Enterprise Resource Planning System and Performance of State Corporations in Kenya

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ABSTRACT

Enterprise resource planning (ERP) system has been one of the most popular business management systems, providing benefits of real-time capabilities and seamless communication for business in large organizations. However, not all ERP implementations have been successful. Since ERP implementation affects entire organizations such as process, people, and culture, there are a number of challenges that companies may encounter in implementing ERP systems. The purpose of this study was to investigate effect of enterprise resource planning system on organizational performance in state corporations in Kenya. The study was guided by the following specific objectives: to examine the effects of financial integration, human resource management integration, procurement integration and ICT on organizational performance in state corporations in Kenya. Theories anchoring the study were Contingency theory, stakeholder theory and balanced score card. This study employed a descriptive research design. The target population were three selected state corporations in Kenya namely: Agricultural Development Corporation, Agricultural Finance Corporation and Pest Control Products Board. The targeted respondents were 330 respondents. A census method was used to select 15 managers from four departments (finance, human resource, ICT and procurement) and simple random sampling was used to select the 60 employees from the four departments (finance, human resource, ICT and procurement). The data collection instruments for this study were questionnaires for the employees and interviews for the sectional managers. The study concluded that financial integration systems are critical to the production of quality accounting information on a timely basis and the communication of that information to the decision makers. Proper management of the human capital or resource is the main objective for HR in supporting the organization's strategic development. Through procurement best practices the state corporation focuses to achieve key performance indicators on different aspects of a procurement system, including cost, quality and timeliness of processes, system productivity and system integrity. The changes to the organization's operational practices, business system and ICT infrastructure have improved operational processes and efficiency of the company. Consequently, this has reduced operating and transaction costs, increased turnover and enhanced profitability. This study recommended that State corporations in Kenya should support ability and facilitate coping with effectiveness of accounting information system (AIS) (reliability, relevance and timeliness) and performance. Accounting field success need, therefore, to incorporate the competencies associated with learning organization and organization support. The HR functions should be properly and strategically developed in order to enhance the human capital at different levels including hiring of staff, compensation /remuneration, performance reviews, training and development, *separation, succession planning among other aspects. Management in State Corporations in Kenya should ensure that there is an appropriate focus on good practice in procurement and that there is a significant procurement procedure in place to ensure compliance with all relevant guideline. The current information and communications technologies should be updated, upgraded and seamless integration both internally and externally should be done to improve the State Corporations operations. The integration of ICT in State Corporations would benefit both, service providers and customers bringing together other stakeholders as well, on a common platform.*

Key Words: Enterprise Resource Planning System, ERP, Performance, State Corporations in Kenya

1. BACKGROUND TO THE STUDY

The adoption of Information Communication and Technology (ICT) for business goes beyond simply buying an office computer and connecting it to the internet. It is made more beneficial if it is set up with integrated information systems to support the functional areas of the business. These areas include operations and management of accounting, finances, manufacturing, production, transportation, sales and distribution, human resource, supply chain, customer relationship and e-business. An example of such a system is the Enterprise Resource Planning (ERP) Software (Torach, 2011).

Tadjer (2010) emphasizes that ERP systems are one database, one application and a unified interface across the entire enterprise". ERP systems offer unique benefits to the organizations implementing them. This they do by improving the decision making process of the organizations through the provision of appropriate and timely information (Hunton et al., 2012). Globalization has necessitated most companies to standardize processes and learn the best practices embedded in ERP systems, which ensure quality and predictability in their global business interests by reducing cycle time from order to delivery (Ross, 2013). With the evolvement of ERP systems, the interest in the impact that these systems have on organizational performance has risen.

2. STATEMENT OF THE PROBLEM

ERP systems attempt to integrate all business processes into one enterprise wide solution to enhance data homogeneity and integration of modular applications (Morris & Venkatesh, 2010). To handle challenges encountered by various transactional systems within an organization, a common course of action has been the adoption of Enterprise Resource Planning (ERP) system. The challenge most organizations encounter is in consolidating ERP systems within the organization. Many organizations prefer a system platform that would provide integration for processes throughout the organization's divisional systems to replace the previous transactional systems.

ADC adopted the ERP system to streamline its support departments' operations with the eventual goal of efficiency in running its core business of revenue collection. The purpose of the ERP was to modernize the support departments Finance department, Human Resource department and Procurement and Supplies department. This adoption has been marked by a mixture of success and challenges (ADC 2017). Reports on the adoption, state that customization of the ERP software from the vendors to KRA business operations has been limited. The ERP system has also been very expensive. ERP implementation is considerably also more difficult and politically charged because the organisation is structured in such a way that there are independent support departments, each responsible for their own reports, because they each have different processes, rules, data semantics, authorization hierarchies and decision centres (KRA 2017) .

Numerous researches have been conducted on ERP on organizational performance. Internationally, Poston and Grabski (2011) analysed four financial performance measures before and after implementing ERP systems using univariate tests and their results show that adoption of ERP leads to efficiency. Hunton et al (2010) also researched on the impact of ERP systems adoption and overall organizational performance using financial ratios and their results fail to indicate a performance improvement for ERP adopters. Locally, Koske (2005) analysed the impact of use of ERP in manufacturing companies in Kenya using a survey of 16 companies and his results show that at the organizational level, ERP has very positive impact on the performance of companies. Therefore, this study sought to investigate effect of enterprise resource planning system on organizational performance in state corporations in Kenya.

3. OBJECTIVES OF THE STUDY

The general objective of this study was to investigate effect of enterprise resource planning system on organizational performance in state corporations in Kenya.

The specific research objectives were:

i. To examine the effects of financial integration on performance of state corporations in Kenya.
ii. To establish the effects of human resource management integration on performance of state corporations in Kenya.
iii. To determine the effects of procurement integration on performance of state corporations in Kenya
iv. To investigate the effects of ICT integration on performance of state corporations in Kenya.

4. RESEARCH QUESTIONS

i. What are the effects of financial integration on performance of state corporations in Kenya?
ii. What are the effects of human resource management integration on performance of state corporations in Kenya?
iii. What are the effects of procurement integration on performance of state corporations in Kenya?
iv. What are the effects of ICT integration on performance of state corporations in Kenya?

5. THEORETICAL REVIEW

5.1 Contingency Theory

The study was guided by Contingency Theory (CT) developed by Lawrence and Lorsch (1967). In this study, as the two levels in the research framework are composed of contextual factors or contingencies such as size, culture, structure, and so forth. CT assumes the existence of rational actors and often researchers using it narrow their focus to deterministic models (i.e., only the arrows representing a required association are shown and the effects of other factors are ignored) (Weill & Olson, 1989). Due to the limitations in CT and its gradually diminishing influence among researchers in IS and related field, Weill and Olson (1989) encourage the use of other theories to explain aspects of organizational behavior. The Contingency Theory states that organizational effectiveness in this instance ERP effectiveness or success can result from the matching of organizational characteristics with contingency factors.

5.2 Stakeholder Theory (ST)

This study was guided by the Stakeholder Theory (ST) that was proposed by Freeman (1984). ST states that sustainable success rests upon a systematic consideration of the views of all key stakeholders of which organizations are made up (Pouloudi & Whitley, 1997; Lyytinen et al., 1998). The Stakeholder Theory considers two perspectives: inside-in (employees, managers) and inside-out (others: shareholders, partners). In the extent IS literature, stakeholders have been identified based on a particular research purpose. For example, Lyytinen et al (1998) describe stakeholders as actors that can set forward claims or benefit from IT systems development issues.

Singletary et al. (2003) identified stakeholders as managers, IT professionals, and end users. Thus, ST could facilitate insights when ERP success is to be discussed from the point of view of differing organizational stakeholder groups, which appear to be similar to the dictates of the organizational performance literature in which "the perspective of the evaluator" is esteemed (Cameron, 1986). However, there are shortcomings in ST as well. Due to its origins, it tends to focus more on control and governance structures in corporations than on how organizational actors relate with each other. In discussing the cracks in ST, Weiss (2006, p.5) asserts that "ST grounds its view of the moral issues surrounding the enterprise in the issue of the control and governance of large corporations." Phillips (2004) sums the limitations of ST by noting that historically ST has been plagued by questions on how to allocate management resources, including time, energy, etc. to other stakeholder groups in the corporation. He adds "While there is no determinate algorithm, ST can provide some broad direction on making these decisions".

5.3 Balanced Score Card

This study was guided by balanced Balanced score card by Kaplan & Norton (1995). Balanced Score Card (BSC) suggests managers to view organization's performance from four dimensions, customer perspective, internal perspective, innovation & learning perspective, financial perspective (Kaplan & Norton, 1995). BSC incorporates financial and non-financial measures in one measurement system. The objectives and measures of BSC are derived from an organization's vision and strategy. The Balanced Scorecard provides executives with a comprehensive framework that translates a company's vision and strategy into a coherent set of performance measures. According to Kaplan and Norton (1995) the balanced scorecard not only allows the monitoring of present performance, but also tries to capture information about how well the organization is positioned to perform in the future. Furthermore, the Balanced Scorecard has evolved to become a core management tool, in that it helps CEOs not only to clarify and communicate strategy, but also to manage strategy. In practice, companies use the BSC approach to accomplish four critical management processes, clarify and translate vision and strategy, communicate and link strategic objectives and measures, plan, set targets, and align strategic initiatives and enhance strategic feedback and learning.

The Balanced Score Card (BSC) is a management system used to align business activities to the vision and strategy of the organization, improve internal and external communication and monitor organizational performance against strategic goals. It is a performance measurement tool that considers not only financial measures but also customer satisfaction, business process and learning measures (Johnson et al., 2008). Organizations primarily uses balanced score card as a performance measurement tool and recommends that the company should provide enough resources especially for funding further comprehensive sensitization on the importance of balanced score card.

6. CONCEPTUAL FRAMEWORK

Figure 1 shows the relationship between independent variables and dependent variable. The independent variables are the financial integration, human resource management integration, procurement integration and ICT integration. The dependent variable is the organizational performance in state corporations.

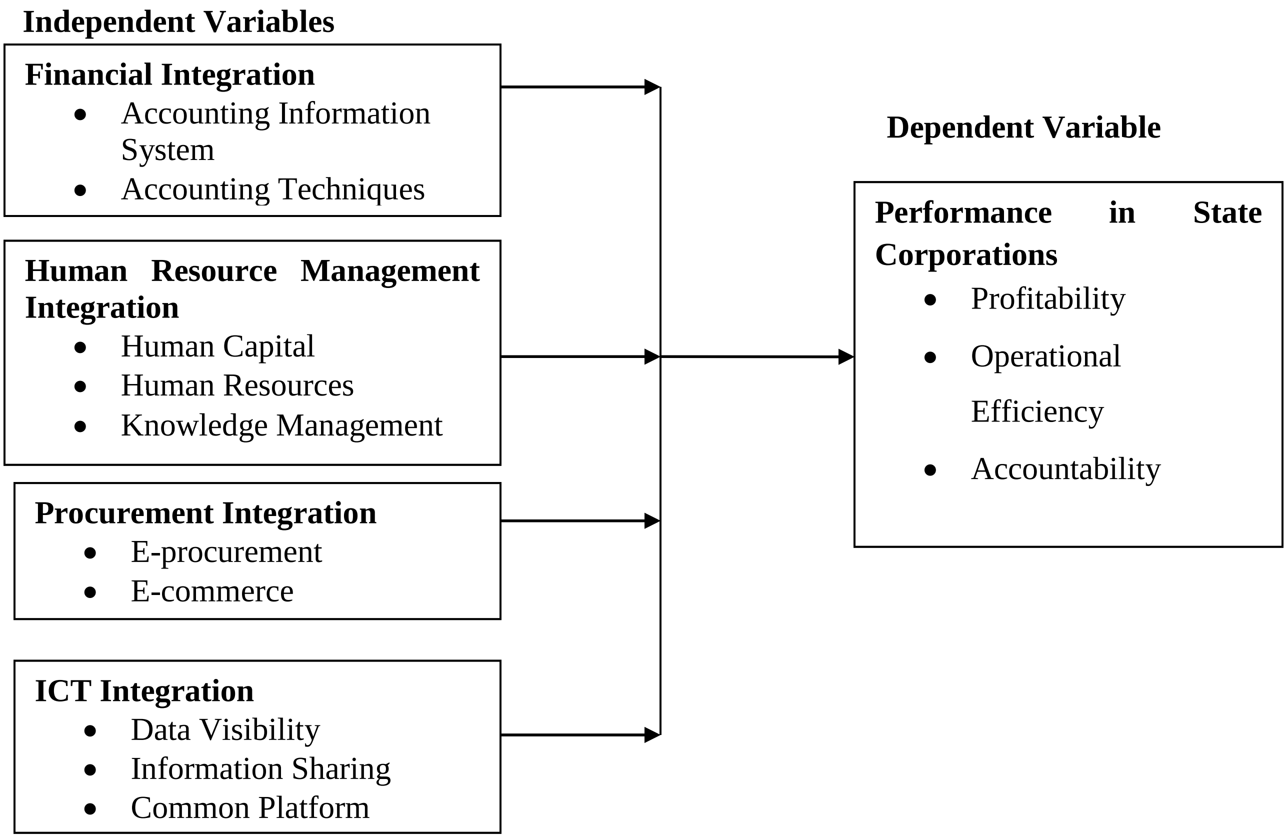

Figure 1: Conceptual Framework

7. Research Methodology

This study employed a descriptive research design. The target population in this study was three selected state corporations in Kenya namely: Agricultural Development Corporation, Agricultural Finance Corporation and Pest Control Products Board. The targeted respondents was 330 respondents comprising of 15 sectional managers and 105 employees from Finance department, IT department, Human resources, Procurement department. Stratified sampling was used to sample the respondents from the selected four departments (finance, human resource, ICT and procurement). A census method was used to select the managers and simple random sampling was used to select the employees. All the managers were selected and a 30% of the population of the employees was used to obtain a sample size. The data collection instruments for this study were questionnaires for the employees and interviews for the sectional managers.

Before the actual data is collected; the researcher carried out a pilot study in Agricultural

Development Corporation (ADC) because it is a state corporation and it will not be included in the study. The pilot study comprised of 10 respondents. The reason behind pilot study was to assess the clarity of the questionnaire items so that those items found to be vague or inadequate was discarded or modified to improve the quality of the research instruments.

To ascertain validity of the questionnaire the researcher consulted statistician for further improvements to make criticism and comments on the same. Reliability was assessed with the use of Cronbach's alpha coefficient. The coefficient was used to estimate the proportion of variance that is systematic or consistent in a set of test scores. A coefficient of 0.8 was obtained.

Collected data was first coded and then quantitatively analyzed using descriptive statistics such as mean and standard deviation according to statistical information derived from the research questions. The coded data was then tabulated and presented for statistical analysis by use of Statistical Package for Social Sciences. Correlation and regression analysis was used to show relationship between independent variable and the dependent variable.

8. DATA ANALYSIS RESULTS

In order to establish the effect of independent variables on the dependent variable, data was collected on each of the identified independent variable and thereafter, regression analysis was done. However, before carrying out the regression analysis, it was necessary to carry out correlation analysis was done to show the strength of a relationship between the independent variables and dependent variable.

8.1 Correlation

Table 1: Correlation Analysis

		Financial Integration	Human Resource Management Integration	Procurement Integration	ICT Integration
financial integration	Pearson Correlation	1	.155	-.054	.127
	Sig. (2-tailed)		.259	.693	.357
	N	55	55	55	55
human resource management integration	Pearson Correlation	.155	1	.614**	.295*
	Sig. (2-tailed)	.259		.000	.029
	N	55	55	55	55
procurement integration	Pearson Correlation	-.054	.614**	1	.555**
	Sig. (2-tailed)	.693	.000		.000
	N	55	55	55	55
ICT integration	Pearson Correlation	.127	.295*	.555**	1
	Sig. (2-tailed)	.357	.029	.000	
	N	55	55	55	55

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

**. Correlation is significant at the 0.05 level (2-tailed).*

The Pearson correlation for financial integration was found to be $r=-0.54$ ($p<0.05$) which showed a weak correlation and a negative significance with procurement integration as compared with the rest of the variables at 0.05 level of significance. P value was 0.693 greater than 0.05 which showed that the relationship was not significant. The Pearson correlation for human resource management integration was found to be $r=0.614$ ($p>0.05$) which showed a strong correlation and a positive significance with procurement integration as compared with the rest of the variables at 0.05 level of significance. P value was 0.00 less than 0.05 which showed a significance relationship. The Pearson correlation for procurement integration was found to be $r=0.555$ ($p>0.05$) which showed a weak correlation and a positive significance with ICT integration as compared with the rest of the variables at 0.05 level of significance. P value was 0.00 less than 0.05 which showed a significance relationship. The Pearson correlation for ICT integration was found to be $r=0.127$ ($p>0.05$) which showed a weak correlation and a positive significance with financial integration as compared with the rest of the variables at 0.05 level of significance. P value was 0.357 greater than 0.05 which showed that there was no significance relationship.

8.2 Regression Analysis

The researcher conducted a multiple regression analysis so as to test relationship among independent variables and dependent variable. The researcher applied the statistical package for social sciences to code, enter and compute the measurements of the multiple regressions for the study.

Table 2: Results of Multiple Regressions

Model	R	R Square	Adjusted R Square	St. Error of the Estimate
1	0.622	0.756	0.678	0.598
Financial Integration	0.654	0.547	0.756	0.500
HRM Integration	0.712	0.478	0.841	0.498
Procurement Integration	0.568	0.641	0.613	0.496
ICT Integration	0.632	0.599	0.703	0.502

Coefficient of determination explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable that is explained by all the four independent variables. The four independent variables that were studied, explain only 75.6% of the performance of organizational performance in state corporations in Kenya by the R squared. This therefore means that other factors not studied in this research contribute 24.4% of the performance of organizational performance in state corporations in Kenya. Therefore, further research should be conducted to determine the influence of performance of organizational performance in state corporations in Kenya.

Table 3: Determination of Coefficient

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
Constant	0.431	0.542		4.123	0.003
Financial Integration	0.756	0.300	0.211	3.978	0.005
Human Resource Management Integration	0.841	0.399	0.354	2.745	0.002
Procurement Integration	0.613	0.284	0.362	3.461	0.001
ICT Integration	0.706	0.461	0.245	2.999	0.006

As per the SPSS generated table above, the equation for prediction was $Y= 0.431- 0.756 X_1+ 0.841X_3- 0.613 X_3 + 0.706X_4$. Where Y= Performance of State Corporations, X_1= Financial Integration, X_2= Human Resource Management Integration, X_3= Procurement Integration and X_4= ICT Integration.

9. CONCLUSION

The study concludes that financial integration are critical to the production of quality accounting information on a timely basis and the communication of that information to the decision makers. The study findings established that there is a relationship between the financial integration and organizational performance, though it is important to highlight that an in-depth study is required to examine other factors that may influence this relationship. The information value generated by through financial integration to shareholders and stakeholders in making investment decisions is invaluable. The major challenges were lack of proper training and lack of proper system documentation as some of the challenges they face.

The study concludes that proper management of the human resource is the main objective for HR in supporting the organization's strategic development. Majority of the organizations have increasingly come to view the human resource as a unique asset that can provide sustained competitive advantage. Business success can only be achieved if organizations are successful at managing their human capital to achieve a competitive edge.

The study concludes that through procurement integration best practices the state corporation focuses to achieve key performance indicators on different aspects of a procurement system, including cost, quality and timeliness of processes, system productivity and system integrity. The procurement system is influenced by culture and technology. The aspect of how to control and coordinate the activity between the state corporations in the supply chain and how ICT affects the level of control integration in the supply chain is of great importance.

From the findings the study concludes that there is a strong positive correlation between ICT integration and organizational performance in State Corporation in Kenya. The changes to the organisation's operational practises, business system and ICT infrastructure have improved operational processes and efficiency of the company. Consequently, this has reduced operating and transaction costs, increased turnover and enhanced profitability.

10. RECOMMENDATIONS

On financial integration, state corporations in Kenya should support ability and facilitate coping with effectiveness of financial integration (reliability, relevance and timeliness) and performance. Accounting field success need, therefore, to incorporate the competencies associated with learning organization and organization support. The state corporations should sensitize the staff and customers to utilize the capabilities of financial integration.

On human resource management integration, the HR functions should be properly and strategically developed in order to enhance the human capital at different levels including hiring of staff, compensation /remuneration, performance reviews, training and development, separation, succession planning among other aspects. It would be worthwhile to ensure most of the routine and administrative duties are automated or outsourced in order to make way for the HR staff to focus on more strategic initiatives. The automation and outsourcing will enable the HR personnel to operate at both administrative and strategic levels. In order for the HR to be respected for its contribution to the business value, it has to be involved in the overall business strategy. It also must measure itself in a business manner; by ensuring that it aligns itself with other departments' goals and objectives.

On procurement integration, the study recommends that management in State Corporations in Kenya should ensure that there is an appropriate focus on good practice in procurement and that there is a significant procurement procedure in place to ensure compliance with all relevant guideline. On delivering services management must address the issue of procurement best practices as these has accrued benefits directly to the bottom line of organizations. The study also recommends that procurement teams in State Corporations should adopt a culture of collaboration and continuous improvement, create and actively use management information to inform strategic procurement decisions, embed best practice and improve organizational processes.

On ICT integration, the study recommends that the current information and communications technologies should be updated, upgraded and seamless integration both internally and externally should be done to improve the State Corporations operations. The integration of ICT in State Corporations would benefit both, service providers and customers bringing together other stakeholders as well, on a common platform. The selection of right information communications technology tool is also crucial to match the customer requirements with service dimensions.

REFERENCES

Aggarwal, N. & Kapoor, M. (2012). Human Resource Information Systems (HRIS) - Its role and importance in Business Competitiveness. *Gian Joyotie Journal*, 1(2)

Akoth, M. (2014). *E-Procurement and Organizational Performance of Non-Governmental Organizations in Nairobi, Kenya.* Unpublished MBA Project, University of Nairobi, Nairobi, Kenya

Almajali, A. Y., Alamro, S. A., & Al-Soub, Y. Z. (2012). Factors affecting the financial performance of Jordanian insurance companies listed at Amman Stock Exchange. *Journal of Management Research*, *4*(2), 266.

Amin, K. A. (2012). *Electronic Procurement and Organizational Performance among Commercial State Corporations,* Unpublished MBA Project, University of Nairobi, Nairobi, Kenya

Asemi, A., & Jazi, M. D. (2010). A comparative study of critical success factors (CSFs) in implementation of ERP in developed and developing countries. *International Journal*, *2*(5), 99-110.

Bellini, E., & Canonico, P. (2008). Knowing communities in project driven organizations: Analysing the strategic impact of socially constructed HRM practices. *International Journal of Project Management*, *26*(1), 44-50.

Borg, W. R., & Gall, M. D. (1989). *Educational Research: An Introduction* (5thed.). New York: Longman

Cooper, D. R. & Schindler, S., (2011). *Survey design*. Thousand Oaks, CA: Sage

Dhakal, T. N. & Jamil, I. (2010). Prospects and Challenges of E-Governance for Service Delivery in Nepal. Available at: http://www.napsipag.org/TEK%20NATH%20DHAKAL.pdf (accessed 15 June 2013).

Dhakal, T. N., & Jamil, I. (2010). Prospects and Challenges of E-Governance for Service Delivery in Nepal. *Reaching out to People, Achieving Millennium Development Goals through Innovative Public Service Delivery, Trivandrum, India, December*, 11-13.

Dobni, C. B. (2012). The innovation blueprint. *Business Horizons,* 49(4), 329-339.

Gable, G. Sedera, D. & Chan, T. (2013). Enterprise systems success: a measurement model, paper presented at the 24th conference of ICIS, Washington, United States.

Galani, D. Gravas, E. & Stavropoulos, A. (2010). The impact of ERP systems on accounting processes. *World Academy of Science, Engineering and Technology,* 66, 418–423.

Gibson, B. J., Mundy, R. A., Sink, H. L., (2012). Supplier certification: application to the purchase of industrial transportation services. *The Logistics and Transportation Review* 31(1), 63-74.

Government of Kenya, (2013). Report of the presidential taskforce on parastatal reforms. Retrieved: atwww.apsea.or.ke/.../76-report-of-presidential-taskforce-on-parastatal-reforms

Handfield, R.B. 1993. A Resource Dependence Perspective of Just-in-Time Purchasing. *Journal of Operations Management,* 11, 28-311.

Heeks, R., (2011). Understanding e-governance for development. i-Government Working Paper Series, Paper No. 11, Manchester, UK: IDPM, University of Manchester. Available at: http://hasp.axesnet.com/contenido/documentos/eGovernance%20for%20Development%20UNPAN.pdf (accessed 29 June 2013)

Hunton J. E., Lippincott B., & Reck J. L., (2010). Enterprise Resource planning Systems: Comparing Firm performance of Adopters and Non adopters. *International Journal of Accounting Information Systems*, 4

Hunton J. E., Lippincott B., & Reck J. L., (2013). Enterprise Resource planning Systems: Comparing Firm performance of Adopters and Non adopters. *International Journal of Accounting Information Systems,* 4

Hunton, J. E., Lippincott B., Reck J. L., (2013). Enterprise Resource planning Systems: Comparing Firm performance of Adopters and Non adopters. *International Journal of*

Accounting Information Systems, 4

Hunton, J. E., Lippincott, B., & Reck, J. L. (2013). Enterprise Resource Planning (ERP) Systems: Comparing Firm Performance of Adopters and Non-Adopters. *International Journal of Accounting Information Systems*, 4, 165-184.

Kakwezi, P., & Nyeko, S. (2010). Procurement processes and performance: Efficiency and effectiveness of the procurement function. *Retrieved April*, *3*, 2011.

Kalleberg, A. L., & Moody, J. W. (2014). Human resource management and organizational performance. *American Behavioral Scientist*, *37*(7), 948-962.

Koske, P. K., (2011). *Impact of use of ERP in manufacturing companies in Kenya*. Unpublished Master's Thesis, University of Nairobi, Kenya.

Koske, P. K., (2015). *Impact of use of ERP in manufacturing companies in Kenya.* Unpublished Master's Thesis, University of Nairobi, Kenya.

Kothari, C. R. (2004). *Research methodology: Methods and techniques*. New Age International.

Kumar, S., & Keshan, A. (2009). ERP implementation in Tata steel: focus on benefits and ROI. *Journal of Information Technology Case and Application Research*, *11*(3), 68-103.

Law, C. C., & Ngai, E. W. (2011). ERP systems adoption: An exploratory study of the organizational factors and impacts of ERP success. *Information & Management*, *44*(4), 418-432.

Morris, M. G. & Venkatesh, V. (2010). Job Characteristics and Job Satisfaction: Understanding the Role of Enterprise Resource. *Management Information Systems Quarterly*, 34, 9.

Mose, H. (2013). The Critical Success Factors and Challenges in E-Procurement Adoption Among Large Scale Manufacturing Firms in Nairobi, Kenya. *European Scientific Journal*, 9(13)

Mugenda, O. & Mugenda, A. (2003). *Research Methods: Qualitative and Quantitative Approaches*. Nairobi: Acts Press.

Nepelski, D. (2011). The impact of e-procurement on the number of suppliers. Where to move to? Information Society and Competition, German Institute for Economic Research

Nicol, W. (2013). Mainstreaming the Procurement Function into the Public Expenditure Policy and Effectiveness Dialogue. Paper presented at the World Bank Roundtable, Paris, France, January 22-23.

Nicolaou, A. I., & Bhattacharya, S. (2014). Organizational performance effects of ERP systems usage: The impact of post-implementation changes. *International Journal of Accounting Information Systems*, *7*(1), 18-35.

Nicolaou, A. I., Sratopoulos, T., Dehning, B. (2013). Financial Analysis of Potential Benefits From ERP System Adoption. *Journal of Business and Information Technology*, 2, 40-50

Ongeti, W. J. (2014). *Organizational Resources, Corporate Governance and Performance of Kenyan State Owned Corporations*. (Unpublished Ph.D. Thesis)University of Nairobi.

Padachi, K. (2011). Trends in working capital management and its impact on firms' erformance: an analysis of Mauritian small manufacturing firms. *International Review of business research papers*, *2*(2), 45-58.

Pegnato, J. A. (2013). Assessing Federal Procurement Reform: Has the Procurement Pendulum Stopped Swinging? *Journal of Public Procurement*, 3(2).

Poston R., & Grabski S, (2011). Financial impacts of enterprise resource planning implementations. *International Journal of Accounting information Systems*, 2(4), 271-294

Ravichandran, K. & Lertwongsatein, M. (2013). Effect of Information Systems Resources and

Capabilities on Firm Performance: A Resource-based View Perspective. *Journal of Management Information Systems,* 21(4), 237-276

Ross J. W. (1999). *The ERP Revolution: Surviving versus Thriving, Sloan School of Management, center for information Systems Research*, MIT Cambridge,MA

Scapens, R. W.; Jazaeyri, M. (2003). ERP systems and management accounting change: opportunities or impact? *European Accounting Review,* 12(1), 201–233.

Scottish Government official website, (2013).What is collaborative procurement? Retrieved from:http//www.scotland.gov.uk/Topics/government/Procurement/directory/collaborative Procurement. Accessed on 14/08/2013 04:10.

Spathis, C. & Constatinides, S. (2004). Enterprise resource planning systems' impact on accounting processes. *Business Process Management Journal,* 10(2), 234–251

Ssewanyana, J. & Busler, M., (2012). Adoption and usage of ICT in developing countries: case of Ugandan firms. *International Journal of Education and Development using Information and Communication Technology*, 3(3), 49-59.

Sundtoft Hald, K., & Mouritsen, J. (2013). Enterprise resource planning, operations and management: Enabling and constraining ERP and the role of the production and operations manager. *International Journal of Operations & Production Management*, *33*(8), 1075-1104.

Tadjer, R. (2010). *Enterprise resource planning.* Internet week, Manhasset, April 13.

Thai, K.V., & Grimm, R. (2000). Government Procurement: Past and Current Developments. *Journal of Public Budgeting, Accounting & Financial Management*, 12(2), 231-247.

Torach J, (2011). Improving Your Business with ERP Solutions; East African Business Week (Kampala). Retrieved on 15th June 2011 from (http://www.www.busiweek.com/10/page.php?aid=58)

Zhao, Y., & Fan, Y. S. (2007). Implementation approach of ERP with mass customization. *International Journal of Computer Integrated Manufacturing*, *20*(2-3), 160-168.