

## INFLUENCE OF HUMAN RESOURCE INFORMATION SYSTEM ON THE PERFORMANCE OF OIL AND GAS COMPANIES IN KENYA

Esther Kanyua Kiruja

Department of Business Administration and Entrepreneurship, Technical University of Kenya

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**Abstract:** This study sought to address by investigating the influence of Human Resource Information System and performance of Oil and gas Companies in Kenya. Specifically, the study investigated the effects of recruitment and selection, training and development and performance appraisal systems on performance of Oil and gas Companies in Kenya. The study used descriptive research design. The target population was 150 oil and gas marketing companies whose headquarters are based within Nairobi County. The human resource manager, employee relations manager, administrative officer, training and development officer, payroll officer together with the assisting officer for each was targeted. Thus, 10 respondents from each company were targeted giving a total population of 150 respondents. A sample size of 60 respondents was purposively selected. A questionnaire was used for data collection. Descriptive statistics was used to analyze and present the data. Inferential statistics were also used out to establish the nature of the relationship that exists between variables using regression analysis. Pearson's Coefficient Correlation analysis was used to examine the type and extent of the relationships. The study concluded that human resource information systems affect training and development and the firm performance of the oil and gas companies to a high extent. This is prevalent after adoption of HRIS systems the companies has experienced a trending growth in market share, growth and profitability. The study further indicate strongly that integration of training in the human resource information systems has a greater impact since the employees can easily access it in their own favorable times. The study recommended that oil and gas companies should fully utilize training resources by putting a fair amount in training needs assessment. The automated training and development system will only pay off if its carefully designed linking it to the organizational goals and strategy and fully implemented.

**Keywords:** Human Resource Information System, Recruitment and Selection, Training and Development and Performance Appraisal Systems

### 1. INTRODUCTION:

Human resource management is one of the arms of the organization that uses information systems to operationally position itself as well as to strategically and tactically create an environment that will enhance competitive advantage and intangible assets such as organizational reputation and sustainability (Laudon&Laudon, 2009). 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.

Using the HRIS system, employees' organization-wide can communicate more effectively with management, obtain access to company information for personal advancement such as job availability and other career opportunities, and check basic data to ensure their own rights. Resistance to change is one of the greatest challenges change managers face, particularly when the changes involve the use of information technology. The findings indicated that some of the employees were computer illiterate. This makes them resistance to change as they are unable to use the system. The ICT department requires more resources as to implement the system. Employees' input is very important during HRIS implementation as they are the end users. Job aids for different users also need to be identified during the system implementation (Mohamed, 2012).

Organizations require an efficient planning and control system that synchronizes planning of all processes across the organization to improve business performance. Organizational success depends tremendously on the performance of human resource management (HRM) (Troshani Jerram&Rao, 2011). 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. 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. 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.

## 2. RESEARCH OBJECTIVES:

- i. To assess the influence of automated recruitment and selection system on performance of Oil and Gas Companies in Kenya
- ii. To establish the influence of automated training and development system on performance of Oil and Gas Companies in Kenya
- iii. To investigate the influence of automated performance appraisal system on performance of Oil and Gas Companies in Kenya

## 3. LITERATURE REVIEW

This study was guided by Resource based theory which explains how it can help improve firm performance, Human capital theory which underpins the philosophies of human resource management and human capital management and Technology Acceptance Model which investigates user acceptance of technology.

## Resource Based View

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.

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.

## Human Capital Theory

Human capital theory is associated with the resource-based view of the firm as developed by Barney (2001). This proposes that sustainable competitive advantage is attained when the firm has a human resource pool that cannot be imitated or substituted by its rivals. Boxall (2008) refers to this situation as one that confers 'human capital advantage'. But he also notes (Boxall 2006 and 2009), that a distinction should be made between 'human capital advantage' and 'human process advantage'. The former, results from employing people with competitively valuable knowledge and skills, much of it tacit. The latter, however, follows from the establishment of: difficult to imitate, highly evolved processes within the firm, such as cross-departmental co-operation and executive development.

Accordingly, 'human resource advantage', the superiority of one firm's labour management over another's, can be thought of as the product of its human capital and human process advantages. For the employer, investments in training and developing people is a means of attracting and retaining human capital as well as getting better returns from those investments. These returns are expected to be improvements in performance, productivity, flexibility and the capacity to innovate that should result from enlarging the skill base and increasing levels of knowledge and competence. Schuller (2010) suggests that: 'The general message is persuasive: skills, knowledge and competences are key factors in determining whether organizations and nations will prosper.' This point was also made powerfully by Reich (2011).

However, Davenport (2009) has some cautionary words about the asset-based content of human capital theory. He argues that workers should not be treated as passive assets to be bought, sold and replaced at the whim of their owners – increasingly, they actively control their own working lives. Workers, especially knowledge workers, may regard themselves as free agents who can choose how and where they invest their talents, time and energy. He suggests that the notion that companies own human assets as they own machines is unacceptable in principle and inapplicable in practice; it short-changes people by placing them in the same category as plant and equipment. Important though human capital theory may be, interest in it should not divert attention from the other aspects of intellectual capital – social and organizational capital – which are concerned with developing and embedding the knowledge possessed by the human capital of an organization. Schuller (2010) contends that: 'The focus on human capital as an individual attribute may lead – arguably has already led – to a very unbalanced emphasis on the acquisition by individuals of skills and competences which ignores the way in which such knowledge is embedded in a complex web of social relationships.'

## Technology Acceptance Model

Davis (1989) introduced the Technology Acceptance Model (TAM) which is widely applied to investigate user acceptance of technology. Davis (1989) claimed that, all else being equal, an application that the end-user perceives as being easier to use than another is more likely to be accepted. According to TAM, perceived usefulness and perceived ease of use, both influence one's attitude toward system usage, which influences one's behavioral intention to use a system, which, in turn, determines actual system usage. Originally, Davis (1989) found a weak link between perceived usefulness and attitude, but a strong link between perceived usefulness and behavioral intention, therefore dropped attitude from the final model. The revised model of TAM has two versions: pre and post implementation. Davis (1989) expressed that in both the phases of implementations, individuals would depend more on perceived usefulness and perceived ease of use to form intentions which predicts acceptance behavior.

TAM has proven to be among the most effective models in the IS literature for predicting user acceptance and usage behavior. Nevertheless, few of TAM studies have investigated the impact of system characteristics as antecedents to ease of use or perceived usefulness (Wixom and Todd, 2005). In their integration of the technology acceptance literature, Venkatesh et al. (2003) stress the need to extend this literature by explicitly considering system and information characteristics and the way in which they might influence the core beliefs in TAM and might indirectly shape system usage. Studies have been to show the effectiveness of HRIS on Human Resource performance using the TAM Model. The theoretical framework shows the relationship of the TAM model's element which is the perceived ease of use and the perceived usefulness with the Human Resource Performance in terms of Human Resource Process, Time and Cost Saving, Decision Making and also the Information Effects (Shibly, 2011).

## Automated Recruitment and Selection System and Performance

Recruitment aims at providing a satisfactory pool of qualified individuals to fill jobs in a firm (DeCenzo and Robbins, 2010). Employees, job design, and job analysis set the foundation for recruitment by identifying what various people do in their jobs and how they are affected by them. Selection on the other hand is the process of collecting and evaluating information about an individual in order to extend an offer of employment (Gatewood, Field & Barrick, 2008). This process is performed under legal and environmental constraints and addresses the future interest of the organization and of the individual. Mathis and Jackson (2010) summarized this and commented that the selection process is concerned with choosing qualified persons to fill those jobs.

A good system will automate the majority (70-80%) of the recruiting process. This subsystem records details of recruitment and selection activities, like; cost and method of recruitment and selection and time to fill the position, and provide necessary information timely to the users (Chowdhury et al., 2013). Through automated recruitment and selection facilitated through automated HR planning system, managers anticipate the current and future demand of employees and the nature of workers issues, including the retention of employees. These factors are used when recruiting applicants for job opening.

Automated recruitment and selection system allow data and information about applicants regarding current employees, whether for a transfer or promotion, or outside candidates for the first time position with the firm to be collected and evaluated (Wiblen, Dery & Grant, 2010). The steps in the selection process are then applied in an ascending order: preliminary reception of applicants, initial applicant screening, selection testing, selection interview, background investigation and reference checking, supervisory interview, realistic job previews, making the hiring decision, candidate notification, and evaluating the selection process (Beulen, 2009).

There are two types of e-recruiting systems. An applicant tracking system tracks demographic information, as well as the skills of applicants and those interviewed. The search feature of applicant tracking systems can screen out the qualified resumes based on certain predefined criteria, resulting in huge timesaving for HR. Letters or e-mails can be automatically sent by the system to unqualified applicants. The second system is called a hiring management system (HMS). The main difference between it and the applicant tracking system is that the HMS uses job boards and corporate websites to create a match from a pool of applicants. An email is sent to the company when the system receives a resume that matches the recruiter's desired qualifications (Bussler and Davis, 2001-2002).

The implication therefore is a quicker interview, which reduces time to hire. “Hot prospects” can receive an offer more quickly, so a talented applicant does not disappear to another company. Passive candidates are also reached through push technology, making them aware of positions that match their skills. Both types of systems offer similar functions, and the distinction between them is not so sharp. Indeed, the internet offers several things: access, speed, precision, targeting ability, efficiency, cost and time effectiveness. A good recruiting system can reduce the hiring time by two-thirds and lower costs by 90%. Undoubtedly, when compared with newspaper ads, the internet offers much lower recruitment costs (Bussler and Davis, 2001-2002).

### **Automated Training and Development System and Performance**

Automated training and development system can be used in staff development and facilitating employees identification and enrollment of adequate or required training courses that are related to their current job or to develop their skills and abilities that enable them to carry out new jobs (Beulen, 2009). Development of existing staff needs to be maintained as different industries and sectors continue to implement new technologies. Supporting employees in identifying their professional development options and targets is the purpose of education and training tools (Beulen, 2009). As such, it contributes radically to retention management.

This system provides a system for organizations to administer and track employee training and development efforts. Sophisticated training and development systems can enable managers to approve training, budgets, and calendars alongside performance management and appraisal metrics. Establishment of automated training and development system is usually done to beef up employee’s capabilities to meet current business trends. This HRIS is enforced often after conducting performance appraisal. By this means, training and development might assist management to identify labour deficiencies, if any in the company so as to keep performance on track (Tansley, Newell& William, 2001).

With regard to the actual learning and development management, workflow is improved through automated training and development system. The system helps to track training, skills and competencies. HR can use the system to manage human capital and maximize talent. The system stores “electronic resumes” for each current employee, which gives the company an electronic inventory of its human capital. It can track where skills are in short supply and HR can develop appropriate training. Rather than going outside the company for talent, the system does queries looking for qualified internal candidates for each opening. Furthermore, employees can use the system to manage their own careers. If an employee is interested in designated career path but lacks certain skills, the employee can start appropriate training and the system tracks what courses have been completed. Ongoing training is often linked to higher wages, thus motivation to learn and morale is higher in these companies.

Furthermore, many training opportunities are offered online to employees as well as suppliers. Training schedules, handouts, and course descriptions are posted on the company intranet. The advantage of online training is its 24-hour availability, which is especially crucial for global enterprises. Online training is also cost effective, saving travel expenses and time spent away from the office. Moreover the fear of the classroom setting makes online learning attractive to some employees; it allows them to remain semi-anonymous while asking questions and allows the ability to learn at their own pace. In the future, more training will be brought directly to the desktop through desktop video, adding interactivity and more fun to the learning process (Bussler& Davis, 2001).

### **Automated Performance Appraisal System and Performance**

Performance appraisals are used for administering remunerations and salaries, and identifying individual employee strengths and weaknesses (Mathis and Jackson, 2010). It is variously called employee rating, employee evaluation, performance review, or result appraisal. It is used to assess an employee’s performance and provide feedback about past, current, and future performance expectations (Beulen, 2009).

It provides data on individual employee performance appraisal data, like; due date of appraisal, scores etc. In an automated performance appraisal system, it is possible to track core competencies and provide the manager with tips for employees needing improvement or coaching. It can also alert the supervisor to trends within the department that may indicate a need for training or management attention. On one side, these automated appraisal systems bring about invaluable advantages. For instance, they enable companies with numerous locations to



manage consistently across operations (Bussler & Davis, 2001). On the other side however, they have two major limitations.

First, they and their databases are based on raw data (such as CVs and job offers and job/role descriptions), which are organized according to some ad-hoc “reference grid” (like a job tree): indeed, limited attention is devoted to data organization and to its foundations. Data organization should be based on the central concept of competency: raw data are interesting if they convey information about what abilities are required for accomplishing tasks and what abilities individuals hold (or have acquired); this information is indeed forming the competence, required and acquired respectively.

Second, applications based on database technology do not really support the systematic analysis, exploration, and sharing of raw data and therefore offer limited support and weak integration to what can be called competence management processes. For instance, within a process for assessing individual competencies, it is difficult to implement portal services that try to automatically find out competencies of individuals from their CVs or, inside a company, from other documents (like activity or process reports which individuals have made).

Lindgren et al. (2004) emphasize further that HRIS should take into account real-time capture of information about competencies (often not aligned), capture of competence-in-making to represent what employees are willing to learn, and to support flexible analysis over the stored competencies. One major importance and justification on what an organization may gain from fully realizing its competence management; indeed, it is the way in which the company may assess its core competencies, adapts to, or adopts strategic changes. Nevertheless, portals for automated performance appraisal systems are usually not organized around the central concept of competency (even if they often refer to competency) but on raw data. They attempt to manage competencies by use of pre-established lists, free text about skills, functional areas, and areas of specialization, jobs, technological standards, and enabling technologies.

### **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). 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).

#### 4. DATA COLLECTION

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.

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). 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. 60 respondents were subjected to the research. The questionnaire was pre tested to ensure clarity and content validity prior to it being administered. Baker (1988) argues that the size of a sample for the purpose of pilot testing can range between 5% and 10%. However, Mugenda and Mugenda (2003) argue that the pretest sample should be between 1% and 10% depending on the size of the sample, the larger the sample, the smaller the percentage.

#### 5. RESULTS

##### Automated Recruitment and Selection System

Automated recruitment and selection system allow data and information about applicants regarding current employees, whether for a transfer or promotion, or outside candidates for the first time position with the firm to be collected and evaluated. This section shows section shows different variables on automated recruitment and selection systems.

##### Distribution of Responses on Variables of Automated Recruitment and Selection System

Statement	SD	D	N	A	SA	Mean	Stdev
Human resource information systems analyses each job description, job position and its job title in the organization	3.6	5.4	8.9	35.7	46.4	4.2	1.1
Human resource information systems performs comprehensive reporting and tracking of applicants effectively	7.1	5.4	0.0	55.4	32.1	4.0	1.2
Candidates are recruited through Human resource information systems e-recruiting	3.6	5.4	1.8	46.4	42.9	4.2	0.9
Human resource information systems reduces recruiting and selection costs	5.4	3.6	3.6	50.0	37.5	4.1	1.0
Human resource information systems eliminates unsuitable applicants early in the right place at the right time and focuses on promising candidates	3.6	5.4	5.4	39.3	46.4	4.2	1.0
Human resource information systems evaluates the recruitment processes effectively	7.1	5.4	1.8	50.0	35.7	4.0	1.2

Human resource information systems maintains relationships with individual who register and send in their applications to the organization	8.9	7.1	0.0	41.1	42.9	4.0	1.1
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### Automated Training and Development System

Automated training and development system can be used in staff development and facilitating employees identification and enrollment of adequate or required training courses that are related to their current job or to develop their skills and abilities that enable them to carry out new jobs. This section shows section shows different variables on automated training and development system.

### Distribution of Responses on Variables of Automated Training and Development System

Statement	SD	D	N	A	SA	Mean	Stddev
Organization uses Human resource information systems training and development subsystem at an optimum level	8.9	5.4	1.8	35.7	48.2	4.1	1.5
Human resource information systems provides insights into organizational training needs	3.6	5.4	0.0	53.6	37.5	4.2	0.9
Human resource information systems assess the budget of training and development programs in the organization	1.8	3.6	3.6	44.6	46.4	4.3	0.7
Human resource information systems selects the identifies skill gaps and the right person to be trained at the right time	1.8	10.7	7.1	41.1	39.3	4.1	1.1
Both managers and employees find Human resource information systems detailed training plan relevant to their needs	10.7	14.3	3.6	42.9	28.6	3.5	2.4
Human resource information systems evaluates the effectiveness of training programs	7.1	8.9	5.4	46.4	32.1	3.9	1.4
Human resource information systems identifies a logical progression path and indicates the steps required for advancements	5.4	8.9	3.6	46.4	35.7	4.0	1.2

### Automated Performance Appraisal System

Performance appraisals are used for administrating remunerations and salaries, and identifying individual employee strengths and weaknesses. On one side, these automated appraisal systems bring about invaluable advantages. For instance, they enable companies with numerous locations to manage consistently across operations.



## Distribution of Responses on Variables of Automated Performance Appraisal System

Statement	SD	D	N	A	SA	Mean	Stddev
Human resource information systems minimizes costs associated with succession planning or applicant tracking	3.6	5.4	1.8	37.5	51.8	4.3	1.0
Human resource information systems identifies specific key positions and targets specific employees as potential successors and ensure continuity of operations	7.1	14.3	0.0	50.0	28.6	3.8	1.5
Human resource information systems makes better and faster decisions about successor ranking in the organization	3.6	12.5	1.8	53.6	28.6	3.9	1.1
Human resource information systems supports a performance-oriented compensation process throughout the organization	0.0	7.1	5.4	48.2	39.3	4.2	0.7
Human resource information systems assists in monitoring the progress and aligns employee goals with corporate goals	1.8	3.6	7.1	41.1	46.4	4.3	0.8
Human resource information systems identifies and tracks high-potential employees and implements development plans to ensure that they are prepared to assume future leadership roles	0.0	5.4	0.0	48.2	46.4	4.4	0.6

## 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 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	2.5	25	44.6	18	32.1	56	100.0
Profitability	10	17.9	30	53.6	16	28.6	56	100.0

## Regression coefficient matrix

	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
	B	Std. Error			
(Constant)	0.40	0.20		1.95	0.05
Staff recruitment and selection	0.14	0.09	0.16	1.53	0.03
Employee development	0.23	0.05	0.28	4.50	0.00
Performance appraisal	0.21	0.06	0.24	3.39	0.00

**Dependent Variable: Firm performance**

Source: Research Data (2021)

## Correlation matrix

		Firm performance	staff recruitment and Selections	Employee development	Performance appraisal
<b>Pearson Correlation</b>	Firm performance	1.000	0.665	0.690	0.715
	Staff recruitment and selection	0.665	1.000	0.407	0.650
	Employee development	0.690	0.407	1.000	0.536
	Performance appraisal	0.715	0.650	0.536	1.000

Source: Research Data (2021)

## 6. CONCLUSION AND RECOMMENDATIONS

### Conclusion

The study revealed that human resource information system enhances organizational performance. Recruitment and selection system affects the performance of oil and gas companies. An integrated Human resource information systems reduces recruiting and selection costs. This is so through elimination of unsuitable applicants early in the right place at the right time and focuses on promising candidates.

The study concludes from its findings that human resource information systems affect training and development and the firm performance of the oil and gas companies to a high extent. This is prevalent after adoption of HRIS systems the companies has experienced a trending growth in market share, growth and profitability. The findings further indicate strongly that integration of training in the human resource information systems has a greater impact since the employees can easily access it in their own favorable times. This ensures that employees attain skills that will eventually develop them career wise.

Further, the study concluded that integration of performance appraisal in the HRIS has resulted to more positive productive developments and improvements. The automated performance appraisal has created a conducive environment through better working relationships, changed perception of employees and stakeholders towards the company therefore resulting to a significant performance improvement in the oil and gas companies. More so low resistance to change among other distracters has been addressed through better change management prospects.

### Recommendations

The study recommended that 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. The oil and gas companies should fully utilize training resources by putting a fair amount in training needs assessment. The automated training and development system will only pay off if its carefully designed linking it to the organizational goals and strategy and fully implemented.

Recruitment and selection costs should be reduced through formulated strategy of acquiring the right candidate with relevant skills and without bias. This will eventually enhance efficiency in work performance and improve the company performance at large.

Reward system as a component of appraisal system should be fully implemented at all levels of the departments as a way of motivating employees and promoting teamwork that enormously contribute to rapid performance growth.

### Suggestions for further Research

The study sought to establish the influence of human resource information systems on the performance of oil and gas companies in Kenya a case study of companies in Nairobi County. This study recommends that further research be conducted on the influences of HRIS based decision making, learning and performance appraisal processes on organizational effectiveness in the oil and gas industries as well as other industries. This will be in reaction to the fact that in this particular study, the HRIS based on organization performance and left out on other elements of organization effectiveness.

## 7. APPENDIX:QUESTIONNAIRE

### Instructions

Kindly tick (✓) inside the relevant box to indicate the correct answer where choices are given  
Write your answer in the spaces provided where choices are not given.

### SECTION A: General Information

1. Indicate your gender  
Male( ) Female ( )
2. Indicate your education level  
PhD ( ) Master ( ) Degree( ) Diploma ( )
3. What is your work Experience  
Above 10 years( ) 5 to 10 years( ) Less than 5 years( )
4. What markets do you serve?  
Local( ) Export( ) Both local and export( )
5. How long has your organization been in the petroleum import and distribution business in Kenya?  
Less than 5 years( ) 5 – 9 years( ) 10 years and above( )
- 6 i). Does the organization currently maintain HR information System?  
Yes( ) No( )
- ii). If yes, for how long have you been using Human resource information systems?  
Less than 1 year ( )  
1 to 5 years ( )  
6 to 10 years ( )  
More than 10 years ( )

### SECTION B: Automated Recruitment and Selection System

- 8 i). Has your organization automated recruitment and selection system?  
Yes ( ) No ( )
- ii) Indicate the extent to which you agree with the following statements on a scale of 1 – 5 (1= Strongly disagree, 2=Disagree, 3=Neutral, 4=Agree and 5=Strongly agree)

Statement	(5)	(4)	(3)	(2)	(1)
Human resource information systems analyses each job description, job position and its job title in the organization					

Human resource information systems performs comprehensive reporting and tracking of applicants effectively					
Candidates are recruited through Human resource information systems e-recruiting					
Human resource information systems reduces recruiting and selection costs					
Human resource information systems eliminates unsuitable applicants early in the right place at the right time and focuses on promising candidates					
Human resource information systems evaluates the recruitment processes effectively					
Human resource information systems maintains relationships with individual who register and send in their applications to the organization					

### SECTION C: Automated Training and Development System

9 i) Has your organization automated training and development system?

Yes ( )

No ( )

ii) Indicate the extent to which you agree with the following statements on a scale of 1 – 5 (1= Strongly disagree, 2=Disagree, 3=Neutral, 4=Agree and 5=Strongly agree)

Statement	(5)	(4)	(3)	(2)	(1)
Organization uses Human resource information systems training and development subsystem at an optimum level					
Human resource information systems provides insights into organizational training needs					
Human resource information systems assess the budget of training and development programs in the organization					
Human resource information systems selects the identifies skill gaps and the right person to be trained at the right time					
Both managers and employees find Human resource information systems detailed training plan relevant to their needs					

Human resource information systems evaluates the effectiveness of training programs					
Human resource information systems identifies a logical progression path and indicates the steps required for advancements					

#### SECTION D: Automated Performance Appraisal System

10 i) Has your organization automated performance appraisal system?

Yes ( ) No ( )

ii) Indicate the extent to which you agree with the following statements on a scale of 1 – 5 (1= Strongly disagree, 2=Disagree, 3=Neutral, 4=Agree and 5=Strongly agree)

Statement	(5)	(4)	(3)	(2)	(1)
Human resource information systems minimizes costs associated with succession planning or applicant tracking					
Human resource information systems identifies specific key positions and targets specific employees as potential successors and ensure continuity of operations					
Human resource information systems makes better and faster decisions about successor ranking in the organization					
Human resource information systems supports a performance-oriented compensation process throughout the organization					
Human resource information systems assists in monitoring the progress and aligns employee goals with corporate goals					
Human resource information systems identifies and tracks high-potential employees and implements development plans to ensure that they are prepared to assume future leadership roles					

#### SECTION E: Firm's Performance

11. In your opinion, to what extent has the adoption of HRIS improved the performance of this company?

Very great extent ( ) Great extent ( )

Moderate extent ( ) Little extent ( )

Any Other (Specify).....

12. To what extent has human resource information systems enhanced the following aspects of performance? (Tick Appropriately)



Aspect	0-40%	40-80%	above 80%
Market Share			
Sales Volume			
Profitability			

13. Which of the automated HR system(s) do you think has improved the performance of this company most? (Tick all the applicable systems)

Automated recruitment and selection system ( )

Automated training and development system ( )

Automated performance appraisal system ( )

14. Why do you think the above selected systems have greatly improved your company performance?

.....

15. Please give suggestions on how HUMAN RESOURCE INFORMATION SYSTEM (HRIS) in your company can be enhanced to improve the firm's performance.

**Thank you for your help in answering these questions**

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