



INFLUENCE OF AUTOMATED HUMAN RESOURCE PLANNING SYSTEM ON THE PERFORMANCE OF OIL AND GAS COMPANIES IN KENYA: A CASE OF NAIROBI COUNTY

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Abstract: *Organizational success depends tremendously on the performance of human resource management. Among the key to success is a solid information system infrastructure. Thus, the adoption of Human Resource Information System (HRIS) in organizations should impact on the performance. The study investigated the influence of automated human resource planning systems on performance of Oil and gas Companies in Kenya. The study used descriptive research design. The target population was 150 employees. The human resource manager, employee relations manager, administrative officer, training and development officer, payroll officer together with the assisting officer for each was targeted. A sample size of 60 respondents was purposively selected. A questionnaire was used for data collection. Descriptive and Inferential statistics were used. Pearson's Coefficient Correlation analysis was used to examine the type and extent of the relationships. The study revealed that a vast majority mentioned that their companies had automated HR planning system. The study recommended that Oil and gas companies should have an established and properly managed human resource planning system that is relevant to the objectives of the company to enable it achieve all the firm performance indicators such as market share, profitability and higher growth rates.*

Keywords: *Human resource information system, HR planning, Performance appraisal, Recruitment and selection, Training and development*

INTRODUCTION

Organizations have started using information systems in various functions and departments in the last decades. Human Resources Management is one of the departments that mostly use management information systems. Given the ever rising wave of globalization, technology change and sustainability debate, organizations are increasingly under pressure



to tap into the energies of information systems in disparate areas of organizational life. This tendency has precipitated the surge in the number of organizations collecting, storing and analyzing information pertaining to their human resources via the use of human resource information systems (HRIS) as well as other kinds of software that include HRIS functionality (Kavanaghet *al.*, 2012). Effective and efficient management of information systems can generate information resource, which organizations need for operational, tactical and strategic planning and decision-making that can enhance its commitment to sustainability (Achua, 2008).

The use of Human Resource Information Systems (HRIS) has been advocated as an opportunity for human resource (HR) professionals to become strategic partners with top management (Lengnick-Hall and Moritz, 2013). The idea has been that HRIS would allow for the HR function to become more efficient and to provide better information for decision-making. The question remains whether HRIS has fulfilled its promise. In its most basic form HRIS is a system used to acquire, store, manipulate, analyze, retrieve and distribute pertinent information about an organization's human resources. It is often regarded as a service provided to an organization in the form of information (Tannenbaum, 2009).

However, the promise is that, as the use of these systems become more widespread, higher level forms of HRIS will evolve. Lengnick-Hall and Moritz (2013) postulated that HRIS will be implemented at three different levels: the publishing of information; the automation of transactions; and, finally, a change in the way human resource management is conducted in the organization by transforming HR into a strategic partner with the line business. In their view, the evolution of HR as promoted by HRIS evolves from information to automation and from automation to transformation. They note that while HRIS has been widely deployed, a transformation of human resource management has occurred in relatively few organizations.

The evolution that Lengnick-Hall and Moritz propose revolves around the perspective that HRIS will create informational efficiencies and cost savings such that HR departments can turn their attention to providing better analysis of current data and creative uses of the HRIS to provide better and more accurate data upon which to base strategic decisions. Overman (2009)



Petroleum Exploration in Kenya begun in the 1950's with the first well being drilled in 1960. British Petroleum (BP) and Shell began exploring in Kenya in 1954 in the Lamu Embayment where they drilled ten wells. None of the wells were fully evaluated or completed for production despite several indications of oil staining and untested zones with gas shows. In Mandera Basin, Frobisher Ltd., Adobe Oil Company and Burmah Oil Company conducted photo geological field geology, gravity, aeromagnetic and seismic surveys that did not materialize into drilling programs (www.nationaloil.co.ke). In 1975, several consortia acquired acreage in upper part of Lamu Basin. Texas Pacific et al drilled Hargaso-1 in 1975 and encountered oil and gas shows in the Cretaceous rocks. In 1976 Chevron and Esso drilled Anza-1 and Bahati-1 wells in the southern part of Anza Basin.

The drilling mud of both tests was suspected of having hydrocarbons and microfossils that contaminated the geochemical and cuttings respectively. An interest in the offshore portion of the Lamu Basin resulted in the drilling of three deep wells, Simba-1, Maridadi-1 and Kofia-1 by a consortium of Cities Services, Marathon and Union in 1982. Seismic data revealed that salt diapiric structures were present along the Kenyan margin. In 1986, the petroleum exploration and production legislation in Kenya was revised to provide suitable incentives and flexibility to attract international exploration interest in the country (www.nationaloil.co.ke).

The history of oil marketing in Kenya began in 1903 during colonial times. Initially kerosene was the main import in tins but later gasoline was imported in tins and drums. Royal Dutch Shell established the first depot on the Mombasa Island at Shimanzi. BP and Shell carried out exploration work in the 1950s with the first exploration well being drilled in 1960. Over the past 50 years many other oil and gas companies have tried their luck onshore and offshore, including Exxon, Total, Chevron, Woodside and CNOOC (Deloitte, 2013). Kenya has attracted oil & gas companies not only because of its ports and strategic location but also because the government is keen not to be left out of the exploration. Oil discoveries in Uganda and Kenya and gas deposits found off Tanzania and Mozambique have turned east Africa into a hot spot for hydrocarbon exploration. Currently there are 73 oil and gas marketing companies in branches all over country

The study concluded that the potential advantages of HRIS are faster information processing, greater information accuracy, improved planning and program development,



and enhanced employee communications. It is the realization that there are myriad applications and uses of human resource information system in human resource management but the study focused on how HRIS and its effectiveness influence the performance of companies. The study sought to come up with recommendations to enable Oil and Gas Companies effectively and efficiently adopt the use of HRIS in human resource management.

STATEMENT OF THE PROBLEM

Organizational success depends tremendously on the performance of human resource management (HRM) (TroshaniJerram&Rao, 2011). Thus, the adoption of Human Resource Information System (HRIS) in organizations should impact on the performance. However, HRIS differs in its functionality and application from administrative applications, talent management applications, workforce management applications, service delivery applications and workforce analysis and/or decision support applications. For instance, a survey conducted in the USA in 2009 indicated that 70% of large firms' used HRIS in which case 80% conducted online recruitment, 67% posted job opening online and 40% used web based portals as a means of communicating company policy (Grobleret al., 2009). In another study, Kinnie and Arthurs (2010) found that the most frequent uses of HRIS were in operational areas of employee records (72%) followed by payroll (66%) and pensions (57%). Teo, Soon and Fedric (2011) found that HRIS was predominantly used for employee record keeping (96.8%) and payroll (90.5%). This indicates that HRIS may have varying impact in different contexts. As such, the influence exerted by HRIS in different contexts is worth investigating.

Oil and gas exploration companies are faced wide challenges which in turn affect their overall performance. These include constrains in making timely purchases and supplies, increased cost of transactions and competition from the competitors (Petroleum Insight, 2007). Fast technological progress, changes in customer preferences, new regulations and other market shifts compel the firms to reconfigure their asset bases and processes continuously to match the requirements of the dynamic operating environment. HRIS could therefore have a significant influence on the performance of these companies. This influence should be established.



Several studies have been conducted on HRIS. For instance, Ngai and Wat (2006) conducted a survey of the implementation of HRIS in Hong Kong organizations. However, in this study, the contributions of the various aspects of HRIS on performance were not adequately explored. Florkowski (2006) carried out a study on the diffusion of human-resource information-technology innovations in US and non-US firms. However, this study cannot be extrapolated to cover the Kenyan context because of the differences in the operating environment.

In the Kenyan context, Macharia (2011) studied the role of human resource information systems in strategic human resource management. The study was however, focused on the strategic role and in SMES which cannot be generalized to apply in the context of oil and gas exploration companies. Kirui (2012) studied the role of information systems in human resource management. The study was focused on the manufacturing industries. The study however did not focus on performance specifically and also cannot be generalized to the context of oil and gas exploration companies. A review of these studies indicates that, the link between HRIS and performance particularly in oil and gas exploration companies in Kenya is an area that has received little attention amongst researchers. This has created a research gap that this study sought to address by investigating the influence of HRIS on the performance of Oil and gas Companies in Kenya.

RESEARCH OBJECTIVE

To examine the influence of automated human resource planning system on performance of Oil and Gas Companies in Kenya

RESEARCH QUESTION

How does automated human resource planning system influence the performance of Oil and Gas Companies in Kenya?

LITERATURE REVIEW

Theoretical Review

A theory is basically a set of assumptions or propositions, logically or mathematically linked. It is also referred as an explanation in general terms connected to natural observable phenomena (Kothari 2011). This study was guided by Resource based theory which explains how it can help improve firm performance.



Resource Based theory

The resource based theory commonly referred to as resource based view (RBV) can be traced to the works of Penrose (1959). The argument in the theory is that a firm consists of a collection of productive resources' and these resources may only contribute to a firm's competitive position to the extent that they are exploited in such a manner that their potentially valuable services are made available to the firm. Wernerfelt, (1984), attempted to formalize the RBV concept by arguing that while a firm's performance is driven directly by its products, it is indirectly (and ultimately) driven by the resources that go into their production. Thus, firms may earn above normal returns by identifying and acquiring resources that are critical to the development of demanded products. This brought on board the concept that these resources are not only static but include firm's inimitable skills, technologies, knowledge, etc., with which they are deployed (Newbert, 2007).

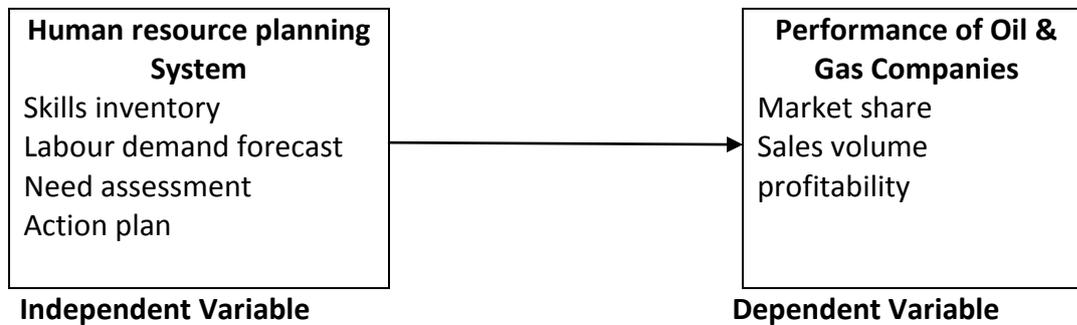
Wright and McMahan (2009) affirm that RBV is more suitable in explaining performance, based on path dependency and administrative heritage. It is however less useful in predicting under what circumstances the specific resources of a company will generate a sustainable competitive advantage. Another criticism is that the inside-out perspective tends to neglect the importance of contextual factors, including the Porter-based factors (such as threat of market entry and threat of suppliers), as well as the institutional setting, which is particularly crucial from a HRM point of view. Hence, to fully understand (strategic) human resource management in, for example, different institutional settings, there is need for an additional theory (Wright and McMahan, 2009).

The resource-based theory has caused a change in strategic management thinking from an outside-in approach to an inside-out approach. In this 'new' stream of thought, internal resources form the starting point of determining organizational success, in contrast to the 'old' paradigm of outside-in thinking. Authors like Kamoche (1996), Boxall (2008) and Wright et al. (2009) applied this theory to the field of human resource management and state that it is people that encompass the properties assumptions of value, rareness, inimitability, and non-substitution, – which according to Barney (2001) are the necessary conditions for organizational success. According to Delery and Shaw (2011), the choice of the resource-based view (RBV) affords the researcher several advantages in investigating the strategic nature of HRM.



Conceptual Framework

Miles and Huberman (1994) defined a conceptual framework as a visual or written product that explains, either graphically or in narrative form the main things under study- the key factors, concepts, or variables and the presumed relationships among them. A conceptual framework was developed to verify the influence of HRIS on the performance of oil and Gas Companies in Kenya.



Automated Human Resource Planning System and Performance

Human resource planning is the process of making a decision about what positions inside the firm to fill and how to fill them (Desseler, 2013). It is also the process of identifying current and future HR needs for an organization to achieve its goals as well as forecasting a firm's future demand and supply (DeCenzo and Robbins, 2010). The human resource planning system has the role of conducting special studies to provide data on the firm's human resources. Such system consists of two steps: assessing current human resources and meeting future human resource needs. It helps HR managers to ensure that they have the right number and kinds of capable people in the right places and at the right (Chowdhury et al., 2013). This is especially facilitated by skills inventory. This system keeps track of employee skills and matches employees with specific jobs. The skills inventory contains information about every employee, such as work experience, work preferences, test scores, interests, and special skills or proficiencies (Chauhan et al., 2011).

This function serves as a link to the overall strategic plan of an organization. Human resource planning is a continuous process that works on both long-term and short term. Forecasting of staff requirements is well established in HRM vocabulary. It is assumed that human resource planning has influence on companies' performance because in whatever businesses do, they cannot ignore the human aspect. As such, Armstrong (2006) appears to suggest that human resource planning contributes to organizations earnings/returns by



reducing costs, employees training, associating with modern environmental and technological changes are several considerable advantages of human resource planning.

Barron, Chhabra, Hanscome and Henson (2004) perceived automated HR planning to emphasize mainly the retention of capable employees and the reduction costs associated with maintaining them. Automated HR planning also gives opportunity to HR professionals to enhance their contribution to the long-term plan of enterprises. Firstly, by automating and devolving many routine HR tasks to line management, HRIS provide HR professionals with the time needed to direct their attention towards more business critical and strategic level tasks, such as leadership development and talent management (Lawler & Mohrman, S.A. 2003). It also provides an opportunity for HR to play a more strategic role, through their ability to generate metrics which can be used to support strategic decision making (Lengnick-Hall & Moritz, 2003).

Automated HR planning system also support long range planning with information for labour force planning and supply and demand forecast; staffing with information on equal employment, separations and applicant qualifications; and development with information on training programs, salary forecasts, pay budgets and labour or employee relations with information on contract negotiations and employee assistance needs (Shiri, 2012). Risk and security management is another crucial function which can be derived by automated HR planning system by following private and highly sensitive individual data and multiplatform security aspects which are perhaps the most serious factors that need to be taken into consideration (Karakanian, 2000).

Dessler (2005) added that, automating HR planning system influence manpower activities by: Making a regular analysis of the human resource needs of the company through matching the supply of human resource with the demand for it – the system identifies unfilled positions accurately; Providing insights into organizational training needs by identifying deficiencies in employee's performance and then select the right persons to be trained at the right time after which the system evaluates the effectiveness of the training programs. Wiblen, Grant and Dery (2010) also asserted that, the performance related data and productivity information data embedded in the HRIS is used as evidence in employee



grievance matters; careful documentation of employee performance, method of measuring the performance of employees and reporting system, which is critical to organizations.

Firm's Performance

Firm performance is defined as “the economic outcomes resulting from the interplay among an organization’s attributes, actions and environment” (Combs et al., 2005, p. 261). Organizational performance involves measuring and evaluating the quality, effectiveness, and efficiency by using output and outcome indicators. Gibson et al., (2010) defined firm performance as the final achievement of an organization that contains measures such as the existence of certain targets to be achieved, has a period of time in achieving the targets and the realization of efficiency and effectiveness. Historically, firm performance has been focused on ‘cost’ or ‘savings’. However, due to increased focus on business results, performance measurement has been extended to broader business and operational objectives (Lisa, Tate, & Corey, 2008).

While effectively measuring organizational performance may appear simple a critical look into the issue will show that adequate measurement of a firm performance is a bigger issue. Functions like Human Resource and Finance can have their performance measured. Some firms use metrics to measure departmental performance which never hit the general ledger, and this compound the performance measurement dilemma. In an increasingly dynamic and information-driven environment, the quest by business leaders and management researchers for performance measures which reflect competitive productivity strategies, quality improvements, and speed of service is at the forefront. Company performance should be judged against a specific objective to see whether the objective is achieved. Without an objective, a company would have no criterion for choosing among alternative investment strategies and projects. For instance, if the objective of the company is to maximize its return on investment, the company would try to achieve that objective by adopting investments with return on investment ratios greater than the company's current average return on investment ratio (Brah&Rao, 2000).

Firm performance can be assessed by an organization’s efficiency and effectiveness of goal achievement (Robbins & Coulter, 2002). According to Andersen (2006) effectiveness is conceptualized as a degree of goal attainment in which case profitability is the ultimate goal



for most firms. Schermerhorn et al (2002) pointed out that performance refers to the quality and quantity of individual or group work achievement. Pearce and Robinson (2003) highlighted three economic goals, which define a company's performance guided by strategic direction. These goals are survival in the market, growth and profitability. A firm's growth is tied inexplicitly to its survival and profitability. Survival means a long term strategy to remain in business and inability to do so mean the company is not capable of satisfying the stakeholder's aims. Although product impact market studies have shown that growth in the market share is correlated with profitability, other important forms of growth do exist. Growth in the number of markets served, in the sales volume, in the variety of products offered, in the technologies that are used to provide goods or services often indicate enhanced firm's performance (Pearce and Robinson, 2003).

There are several performance measurement systems used such as the balanced scorecard developed by Kaplan and Norton (1996). In this study, the researcher will use automated human resource planning system, recruitment and selection system, training and development system and performance appraisal system to show how human resource information systems influence performance of oil and gas exploration companies in Kenya.

RESEARCH METHODOLOGY

Research Design

Descriptive research design was used in this study. Kothari (2004) defines research design as the structure that guides the execution of a research method, and the subsequent analysis of acquired data. This method also allows for a flexible approach when important new issues and questions arise during the duration of the study.

Target Population

The target population for this study was the Oil and Gas Marketing Companies in Kenya. However, respondents were drawn the human resource department of 15 oil and gas companies namely: Libya oil kenya limited, Total Kenya, Kenol-Kobil, Vivo Energy, Gulf Energy Limited, Hass Energy Limited, Hashi Energy limited, Galana oil, Gapco Kenya Limited and Engen Kenya limited, Astrol Petroleum Company Limited, Essar Petroleum (EA) Limited, National Oil Corporation of Kenya Limited, Regnol Oil Kenya Limited and Xenergy Limited whose headquarters are based within Nairobi County and have well established human



resource offices. The study targeted the senior personnel preferably the manager in human resource, employee relations, and administration, training and development and finance/accounts. In addition, the assistant to each of the aforementioned were also targeted thus making it a total of 10 respondents from each company. Therefore, the total target population for this study was 150 respondents.

Target Population

Company	Target Respondents (Senior most personnel in charge and his/her assistant for each category)					
	Human Resource	Employee Relations	Adminis- tration	Training and Development	Finance/ Accounts	Total
Libya oil Kenya limited	2	2	2	2	2	10
Total Kenya	2	2	2	2	2	10
Kenol – Kobil	2	2	2	2	2	10
Vivo Energy	2	2	2	2	2	10
Gulf Energy Limited	2	2	2	2	2	10
Hass Energy Limited	2	2	2	2	2	10
Hashi Energy limited	2	2	2	2	2	10
Galana oil	2	2	2	2	2	10
Gapco Kenya Limited	2	2	2	2	2	10
Engen Kenya limited	2	2	2	2	2	10
Astrol Petroleum Company Limited	2	2	2	2	2	10
Essar Petroleum Limited	2	2	2	2	2	10
National Oil Corporation of Kenya Limited	2	2	2	2	2	10
Regnol Oil Kenya Limited	2	2	2	2	2	10
Xenergy Limited	2	2	2	2	2	10
Total Target Population	30	30	30	30	30	150

Sample and Sampling Procedure

Purposive sampling design was used in this study. This study used Naasiuma (2000) model to determine the sample size. The sample size in this study was determined using the following formula:

$$n = N (cv^2) / \{cv^2 + (N-1) e^2\}$$

Where n = sample size

N = target population

Cv = co-efficient of variation which is taken as 0.5



E = Tolerance at desired level which is taken at 0.05 or at 95% confidence level

Using this formula, the sample size is:

$$n = 150 * (0.5)^2 / \{(0.5)^2 + (150-1) (0.05)^2\}$$

$$n = 150 * 0.25 / \{0.25 + (149 * 0.0025)\}$$

$$n = 37.5 / \{0.25 + 0.3725\}$$

$$n = 37.5 / 0.6025$$

$$n = 60(\text{approximately } 40\% \text{ of the total target population}).$$

The sample size was thus 60 respondents. According to Mugenda & Mugenda (2003) and Gall et al. (2007), a sample size of between 10 and 30 % is a good representation of the target population; hence, the 40% sample size was considered adequate for this study.

Data Collection Instrument

The study used a semi-structured questionnaire to collect data. The questionnaire contained close-ended questions, open-ended questions and likert scale questions. A questionnaire communicates to the respondent what is intended and elicits desired response in order to achieve the research objectives (Chandran, 2004). The close-ended questions provided more structured responses to facilitate tangible recommendations. The open ended questions helped to probe more information from the respondents by allowing them to express their views in their own words and understanding. The likert questions were used to test the rating of various aspects and this will helped in reducing the number of related responses in order to obtain more varied responses.

Data Collection procedure

The study collected both primary and secondary. Secondary data was collected from journals, text books and relevant thesis both published and unpublished. The study developed the questionnaire to be used for data collection. The questionnaire used both open ended questions and closed ended questions which were followed by an explanation (Appendix 2). The study physically administered the research instruments to the respondents. The language used in the instruments was simple and easy to understand and instruction on how to fill the questionnaire given. Drop and pick up later method was used.

Data Analysis and Presentation

The study gathered qualitative and quantitative data. Descriptive statistics such as mean, standard deviation, frequency and percentages was used in analyzing quantitative data



(Kothari, 2004). On the other hand, qualitative data was analyzed using content analysis. Data was presented using frequency tables and bar graphs. To enhance data handling, Statistical Package for Social Sciences version 21 (SPSS) was used due to its ability to handle both small and voluminous data (Dempsey, 2003). Descriptive statistics was used to analyze and present the data in the form of frequency distribution and bar graphs along with an explanation of the study findings. Inferential statistics was also carried out to establish the nature of the relationship that exists between variables. A multiple regression equation for predicting Oil and Gas Companies performance was expressed. Inferential statistics such as non-parametric test which include variance analysis were used to test the significance of the overall model at 95% level of significance.

RESEARCH FINDINGS AND DISCUSSION

Distribution of Responses on Automated HR planning system

The figure below shows that a vast majority 64% mentioned that their companies had automated HR planning system while a few 36% said that they did not have. The respondents indicated that the HR planning system enabled the company forecast its future demand and supply as well as performance.

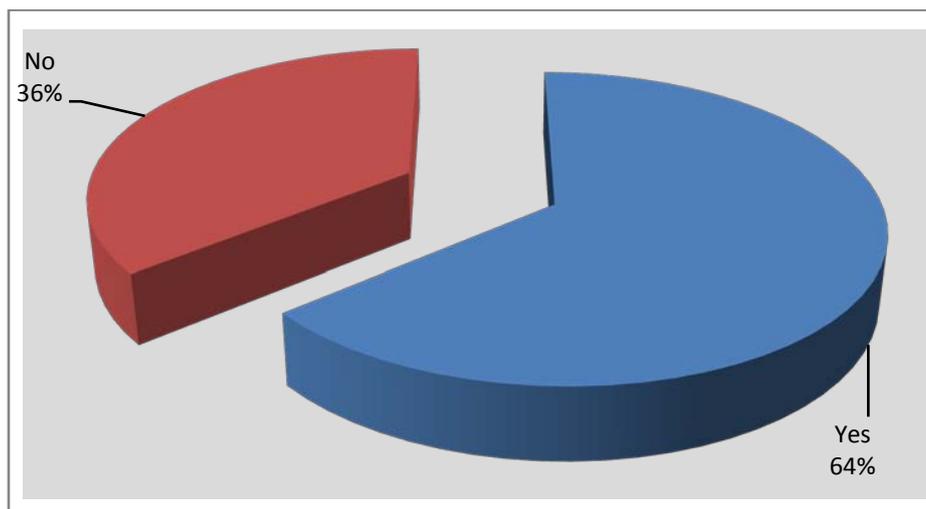


Fig. Distribution of Responses on Automated HR planning system

Distribution of Responses on Variables of Automated HR planning system

The study sought to examine the influence of automated human resource planning systems on the performance of oil and gas companies in Kenya. The findings were as follows;



Distribution of Responses on Variables of Automated HR planning system

Statement	SD	D	N	A	SA	Mean	StdDev
Human resource information systems identifies both qualitatively and quantitatively unoccupied positions accurately	1.8	5.4	17.9	42.9	32.1	4.0	0.9
Human resource information systems maintains skill inventory (ability, capacity, qualification and career goals)	8.9	7.1	12.5	42.9	28.6	3.8	1.2
Organization's human resource planning is highly effective and efficient	5.4	8.9	3.6	50.0	32.1	3.9	1.1
Future supply and demand of labour can be forecast using the What-if analysis function of Human resource information systems	5.4	8.9	-	46.4	39.3	4.1	1.1
Through Human resource information systems, more relevant information has become available in regard to employees for managers to make decisions	1.8	7.1	5.4	32.1	53.6	4.3	1.0
Human resource information systems identifies human resource need to achieve organization's goals and aligns the organization HR strategy	5.4	3.6	1.8	46.4	42.9	4.2	1.0

The table above illustrates the extent to which the following factors determine automated HR planning system affects performance of the companies. Five (5) statements/indicators were used to test the extent to which they influence performance. Likert scales were then used at 5 point where 1 represented an extreme disagreement on the statements with 5 points indicating a strongly agreement. Mean and standard deviation were then used to interpret the data. The higher the mean, the stronger the particular statement. Findings revealed that, Human resource information systems identifies both qualitatively and quantitatively unoccupied positions as supported by mean of 4.0 and a standard deviation of 0.9. The respondents were of the view that Human resource information systems maintains skill inventory (ability, capacity, qualification and career goals) as given by mean of 3.8 and standard deviation of 1.2. Organization's human resource planning is highly effective and efficient as shown by a mean of 3.9 and standard deviation of 1.1 while Future supply and demand of labour can be forecast using the What-if analysis function of Human resource information systems as given a mean of 4.1 and standard deviation of 1.1 The research further gathered that Through Human resource information systems, more relevant information has become available in regard to employees for managers to make



decisions as shown by a mean of 4.3 and standard deviation of 1.0 while others mentioned that Human resource information systems identifies human resource need to achieve organization's goals and aligns the organization HR strategy Human resource information systems evaluates the recruitment processes effectively as given by mean of 4.2 and standard deviation of 1.0.

The results of the study conform to the literature review that HR planning helps a company current and future HR needs for an organization to achieve its goals as well as forecasting a firm's future demand and supply as stipulated by (DeCenzo and Robbins, 2010) Future supply and demand of labour can be forecast using the What-if analysis function of Human resource information systems this is further in alignment with (Chowdhury et al., 2013) who inferred that automated HR systems helps HR managers to ensure that they have the right number and kinds of capable people in the right places and at the right.

Through Human resource information systems, more relevant information has become available in regard to employees for managers to make decisions. Automated HR planning emphasizes mainly the retention of capable employees and the reduction costs associated with maintaining them. Barron, Chhabra, Hanscome and Henson (2004) perceived Automated HR planning also gives opportunity to HR professionals to enhance their contribution to the long-term plan of enterprises.

Human resource information systems maintains skill inventory (ability, capacity, qualification and career goals). Providing insights into organizational training needs by identifying deficiencies in employee's performance and then select the right persons to be trained at the right time after which the system evaluates the effectiveness of the training programs. The study findings are in agreement with findings by Dessler (2005) that, automating HR planning system influence manpower activities by: Making a regular analysis of the human resource needs of the company through matching the supply of human resource with the demand for it – the system identifies unfilled positions accurately.

Firm's Performance

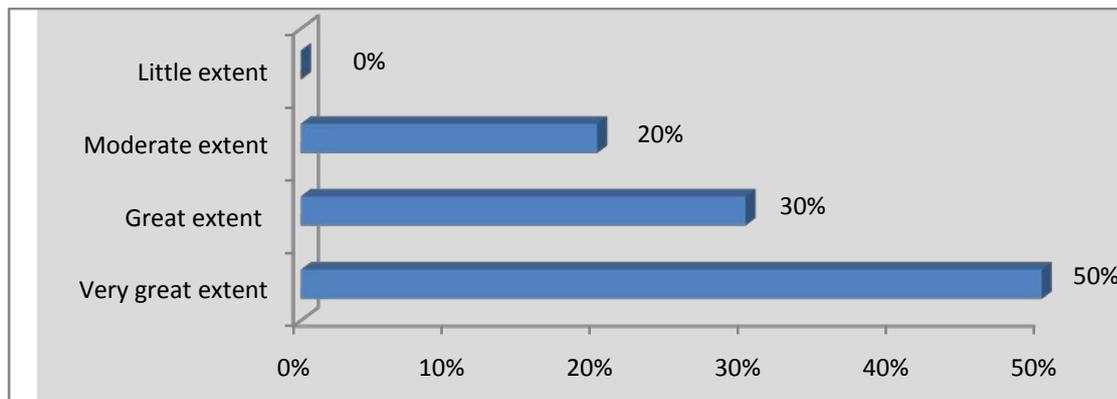
Organizational performance involves measuring and evaluating the quality, effectiveness, and efficiency by using output and outcome indicators. Company performance should be judged against a specific objective to see whether the objective is achieved. Without an objective, a company would have no criterion for choosing among alternative investment



strategies and projects. This section captures functions on Human resource information systems and its significance in improving the company performance.

Extent adoption of HRIS has improved Performance of the Company

The findings depict that majority of the respondents 50% said that adoption of HRIS has improved Performance of the Company to a very great extent while 30% and 20% indicated that the adoption was to a great extent and moderate extent respectively



Extent Human Resource information Systems has enhanced aspects of Performance

The study sought to establish the influence of human resource information systems on performance of oil and gas companies in Kenya. The findings were as follows

Extent Human Resource information Systems has enhanced aspects of Performance

Aspect	0-40%		40-80%		above 80%		Total	
	F	%	F	%	F	%	F	%
Market Share	6	10.7	20	35.7	30	53.6	56	100.0
Sales Volume	13	23.2	25	44.6	18	32.1	56	100.0
Profitability	10	17.9	30	53.6	16	28.6	56	100.0

The table above shows that majority 53.6% indicated that market share was above 80% since adoption of automated HRIS systems while a few 35.7% said that the market share was between 40-80%. On the other 44.6% depicted that the sales volume was between 40-80% since adoption of HRIS systems, while a lesser percent said that it was above 80%. Lastly 53.6% stated that their profitability was between 40-80% while a few 28.6% said that it was above 80%. This is an indication that the oil and gas companies HRIS systems are slowly enhancing the aspects of performance.



The study established that automated human resource planning was positive and significantly related to performance. This implies that that Human resource information system maintains skill inventory. Future supply and demand of labor can be forecast, and relevant information has become available in regard to employees for managers to make decisions, need assessment and action planning.

Regression Analysis

Regression coefficient matrix

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.40	0.20		1.95	0.05
Human resource planning	0.21	0.05	0.26	4.19	0.00

Dependent Variable: Firm performance

At multivariate level, firm performance is 0.40 if the independent variables (that is human resource planning was rendered absent. This means that if the stated independent variable did not, at all, determine the firm performance' programmes the level of reformation would rate 0.40 points. Results are also interpreted to mean that, at multivariate level, a change in one unit of human resource planning would lead to firm performance by 0.21 units; In summary, the independent variable considered in this study positively lead to a change in the firm performance.

Coefficient of determination

Coefficient of determination, also called R-Square (R^2) gives the proportion of variance in the dependent variable (performance) which can be predicted from the independent variable. If there are significant outliers, R^2 is adjusted/corrected for errors.

Coefficient of determination

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.866	0.751	0.739	0.204

Source: Research Data (2017)

The table above illustrates R^2 of 0.751 which means that for any change in the firm performance programmes, all the predictors collectively explain up to 0.751 (also stated as



75.1%) of that change. Adjusted R Square was 0.739, a figure close to that of R^2 which indicates that there were no significant outliers in responses for the variable.

CONCLUSION

The study concludes from its findings that Human resource planning system is significant on the firm's performance. This implies that oil and gas companies do not use human resource planning system to analyze the current and future needs to achieve their goals, forecast on firms future demand and supply for enhanced performance.

RECOMMENDATION

The study recommended that for the Oil and gas companies should have an established and properly managed human resource planning system that is relevant to the objectives of the company to enable it achieve all the firm performance indicators such as market share, profitability and higher growth rates. The management should keep up with emerging trends in Human Resource Information Systems which will eventually impact positively on human resource development and ultimate performance of the company.

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