

Journal of  
Human Resource and Leadership  
(JHRL)

**MODERATING EFFECT OF TOP MANAGEMENT  
COMMITMENT ON HUMAN RESOURCE INFORMATION  
SYSTEM AND ORGANIZATIONAL PERFORMANCE IN  
COMMERCIAL STATE CORPORATIONS IN KENYA**



## MODERATING EFFECT OF TOP MANAGEMENT COMMITMENT ON HUMAN RESOURCE INFORMATION SYSTEM AND ORGANIZATIONAL PERFORMANCE IN COMMERCIAL STATE CORPORATIONS IN KENYA

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### Abstract

**Purpose:** The study sought to determine the moderating effect of top management commitment on the relationship between human resource information system and organizational performance in commercial state corporations in Kenya

**Methodology:** This study adopted a census method, and used both qualitative and quantitative methods of data collection. The target population of the study was 165 chief executive officers (policy makers), directors of human resources and deputy directors of human resources of both pure and strategic commercial state corporations in Kenya. Fifty five interviews were carried out and forty eight of the respondents were interviewed.

**Result:** The study found that there is a moderating effect of top management on the relationship between human resource information system and organizational performance of commercial state cooperation.

**A unique contribution to theory, practice, and policy:** It is therefore, recommended that a continuous assessment on the influence of HRIS on organizational performance is necessary if commercial state corporations are to maintain the competitive advantage resulting from usage human resource information systems.

**Key Words:** *Top management, human resource information system, organizational performance, State Corporation*

## 1.0 INTRODUCTION

### 1.1 Background of the study

Globalization has stimulated the change in management cultures and philosophy (Holbeche, 2009). Recently, globalized of competition has become the rule rather than the exception for a number of industries (Bamel, Bamel, Sahay & Thite, 2014). Troshani, Jerram and Gerrard (2010), affirm that to compete effectively, at home or globally, firms often must coordinate their activities on a worldwide basis. A global information management strategy is therefore needed. O'Brien and Marakas (2011) assert that the strategic and operational importance of information technology in business is no longer questionable. As the 21<sup>st</sup> century unfolds, many companies throughout the world are intent on transforming themselves into global business powerhouses through major investments in global e-business, e-commerce and other IT initiatives (Averbook, 2012). Thus, there is real need for business managers and professionals to understand how to manage this vital organizational function (McKinnon, 2010).

Muriithi, Gachunga and Mburugu (2014) posited that globalization, rapid technological advancement, the move towards a knowledge- based economy and a host of other trends are changing the face of the modern organizations and having a major impact on the role of the human resources (HR) department. Successful adoption and implementation of innovations within the HR department to deal with these challenges and opportunities can be critical determinants of organizational success (Kago, 2014). An important innovation within the human resources management (HRM) function is the use of information technology (IT), which has led to the development of human resources information systems (Noe, Hollenbeck, Gerhart & Wright, 2008). Human resource information system (HRIS), is a system used to collect, record, store, analyze and retrieve data concerning an organization's human resources (Mejia, Balkin & Cardy, 2008).

Belcourt and McBey (2010), agree that human resources (HRs) departments of global companies assemble data such as employee attrition and hiring, compensation and benefits, ethnic, gender, cultural, and nationality distributions and load the same into data warehouses and data marts. By analyzing the past and current data business analysts get business insights and make fact based decisions (Badgi, 2012). The global HRs information systems consist of a number of component systems that are interdependent. Troshani, Jerram and Gerrard (2010) cited that the various components may be broadly classified into the following main sub-systems: data warehousing, data analytics, data mining, and data mash ups and information delivery system. These tools and processes are critical to formulate hypotheses to design data and analytical models to compute and communicate results to appropriate users. These users will then draw business insight from the results and shape business decisions that ultimately will improve performance (Shmuel, Nitin & Bruce, 2010).

Smith and Kelly (1997) as cited by Mitra (2008) believe that the future economic and strategic advantage rests with the organizations that can most effectively attract, develop and retain a diverse group of the best and the brightest human talent in the market place". In general, to maintain competitive advantage in the market place, firms need to balance the resource available to the firm to achieve the desired results of profitability and survival (Kago, 2014). The resources available to the firm fall into three general categories: physical, organizational and human. In

discussing how to gain competitive advantage in the global market porter (1990) noted the management of the human resources is the most critical of the three (Parry, Tyson, Selbie & Leighton,2007). Kariuki (2015) avers that the vision 2030 economic reform progress instigated by the government of Kenya is aimed at turning Kenya into middle income country. It incorporates information communication technology (ICT) as a social economic force under the economic pillar for driving development among other sectors. The government key objective is to turn Kenya into global ICT hub and premier location for business process outsourcing.

## **1.2 Statement of the Problem**

A report by inspectorate of state corporations Republic of Kenya, 2011 as cited by Weru (2014) avers that out of the fifty nine ISO (9001: 2008 series) certified state corporations only 10% recorded increased performance in performance evaluation results while the rest 90% exhibited poor performance contract evaluation results for the three contract years which indicates that some ISO certified SCs continue to perform below the expectations and the set target (ROK, 2012). Wachira (2013) posited that the country's labour output lagged behind global standards. Kenya was ranked 106 out of 139 countries in global competitiveness with the labour index and capital productivity being 0.84 and 0.46 respectively out of a global competitiveness benchmark of at least 5.

Resistance to change can affect or delay the adoption and implementation of HRIS, as employees may feel safer with the old paper system. Most organizations really underestimate the cultural impact of technology on their employees (Mohapatra, 2009) as cited by Aggarwal and Kapoor, (2012).

Batool (2012) agrees that HR should give the same priority to addressing these changes with employees as they do the training and implementation of software, assessing the level of employee skill and acceptance of technology and arranging training and mentoring programs within staff groups to help stressed employees. The main knowledge gap that the study attempts to answer is based on the influence of HRIS on performance in commercial state corporations in Kenya. This question is addressed by examining how performance is affected by poor implementation, policy formulation and strategic implementation of HRIS. Warui (2016) posited that empirical studies on usage of HRIS are few especially in public organizations despite the need for automation and encouragement by the government to increase the usage of HRIS in its institutions as a driver towards achievement of vision 2030. There is scant theoretical literature and empirical studies on the determinants for the adoption of HRIS in commercial state corporations in Kenya necessitating the need for this study. It is against this background that the purpose of this study is to analyze the moderating effect of top management commitment on the relationship between human resource information system and organizational performance in commercial state corporations in Kenya.

## **1.3 Objectives of the study**

To determine the moderating effect of top management commitment on the relationship between human resource information system and organizational performance in commercial state corporations in Kenya

## **2.0 LITERATURE REVIEW**

### **2.1 Theoretical review**

#### **2.1.1 Resource-based theory**

The recognition of the potential of the human assets of organizations in providing competitive advantage has prompted scholars to apply the resource based view (RBV) proposed by Barney (1991) as cited in Davila & Elvira (2009), to understand the role of human resources in organizations. RBV states that, human resources contribute to a sustained competitive advantage for an organization when they are valuable, non- tradable, non- imitable and non – sustainable (Martin & Thompson, 2010). The resource-based theory of the firm blends concepts from organizational economics and strategic management (Barney 1991, Conner 1991) as cited by Kew and Sterdwick (2010). A fundamental assumption of this view is that organizations can be successful if they gain and maintain competitive advantage (Porter 1985) as quoted by Agarwala (2010). Competitive advantage is gained by implementing a value-creating strategy that competitors cannot easily copy and sustain and for which there are no ready substitutes.

For competitive advantage to be gained, two conditions are needed: First, the resources available to competing firms must be variable among competitors, and second, these resources must be immobile that is not easily obtained (Rees & Smith, 2014). Kew and Sterdwick (2010) agree that the three types of resources associated with organizations are physical (plant; technology and equipment; geographic location), human (employees' experience and know ledge), and organizational (structure; systems for planning, monitoring, and controlling activities; social relations within the organization and between the organization and external constituencies).

Belcourt and McBey (2010), concurred that when resource based view theory is applied to analyze the value of IT, information systems are usually considered to be a type of resources. Barney (1991) as cited in Agarwala (2010), argues that organizational resource that can create advantage must have the following attributes: Valuable (the resource can enable a firm to conceive or implement strategies that improve its efficiency or effectiveness), Rare (the resources should not be possessed by a large number of competing firms), Imperfectly Imitable (the resources should not be easily imitated due to unique historical conditions, causally ambiguous, or social complex) and Non-Substitutable (The resource should not be easily replaced by other substitutes), (Farnham, 2010).

Bocij, Greasley and Hickie (2015), affirm that in promoting a resource based view of competitive advantage, there are three main elements of the resource based theory (RBT) that of great importance in establishing a context for developing a model of IS/IT capability. These elements are; resources:-resources in this context are available factors of production that are owned or controlled by the firm, including the information, systems and technology owned or available to the firm are and in the context of is management the critical resources are the knowledge and skills residing in employees or the employees of third party vendors; competencies:- the RBT perspective indicates that resources of themselves do not create value but that value is created by an organization's ability to utilize and mobilize these resources.

From an IS management perspective, competencies can be portrayed as the ability to deploy combinations of firm-specific resources to accomplish a given task and that they represent the collective knowledge of the firm in initiating or responding to change; capability- this refers to

the strategic application of competencies and their use and deployment to accomplish given organizational goals; an organization's current capability is based on its existing competencies, will be either an enabler or inhibitor in terms of the goals it can actually achieve (Bocij, Greasley and Hickie, 2015). One way to apply RBT to the management of IS to focus on competencies within the IS function and that research has identified six domains of IS competence which are strategy, defining the IS contribution defining the IT capability, exploitation and delivering solutions and supply (Zhuang & Lederer, 2016).

In light of this study this supports the variable of ICT capability Chakraborty and Mansor (2013), agree that technology readiness is dependent on organization's technology infrastructure and IT human resources. Badgi (2012) continues to argue that, based on IT expertise skills and knowledge that they use to build a web application; technology infrastructure makes an easier base on which internet technologies can be created. HRIS can become an integral part only if the organization has infrastructures and technical skills. These factors allow the technological capacity of an organization to adopt HRIS (Oliveira & Martins, 2010). Conversely, since organizations with superior technology readiness are in a better position to adopt HRIS, companies that do not have strong technology infrastructure and wide IT expertise may not take the risk of adopting HRIS. Technological readiness is a significant factor in the influence IT adoption in organizations globally (Ganczarski, 2009).

## **2.2 Empirical Review**

Managerial perceptions of the impact of HRIS on organizational efficiency a study by Kumar and Parumasur (2013), established the following: in this study, the effectiveness of the HRIS in achieving organizational effectiveness brought about managerial satisfaction which is as a result of effective human resource management leadership. Panday (2013) as cited by Kumar and Parumasur (2013) agrees that however, believes that managers are not always satisfied with the HRIS and finds that directors are generally satisfied but do not see many benefits from its usage outside of its effect on information and information sharing. Johnson and Guental (2011) are of the view that the HRIS is accompanied by greater expectations from employees for more data and more accessibility and this could impact on managerial satisfaction with the system. Managerial satisfaction with an HRIS may also be affected by the distance and isolation that it can create between HR and employees.

Managers are often used to working with HR professionals on a face-to-face basis and may find it difficult to use an online system to seek answers to their questions to complete tasks. Undoubtedly, the HRIS enables more HR content to be made available online and other administrative tasks are assigned to employees to manage; hence, the need for HR staff is substantially reduced (Ganczarski, 2009). This weakens the relationship between HR managers and the organization and could potentially lead to HR staff feeling dissatisfied due to the relationship breakdown (Johnson & Geuntal, 2012; Sergio et al., 2010). Johnson and Guental (2012) emphasizes that a new HR system involves new skills and roles for HR staff. In larger organizations HR staff tends to focus more on complex HR policy decisions and exceptions which may have financial implications for the organization (Kagio, 2012). The HRIS works well with routine administrative tasks but cannot perform complex or sensitive employee issues.

Hence, the level of education and experience required for success in a HR career will increase over the years and the profession will increasingly be divided into two groups. The first is the

content experts who work with the HRIS and provide a company specific knowledge base for the system and the second is a HR generalist, who focuses on organizational effectiveness (Daft, Kendrick & Vershinina, 2010). This future of the HR professionals could result in managers being dissatisfied with the use of the HRIS due to the ambiguity and the changing nature of the profession and role including the higher education and experience needed for a career in this field (Kavanagh & Thite, 2012). Furthermore, Shani and Tesone (2010) note that a potential factor that could hamper HR managers' satisfaction with the HRIS who is in charge of the system which affects both implementation and management.

### **3.0 RESEARCH METHODOLOGY**

This study adopted a census method, and used both qualitative and quantitative methods of data collection. The target population of the study was chief executive officers (policy makers), directors of human resources and deputy directors of human resources of both pure and strategic commercial state corporations in Kenya. Drop and pick method of administering questionnaires was used to collect quantitative data. Qualitative data was collected and analyzed using thematic analysis and emphasized on pinpointing, examining, and recording patterns or "themes" within data, and quantitative data using statistical tools namely, Statistical Package for Social Sciences (SPSS) version 22.0. A total of 165 questionnaires were administered to chief executive officers (policy makers), directors of human resources and deputy directors of human resources in both pure and strategic commercial state corporations in Kenya. Fifty five interviews were carried out and forty eight of the respondents were interviewed.

### **4.0 RESULTS**

#### **4.1 Descriptive Results**

This section contains descriptive analysis for location. A Likert scale with options of strongly disagree, disagree, neutral, agree and strongly agree were presented for answering by respondents. The results were presented in form of percentages, mean and standard deviations.

**Table 1: Top Management**

<b>Statement</b>	<b>Strong Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly agree</b>	<b>Mean</b>	<b>Std.Dev</b>
There is adequate budgetary allocation for implementation of human resource information system	9.20%	18.50%	16.00%	30.30%	26.10%	3.55	1.31
Decision made by the management are clearly communicated to other stakeholders in the organization	12.60%	12.60%	33.60%	22.70%	18.50%	3.52	1.25
The management has a proactive and continuous policy development for seamless implementation of human resource information system	8.40%	8.40%	39.50%	26.10%	17.60%	3.36	1.13
Top management has an open but realistic attitude towards ICT and bases its decisions on well-grounded expert evaluations	16.00%	17.60%	19.30%	27.70%	19.30%	3.77	1.36
The management has defined the processes for implementation of human resources information system	6.70%	14.30%	27.70%	37.80%	13.40%	3.37	1.1
The management has established clear objectives and goals for execution of all processes	5.90%	14.30%	9.20%	63.00%	7.60%	3.52	1.02
The management is involved in the audit of processes to ensure seamless implementation of human resources information system	7.60%	10.10%	26.10%	45.40%	10.90%	3.42	1.06
The management take actions based on constant reviews to guide the implementation	7.60%	14.30%	5.90%	42.90%	29.40%	3.72	1.24
<b>Average</b>						<b>3.52</b>	<b>1.18</b>

The result revealed that majority of the respondent agreed with the statement there is adequate budgetary allocation for implementation of human resource information system (Mean=3.55). The standard deviation was 1.31 implying that the answers were varied from the mean. The result revealed that majority of the respondent agreed with the statement decision made by the



management are clearly communicated to other stakeholders in the organization (Mean=3.52). The standard deviation was 1.25 implying that the answers were varied from the mean. The result revealed that majority of the respondent were neutral on the statement that the management has a proactive and continuous policy development for seamless implementation of human resource information system (Mean=3.36). The standard deviation was 1.13 implying that the answers were varied from the mean. The result revealed that majority of the respondent agreed with the statement that top management has an open but realistic attitude towards ICT and bases its decisions on well-grounded expert evaluations (Mean=3.77). The standard deviation was 1.36 implying that the answers were varied from the mean. The result revealed that majority of the respondent agreed with the statement the management has defined the processes for implementation of human resources information system (Mean=3.37). The standard deviation was 1.11 implying that the answers were varied from the mean. The result revealed that majority of the respondent agreed with the statement that the management has established clear objectives and goals for execution of all processes (Mean=3.52). The standard deviation was 1.02 implying that the answers were varied from the mean. The result showed that majority of the respondent agreed with the statement that the management is involved in the audit of processes to ensure seamless implementation of human resources information system (Mean=3.42). The standard deviation was 1.06 implying that the answers were varied from the mean. Finally the result revealed that majority of the respondent agreed with the statement the management take actions based on constant reviews to guide the implementation (Mean=3.72). The standard deviation was 1.24 implying that the answers were varied from the mean. The result further revealed that majority of the respondent disagreed with the statement that the management takes actions based on constant reviews to guide the implementation. On a five point scale, the average mean of the responses was 3.52 which mean that majority of the respondents indicated that majority of the respondents were agreeing about the statement; however the answers were varied as shown by a standard deviation of 1.18.

The respondents were asked to describe how top management has shown commitment in implementation of HRIS. Majority of the respondents indicated that top management has shown a recommendable commitment in implementation of HRIS, this was further supported by the following responses’;

Respondent 2: *Provision of budget and consultancy*

Respondent 5: *Continuous improvement and system upgrade*

The respondents were also asked to indicate how commitment or lack of it influences implementation of HRIS in the organization. Results were presented in Table 4.

**Table 2: Content Analysis**

<b>Themes</b>	<b>Frequency</b>	<b>Percentage</b>
Commitment implementation	on 92	77.3%
Lack of commitment implementation	on 27	22.7%
<b>Total</b>	<b>119</b>	<b>100%</b>

Table 4.2 below revealed that majority of the respondents (77.3%) indicated that commitment has positive influence in implementation of HRIS. Lack of commitment on the other hand as indicated by minority of the respondent (22.7%) had a negative influence on implementation of HRIS in the organization.

#### 4.2 Correlation Results

**Table 3: Top Management and Organizational Performance**

Variable		Organization performance	Top managements
Organization performance	Pearson Correlation		1.00
	Sig. (2-tailed)		
	Pearson Correlation	.513**	1.00
Top managements	Sig. (2-tailed)		0.00

\*\* Correlation is significant at the 0.01 level (2-tailed).

The results revealed that top management have a positive and significant association with organization performance ( $r= 0.513$ ,  $p=0.000$ ). These findings were consistent with that of Weir (2013) who argues that conditions in the firm's external and internal environment might enable or constrain the capacity of HR systems to develop and exploit organizational competencies.

#### 4.3 Regression after Moderation

**Table 4: Model fitness**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.884a	0.7127	0.701	0.47197

The  $R^2$  improved from 62.2% to 71.27% after moderation. This implies that top management moderates the relationship between human resource information system and organizational performance of commercial State Corporation in Kenya.

**Table 5: ANOVA**

	Sum of Squares	df	Mean Square	F	Sig.
Regression	40.504	4	10.126	75.457	.000
Residual	25.395	114	0.223		
Total	65.899	118			

The results imply that the overall effect after moderation is significant. In addition F statistic increased from 46.83 to 75.457.

**Table 6: Regression of Coefficient**

	<b>B</b>	<b>Std. Error</b>	<b>t</b>	<b>Sig.</b>
(Constant)	1.1	0.217	5.067	0.000
ICT capability*top management	0.155	0.022	7.175	<b>0.000</b>
System quality*top management	0.083	0.022	3.707	<b>0.000</b>
information quality*top management	0.035	0.027	1.294	<b>0.198</b>
information security and privacy*top management	0.071	0.026	2.742	<b>0.007</b>

The results revealed that top management positively and significantly moderates the relationship between ICT capability and organizational performance of commercial state cooperation ( $\beta = 0.155$ ,  $p=0.000$ ). These findings agree with that of Normalini, Kassim, and Kurnia (2012) agree that IT infrastructure can also be a set of firm wide services budgeted by management and comprising both human and technical capabilities. In addition the results revealed that top management positively and significantly moderates the relationship between system quality and organizational performance of commercial state cooperation ( $\beta = 0.083$ ,  $p=0.000$ ). These findings agree with that Halawi et al. (2008) supported that there is a positive relationship between system quality and user satisfaction of a knowledge management system. The results revealed that top management does not moderate the relationship between information quality and organizational performance of commercial state cooperation ( $\beta = 0.035$ ,  $p=0.198$ ). In addition the results revealed that top management positively and significantly moderates the relationship between information security and privacy and organizational performance of commercial state cooperation ( $\beta = 0.071$ ,  $p=0.007$ ). These findings agree with that of Barron, Chhabra, Hanscome, and Henson (2014) who argued that in addition to verbal support on HRIS usage given by top management to their employees, top management can demonstrate their confidence in HRIS by personally utilizing the system.

$$Y = -1.777 + 0.729X_1M + 0.151 X_2 M + -0.007X_3 M + 0.345X_4 M + e$$

Where  $X_1$  is Ict Capability,  $X_2$  is System capability,  $X_3$  is information quality,  $X_4$  is information security and privacy, M is Top management while Y is Organizational performance

#### 4.4 Hypothesis Testing for the moderator

The hypothesis was tested by using multiple linear regression. The acceptance/rejection criteria were that, if the p value is less than 0.05, the  $H_0$  is rejected. The hypothesis was that top management does not have a moderating effect on the relationship between human resource information system and organizational performance of commercial state cooperation. Results in Table 4.55 above show that the p-value was  $0.000 < 0.05$ . This indicated that the hypothesis was rejected hence there is a moderating effect of effect of top management on the relationship between human resource information system and organizational performance of commercial state cooperation. These findings agree with that of Barron, Chhabra, Hanscome, and Henson (2014) who argued that in addition to verbal support on HRIS usage given by top management to their employees, top management can demonstrate their confidence in HRIS by personally utilizing the system.

## **5.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS**

### **5.1 Summary of Major Findings**

The objective of the study was determining the moderating effect of top management commitment on the relationship between human resource information system and organizational performance in commercial state corporations in Kenya. The result revealed that there is adequate budgetary allocation for implementation of human resource information system. The result revealed that decisions made by the management are clearly communicated to other stakeholders in the organization. The result revealed that the management has a proactive and continuous policy development for seamless implementation of human resource information system. The result revealed that top management has an open but realistic attitude towards ICT and bases its decisions on well-grounded expert evaluations. Correlation results indicated that top management commitment and organization performance has a positive and significant association. Regression results further revealed that top management and performance were positively and significantly related. Therefore, the result revealed that top management commitment significantly influences organizational performance in commercial state corporations in Kenya.

### **5.2 Conclusions**

The study concluded that top management support for IT applications as the highest predictor of IT usage. The study concluded that top management support is essential for creating a supportive climate and providing adequate resources for the adoption and implementation of new technologies. The study also concluded that there is universal agreement that large-scale technology projects generally fail due to managerial, and not technical, reasons.

The study concluded that top management, with its broader perspective, is better able to identify business opportunities for the exploitation of IT and provide appropriate strategic vision and direction for the adoption and implementation of new innovations or technologies. Visible top management support also sends signals about the importance of the innovation, helping to overcome organizational resistance to HRIS.

### **5.3 Recommendations**

The study recommended the adoption of top management, since it has a broad perspective, is better able to identify business opportunities for the exploitation of IT and provide appropriate strategic vision and direction for the adoption and implementation of new innovations or technologies. In addition, visible top management support also sends signals about the importance of the innovation, helping to overcome organizational resistance to HRIS.

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