can manage stress in my work	155	4.00	Agree
6.	Through HRIS career planning and development, I can work in teams	155	4.17	Agree
7.	Through HRIS career planning and development, my creativity have improved	155	4.43	Strongly Agree
8.	Through HRIS career planning and development, I can make a productive decisions	155	4.37	Strongly Agree
9.	Through HRIS career planning and development I am satisfied with my job	155	4.26	Strongly Agree

Source: Field Data (2023)

Findings indicated that respondents strongly agreed that HRIS career planning and development has improved their working morale, HRIS career planning and development have improved their productivity, through HRIS career planning and development they perform well their duties, through HRIS career planning and development, their working interest has been improved, through HRIS career planning and development, their creativity has been improved, through HRIS career planning and development, they can make a productive decision in their work and through HRIS career planning and development, they are satisfied with their job with the mean score of 4.25, 4.48, 4.28, 4.27, 4.43, 4.37 and 4.26 respectively.

It was further revealed that respondents agreed that through HRIS career planning and development, they can manage stress in work and that through HRIS career planning and development, they can work in teams with the mean score of 4.00 and 4.17 effectively. This gives an expression that HRIS career planning and development influenced employee performance at IAA.

5.0 Discussion

Findings on how human resource information system career planning and development influence employee performance correlates with those of Atika (2017) who conducted a study on the factors influencing the effectiveness of HRIS at the National Cereals and Produce Board in Kenya concluded that HRIS improved

decision making and reduced costs. Training on the use of the system as well as managing organizational change affected the effectiveness of the system.

Mwashila, (2018) studied the influence of career development on academic staff performance in Kenyan public universities in the coast region. The study found that the notion of management gains a new dimension in this fourth digital revolution period in which we began to experience the information age with attention to electronic commerce, e-Government, Internet of Things (IoT), Big Data and Cloud Computing, and one of the success criteria of organizations in materializing their competitive strategies appears to be having well-equipped and qualified human resources of the internet and information age, and using these resources effectively and efficiently.

A study conducted by Savalam and Dadhabai (2018) on measuring HRIS effectiveness pointed out that a contemporary HRIS is especially in career planning and development has a great influence on employee's performance. This is because of the dynamic database about employees' performance and demographic information. HRIS provides information about employees' data, employment, application requirement, job characteristics, and selection and staffing, procedures of employment, corporate structure, professional and individual improvement, education costs, performance appraisal, personnel planning, organizing. These data are used for many purposes simple or complex. Therefore, the findings from the current study agree with the other past studies as indicated above.

6.0 Conclusions and Recommendations

The study concluded that human resource information system career planning and development influenced employee performance at IAA through improving working morale, increasing productivity, performing well the work duties, increasing creativity, ability to make a productive decision in employees' work.

The study recommended that the Institute of Accountancy Arusha through the Human Resource office should effectively use the human resource information system career planning and development as a means to promote employee performance. Moreover, the Government through the respective Ministry should from time to time improve the existing human resource information system career planning and development policies to enhance employee performance and the Institute's performance in general. Further research can be conducted to establish the influence of human resource information system utilization on organization performance.

REFERENCES:

1. Abbot & Sarin H. (2009). Performance Management. 2nd edition, Person education, Inc., Publishing as Prentice Hall.
2. Aguinis L. W. (2016). Human Resource Management. Indiana University: McGraw Hill.
3. Akgemei P. and Abdullah K. (2006). The Use of Human Resource Information Systems: A Survey, Personnel Review, 30 (6), 677 – 693.
4. Altarawneh M. (2015). Adoption of Human Resource Information Systems in Organizations. SDMID Journal of Management, 4(2), 5 – 15.
5. Alvi, M. (2016). A Manual for Selecting Sampling Techniques in Research. University of Karachi, Iqra University. Retrieved from <https://mpr.ub.uni-muenchen>.
6. Anita, G. & Aruna, O. G. (2013). Human Resource Information System: A current Assessment. MIS Quarterly, 10, 15 – 27.
7. Atika J. N. (2017). Factors influencing the effectiveness of human resource information system at the National Cereals and Produce Board, Kenya. Unpublished MBA project: University of Nairobi.
8. Ball A. (2004). Understanding and validity in qualitative research. Harvard Educational Review, 62(3), 279 – 300.
9. Ball S. (2011). Why triangulate? Educational Researcher, 17(2), 13 – 17.
10. Barron P., Harris, D. and Desimone, R. L., (2004). Human resource development, Dryden Press, Forth Worth, TX.

11. Benbasat W. and Bark N. (2015). Using the HR intranet: An exploratory analysis of its impact on managerial satisfaction. *Personnel Review*, 36(2). 277 – 294.
12. Chatterjee B. (2019). An empirical study of the impact of user involvement on system usage and information satisfaction. *Communication of the ACM*, 29, 232-238.
13. Cudeck P. (2014). *The new deal at work: Managing the market-driven workforce*. Boston, MA: Havard Business School Press
14. Dearing, J. W., & Cox, J. G. (2018). Diffusion of innovations theory, principles, and practice. *Health Affairs*, 37(2), 183-190.
15. Gupta, B. (2013) Human Resource Information System (HRIS): Important Element of Current Scenario. *IOSR Journal of Business and Management (IOSR-JBM)* e ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 13, Issue 6, PP 41- 46 www.iosrjournals.org
16. Harris P. and Desimone M. (2015). Towards integrated, intelligent human resource management. *Applied Ontology: An Interdisciplinary Journal of Ontological Analysis and Conceptual Modelling*, 3(4).
17. Hussain and Others C. (2017). Understanding HRM-Firm performance linkages: The role of the “strengths” of the HRM system. *Academy of Management Review*, 29(2), 203 – 221.
18. Jorojick, P. D. A. (2015). The influence of human resource information system on decision making in LGAs: the case of lawson version 9 in Kiteto District, Tanzania (Doctoral dissertation, Mzumbe University).
19. Joppe, M. (2000). The Research Process. Retrieved December 16, 2006, from <http://www.ryerson.ca/~mjoppe/rp.htm>
20. Kaasien et al S. (2012). *IHRIM go-to guides: e-compensation, the emerging technology series*. Burlington, MA:IHRIM.
21. Kaygusuz, I., Akgemci, T. and Abdullah, Y. (2016). The Impact of HRIS Usage On organizational Efficiency and Employee Performance: A Research in Industrial and banking Sector in Ankara and Istanbul Cities. *International Journal of Business and Management*, Vol. IV (4), Pp. 14-52.
22. Kavanagh, M., Gueutal, H., and Tannenbaum, S. I. (2012). *Human resource information systems. Development and application*. Boston: PWS-Kent Publications Co.
23. Kavanagh, M., Gueutal, H., and Tannenbaum, S. I. (1990). *Human resource information systems. Development and Application*. Boston: PWS-Kent Publications Co.
24. Keat P. and Mohan A. R. (2014). Human resource information systems: Backbone technology of contemporary human resources. *Journal of Labour Research*, 24(3), 381-394.
25. Kemei, E. (2016). The influence of human resource information system utilization on Employee performance in private universities in Kenya: a case of United States international university-Africa (Doctoral dissertation, United States International University-Africa).
26. Kemei, E. (2016) The effects of Human Resource Information System utilization on Employee performance in private universities in Kenya – a case study of USIU Africa. USIU – Africa, Nairobi.
27. Khera, N. and Gulati, M. (2011) Human Resource Information System and its impact on Human Resource Planning: A perceptual analysis of Information Technology companies, *IOSR Journal of Business and Management (IOSRJBM)* ISSN: 2278- 487X Volume 3, Issue 6.
28. Kirui, A. (2016) (Challenges facing state corporations in Kenya in the implementation of human resource management information systems. Unpublished MBA research project. The University of Nairobi.
29. Kombo, K. Donald, and Tromp L.A. Delno, (2006) *Proposal and Thesis Writing, An Introduction*. Nairobi, Paulines Publications Africa.
30. Kothari, C. (2004), *Research Methodology: Methods and Techniques*. New Delhi, New Age International (P) Ltd.
31. Kumar, N. A. (2018) The Impact of HRIS on Organizational Efficiency: Random or Integrated and Holistic. *Corporate Ownership & Control*. Volume 11, Issue 1, Continued – 6.
32. Lawler, E. and Mohrman, S. A. (2003) *Beyond the Vision: What Makes HR Effective? CEO Publication 00-16 (389) Center for Effective Organizations Marshall School of Business University of Southern California October 2000*.

33. Lina, M. A. (2019). Human Resource Information System (HRIS): An Important Element of Modern Organization. *Global Disclosure of Economics and Business*, 8(2), 61-66.
34. Lippert, S. and Michael Swiercz, P. (2005) Human resource information systems (HRIS) and technology trust. *Journal of information science*, 31(5), 340-353.
35. Machaina, K. (2015) Adoption Factors of Electronic Human Resource Management (e-HRM) in Banking Industry of Tanzania. *Journal of Social Sciences*, 11(1).
36. Matimbwa, H., & Masue, O. S. (2019). Usage and Challenges of Human Resources Information System in the Tanzanian Public Organizations. *Journal of Human Resource Management*, 7(4), 131-137.
37. Mc Adam, K. (2010). Role of HRIS in improving Modern HR Operations. *Review of Management*, 58 – 70.
38. Mathis, R. and Jackson, J. (2015). *Human Resource Management*. 13th Edition, South-Western College Publishing, Ohio.
39. Mathias L. and Jackson M. (2015). HRIS Implementation and Deployment: A Conceptual Framework of the New Roles, Responsibilities and Competencies for HR Professionals. *International Journal of Business Information Systems*, 5, 148 – 161.
40. Mbogo, S. and Okutoyi, H. (2018). Human resources management as a determining factor in organizational learning. The University of Nairobi.
41. Mbugua, C. (2015). The role of Human Resource Information Systems in organizational effectiveness: a case study of Kenya Commercial Bank. *International Journal of Business and Commerce*, 4(6), 99-145.
42. Mitzenmacher, M., and Upfal, E. (2017). *Probability and computing: Randomization and probabilistic techniques in algorithms and data analysis*. Cambridge university press.
43. Midiwo D. (2019). Human Resource information systems: Operational issues and strategic considerations in a global environment. *International Journal of Human Resource Management*, 7(1), 245-269.
44. Mulla, P. (2015) Human resource information systems (HRIS) and technology trust. *Journal of Information Science*, 31 (5), 340-353.
45. Mullah M. A. (2015) *Strategic Resource Management*, Canada: John Wiley and Sons.
46. Mwashila, H. M. (2018). The influence of career development on academic staff performance in Kenyan public universities in coast region (Doctoral dissertation).
47. Mwanje, L. (2010) The Relationship between Human Resource Information System and Human Resource Management. *International Journal of Economics, Commerce and Management United Kingdom*, 4(2),
48. Mugenda, O. M. and Mugenda, A. G. (2003). *Research Methods, Quantitative and Qualitative Approaches*, ACT, Nairobi
49. Noe, R., Hollenbeck, J. Gerhart, B., and Wright, P. (2016) *Human Resource Management (4th Ed.)*. New York, NY: McGraw-Hill/Irwin.
50. Obeidat, B. (2019) *A Study of the Implementation Stage of Strategic Decisions in the Banking Sector in Jordan*. 1st Edition, VDM Verlag Dr. Müller e.K.
51. Opiyo, A. (2015) Effects of Human Resource Information System on Performance of Commercial Banks In Kenya: A Case Of Kenya Commercial Bank. *Journal of Business Management Vol 1 Issue 1 June 2015 Paper 2*.
52. Opiyo G. (2015). Competency-based management: A review of systems and approaches. *Information Management & Computer Security*, 14(1), 51-64.
53. Orodho, A. (2003) *Essentials of Educational and Social Science Research Methods: Qualitative and Quantitative Approaches*. Nairobi Acts Press.
54. Oluoch, Ogolla & Oluoch, Mercy. (2019). Performance Management Practices and Employee Productivity at State Department of Labour, Kenya. *International Journal of Business, Humanities, and Technology*. 9. ISSN 2162-1357 (Print), 2162. 10.30845/ijbht.v9n4p3.
55. Paulo, E. (2015) E-HR adoption and the role of HRM: evidence from Greece. *Personnel Review*, 36(2), 277-294.

56. Perry E., (2010) The benefits of using technology in human resource management. IGI global Cranfield School of Management.
57. Perry M. U. (2016). Documenting Information systems for management: a key to maintaining user satisfaction, *information & management*, 8, 221-226.
58. Qadir, A., & Agrawal, S. (2017). Human resource information system (HRIS): re-engineering the traditional human resource management for leveraging strategic human resource management. *MIS Review*, 22(1/2), 41-58.
59. Rahimi, H. (2015) The Effects of Human Resources Information Systems on the Quality of Work Life in Public Sector Organization. *International Journal of Academic Research in Economics and Management Sciences* 2015, Vol. 4, No. 4 ISSN: 2226-3624 DOI: 10.6007/IJAREMS/v4-i4/2007 URL: <http://dx.doi.org/10.6007/IJAREMS/v4-i4/2007>.
60. Ramezan. M. (2010) Measuring the effectiveness of human information systems in a national Iranian oil company (an empirical assessment). *Education Business and Society Contemporary Middle Eastern Issues*, 1-18.
61. Rao. P. (2015) Effectiveness of human information systems: A study concerning Greaves Cotton Ltd. *Asian Journal of Managerial Science* 4 (1), 1-5.
62. Rogers, E. M., & Rahim, S. A. (2021) 11 Where Are We in Understanding the Diffusion of Innovations? In *Communication and change* (pp. 204-225) University of Hawaii Press.
63. Rogers M. (2016). E-HR helps make retention a walk in the park. *Workspan*, 44(11), 54-60.
64. Sohrab, A., and Khuram, S. (2013) HRM and employee performance: A case of university teachers of Azad Jammu and Kashmir (AJK) in Pakistan. *African Journal of Business Management* Vol. 5(13), pp. 5249-5253.
65. Savalam, S., & Dadhabai, S. (2018) Measuring HRIS Effectiveness *IOSR Journal of Business and Management*, 20, 75-81.
66. Sinclair D. L. (2007). Organizational factors affecting the success of end-user computing, *JMIS*, 3, 66-80.
67. Smith O. and Kelly E. (2017). Information systems: The quiet revolution in human resource management. *Journal of Computer Information systems*, 42(2), 17- 20.
68. Stanley A. (2013) The utility and selection of an HRIS. *Adv. Competitiveness Res.*, 9: 42-56.
69. Tessema, M., and Soeters, J. (2014) Challenges and prospects of HRM in developing countries: testing the HRM-performance link in Eritrean civil service, *International Journal of Human Resource Management* 17(1): 86-10.
70. Troshani, I., Jerram, C., and Hill, S. R. (2011) Exploring the public sector adoption of HRIS. *Industrial Management and Data Systems*, 111(3), 470- 488.
71. Troshani, I., Jerram, C., and Rao, S., (2017) Exploring the public sector adoption of HRIS. *Industrial Management and Data Systems*, 111 (3), 470-488.
72. Thompson Q. and Fedric T. (2017). The strategic potential of human resource information systems: Evidence from the Republic of Ireland. *International Employment Relations Review*, 11(1)/2) 97-118.
73. Wickramaratna, U. D. (2011) Project report on The role of Human Resource Information System in Human Resource Planning in Private sector organization in Sri Lanka, Faculty of Graduate Studies University of Colombo.