

**EFFECT OF HUMAN RESOURCE INFORMATION SYSTEMS ON EFFICIENCY OF  
INFORMATION MANAGEMENT ON EMPLOYEES' PERFORMANCE AT MURANG'A WATER  
AND SANITATION COMPANIES, KENYA**

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**Abstract:** *The main purpose of the study was to establish the effect of Human Resource Information Systems (HRIS) on employee's performance in Murang'a Water Companies in Murang'a County which are five in number. The target population was three Water Companies namely: Kahuti Water and Sanitation Company, Gatamathi Water and Sanitation Company Limited and Murang'a South Water and Sanitation Co. Ltd. The study adopted descriptive design to determine the effects of human resource information system on employee's performance.. Data for the study was primary obtained by use of a survey tool. It was collected using a questionnaire. The filled questionnaires were checked for completeness and then coded and the data analyzed. A correlation model for establishing presence and magnitude of dependence using significance levels was applied to the effect of Human Resource Information Systems (HRIS) on employee's performance. The findings of the study established that human resource information system is used in the selected Water Companies in Murang'a County; the institutions have adopted HRIS in their operation; the impact on adoption and implementation of HRIS involved the regulatory as an environmental impact on adoption and implementation of human resource information system and an effective HRIS provides information on just about anything the companies needs to track and analyze about employees, The study made recommendations that a functional Human Resource Information System should be adopted by Water Companies/Other Organizations in order get improved productivity and efficiency on employee's performance. The organization should update their Human resource information systems to ensure that they using the newest version of technology in the market which save more time and increases efficiency. The organization should continue training the employees on the use of the Human resource systems as the need arises. The organizations should automate all other functions and also provide back up to prevent loss of data.*

**Keywords:** *HRIS, information management, employee performance*

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**1. Efficiency of information management and Employees' Performance**

Human Resource Management Systems brings about organizational effectiveness since it makes it easy to manage information in the sense that the HR department is more efficient, and employees and management can access any of their records online whenever they need too. It removes the burden of HR to carry out mundane requests from employees thus, giving HR staff more time to spend on strategic tasks. Modern HRISs have such extensive features that employees have everything they need at their fingertips.

Shiri (2012) found that HRIS provides HR professional with opportunities to enhance their contribution to the strategic direction of the firm. However, Beadles II, Lowery & Johns (2005) found that CHRIS has not yet accomplished this or reached its full potential in the HR environment.

In their study, they found that whilst directors overall are satisfied with the system, they have not yet realized the benefits beyond its effect on information and information sharing as the full capabilities of the system were being underutilized. Kumar (2012) emphasizes that whilst HRIS is an important tool for HRM as it has the potential to provide better information for decision-making; its effectiveness depends on the challenges of its implementation and its effective integration within the organization. Evaluating the HRIS in the Municipality based on the aforementioned dimensions reflects the value of the HRIS in both operational and strategic functions. The 21st century has come with essential changes in communication between organizations and audiences important thereto. In communication context, open space of communication, which becomes more open and uncontrollable, is being increasingly discussed. Organizations are working hard to fulfil their communication programmes which would correspond to the desires of external stakeholders and newest communication channels (Hisrich and Peters, 2002).

Information can then be used for in-depth analyses to help HR and the Organization to make better, more informed decisions. By applying a consistent process for capturing and maintaining employee specific data (job, position and qualifications (Ball, 2011). The global HRIS can be used to identify, plan and budget for employee training, succession planning and expatriate assignments. As the “war on talent” continues to loom, a multinational organization with a global HRIS can very quickly and easily discover the right person to fill as specific position. Having ability to locate the best qualified employees regardless of his or her location is a competitive advantage (Hussain *et al.*, 2007. Additionally, designing the system to identify which employees are interested in overseas assignment will also make the expensive and time-consuming expatriate process quicker and easier. Colgate-Palmolive’s global HRIS contains specific information on each manager’s experience or awareness of different cultures (Obeidat, (2009). The use of HRIS globally to thin locally but compensate globally which can be applied fairly across the globe while still being aware of understanding differences in compensation for similar jobs in various countries (Public Service Commission of Kenay:2004-2009). Compensations users can review plans in local and additional currencies and languages. Using a global IHRS can provide guideline on compensation and help in documentation which can be either on or offline.

Armstrong (2000) asserts that Employee performance is usually looked at in terms of outcomes and also it can be looked at in terms of behavior. Employee's performance is measured against the performance standards set by the organization. A number of measures can be considered in measuring performance such as productivity, efficiency, effectiveness, quality and profitability (Ahuja, 2006). Efficiency is the ability to produce the desired outcomes by using as minimal resources as possible. Effectiveness is the ability of employees to meet the desired objectives or target (Stoner 1996). Productivity is expressed as a ratio of output to that of input. It is a measure of how the individual, organization and industry converts input resources into goods and services. The measure of how much output is produced per unit of resources employed (Lipsey, 1989).

There are various factors that may be considered when putting employee performance into perspective. The factors enable employees to perform better than others. These determinants of performance may be such as “declarative knowledge”, “procedural knowledge” and “motivation” (Sohrab and Khuram,2013). Sohrab and khuram continue to add that Human Resource Information Systems have a positive effect on performance on employees.

## **2. Statement of the Problem**

In the twenty first century, Organizations have been under pressure of reducing the cost of operations and pressures of responding to customers' demand. This has in turn impacted on HR Functions and especially recruitment and selection methods, which causes frequent movement of staff as a result of office pressure. The Water Sector in Kenya has been experiencing rapid growth in terms of increased coverage areas thus raising competition and challenges in meeting targets. In order to increase efficiency of the HR processes embracing HRIS is of paramount importance for any company that desire to be competitive. Ball, (2011) did a study on the Use of HRIS which revealed that the effectiveness of HRIS in achieving Organizational efficiency has effect of the impact of HR functions. Another study by Wachira (2010) on reasons for introducing HRIS revealed that out of thirty three Organizations, 79% recognized savings as the main driving force. Although the Water Sector has largely adopted the use of HRIS to automate timely data from the human Resource department, challenges are still there like lack of updated reward system among others.

Most of the research knowledge and information gathered, it is evident that much of the research studies focus on the effects of HRIS on organizational performance. Some studies have been undertaken to show of the benefits of human resource information system (Buckley et al., 2004). Several studies have also been done in Kenya. For instance, (Mbogo & Okutoyi, 2003) studied the human resources management as a determining factor in organizational learning. Besides the fact that the study focuses on a human resource, the context was generalized. Macharia (2011) did a research on role of human resource information systems in strategic human resource management. Her study was, however, focused on the strategic role and in SMES. Kirui (2012) studied the role of information systems in human resource management. The study focused on the manufacturing industries.

The researcher has not found any published research on human resource information system on employee performance in water companies in Kenya. It is evident that much of the research studies focus on the effects of HRIS on organizational performance, strategic human resource and another field. This creates a major gap in the effects of HRIS on employee performance. Moreover, there is little or no research conducted on the use and effect of HRIS on Water and Sanitation Companies in, Murang'a County.

This shows that there is a great knowledge gap in the research as to how Water and Sanitation companies use HRIS to contribute to the better performance of employees. Therefore, this study seeks to investigate effects of HRIS on employees' performance in Murang'a Water and Sanitation Companies would be very essential in providing the body of knowledge. Employee performance is sometimes not effective because the organizations have not fully embraced the software hence failing to eliminate costs of time due to duplication of tasks and financial costs due to outsourcing.

## **3. Objectives of the Study**

The research was guided a general objective aimed to analyze the effect of human resource information systems on employees' performance and a specific objective to determine the effect of human resource information systems on efficiency of information management on employees' performance at Murang'a water and sanitation companies

## **4. Research Methodology**

The target population was three Water Companies namely: Kahuti Water and Sanitation Company, Gatamathi Water and Sanitation Company Limited and Murang'a South Water and Sanitation Co. Ltd. The study adopted descriptive design to determine the effects of human resource information system on employee's performance..

Data for the study was primary obtained by use of a survey tool. It was collected using a questionnaire. The filled questionnaires were checked for completeness and then coded and the data analyzed.

### 5. Data Analysis, Presentation, Interpretation And Discussion

The study sought to determine the effect of HRIS on efficiency of Information management on employees performance at Murang’a Water and Sanitation Companies. Likert scale for rating questionnaires was employed: Scale: 5- Strongly Agree 4 – Agree, 3 – Neutral, 2 – Disagree and 1 – Strongly Disagree. The respondents’ views of this issue appear on Table 1.

Table 1: Efficiency of information management on employee performance

<b>Descriptive Statistics</b>					
	N	Minimum	Maximum	Mean	Std. Deviation
Our HRIS has improved my ability to disseminate information and provided increased levels of useful information	78	1.00	4.00	2.0485	.66007
Our HRIS has improved the recruitment process and decreased time spent on recruiting.	78	1.00	4.00	2.4361	.73420
I am satisfied with the HRIS self-service portal flexibility of the system.	78	1.00	3.00	1.9205	.54057
Overall I think that our HRIS is effective with the generated information in benefiting employees and improve the strategic decision making.	78	1.00	5.00	2.9736	1.08864
The information from our HRIS can be access from anywhere through web-based interface	78	1.00	3.00	1.8567	.41034
<b>Valid N (listwise)</b>	<b>78</b>				

According to the Table 1 a mean of 2.0485 participants agreed that HRIS has improved ability of employees to disseminate information and provided increased levels of useful information, a mean score of 2.4361 participants agreed HRIS has improved the recruitment process and decreased time spent on recruiting., a mean score of 1.9205 participants were neutral that they are satisfied with the HRIS self-service portal flexibility of the system , a mean of 2.9736 participants strongly agreed that HRIS is effective with the generated information in benefiting employees and improve the strategic decision making and a mean of 1.8567 were neutral that information HRIS can be access from anywhere through web based interface. This implies that Human Resource Information Systems have been adopted at Murang’a water companies Muranga

County, Kenya and it was found to be effective with the generation of information in benefiting employees and improving their performance. This goes line with Collins and Smith (2006) who stated that Human Resource Information System allows the HR function to become more efficient and to provide better information for decision-making.

**Employees performance**

The study sought to establish the employee performance. Likert scale for rating questionnaires was employed: Scale: 5- Strongly Agree 4 – Agree , 3 – Neutral , 2 – Disagree and 1 – Strongly Disagree. The respondents’ views of this issue appear on Table 2.

*Table 2: Employee Performance*

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
I feel the workplace training opportunities encourage me to work better	78	1.00	5.00	3.0584	1.1960
My job gives me the opportunity to learn.	78	1.00	5.00	3.0181	1.1373
I am valued as a hardworking individual within my organization	78	4.00	5.00	3.1210	1.2441
Valid N (listwise)	78				

As per the findings in Table 2 a mean of 3.0584 participants strongly agreed that workplace training opportunities encourage them to work better, a mean score of 3.0181 participants strongly agreed their job gives the opportunity to learn and lastly a mean of 3.1210 strongly agreed that they are valued as a hardworking individual within their organization. This implies that employees at Muranga Water and Sanitation Company are well motivated hence there are efficient and effective when performing their duties. There are various factors that may be considered when putting employee performance into perspective. The factors enable employees to perform better than others. These determinants of performance may be such as “declarative knowledge”, “procedural knowledge” and “motivation” (Sohrab and Khuram, 2013).

**6. Inferential statistics**

The study used inferential statistics to make inferences based on probability.

**Pearson Correlation Analysis**

After the descriptive analysis, the study conducted Pearson correlation analysis to indicate a linear association between the predicted and explanatory variables or among the latter. It, thus, help in determining the strengths of association in the model, that is, which variable best explained the relationship between the variables. The analysis was shown in Table 3.

Table 3: Correlations

		Employee Performance	Information management
Employee Performance	Correlation Coefficient	1.000	
	Sig. (2-tailed)		
	N	78	
Information management	Correlation Coefficient	.672	1.000
	Sig. (2-tailed)	.002	.
	N	78	78

On the correlation of the study variable, the researcher conducted a Pearson moment correlation. From the finding in the table, the study found a strong positive correlation between Performance of employees and Information management as shown by correlation coefficient of 0.672, this too was also found to be statistically significant at 0.002 confidence level.

According to the study, human resource information systems have been adopted at Murang’a water companies Muranga county, Kenya and it was found to be effective with the generation of information in benefiting employees and improving their performance. This goes line with Collins and Smith (2006) who stated that Human Resource Information System allows the HR function to become more efficient and to provide better information for decision-making.

### 7. Summary of the Study

The study found out that human resource information systems have been adopted at Murang’a water companies Muranga county, Kenya and it was found to be effective with the generation of information in benefiting employees and improving their performance. This goes line with Collins and Smith (2006) who stated that Human Resource Information System allows the HR function to become more efficient and to provide better information for decision-making.

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