EFFECT OF ENTERPRISE RESOURCE PLANNING SYSTEM ON PROJECT PERFORMANCE IN THE ROADS SECTOR IN KENYA: A CASE OF KENYA URBAN ROADS AUTHORITY

Marangu, P. G. S., & Muchelule, Y.

The Strategic JOURNAL of Business & Change MANAGEMENT
ISSN: 2312-9492 www.strategicjournals.com
Vol. 5, Iss. 4, pp 1666 - 1671, November 4, 2018. www.strategicjournals.com, ©Strategic Journals

EFFECT OF ENTERPRISE RESOURCE PLANNING SYSTEM ON PROJECT PERFORMANCE IN THE ROADS SECTOR IN KENYA: A CASE OF KENYA URBAN ROADS AUTHORITY

Marangu, P. G. S.,[*1] & Muchelule, Y.[2]
[*1] Msc. Scholar, Jomo Kenya University of Agriculture & Technology [JKUAT], Nairobi, Kenya
[2] Ph.D, Lecturer, Jomo Kenya University of Agriculture & Technology [JKUAT], Nairobi, Kenya

Accepted: November 3, 2018

ABSTRACT

Enterprise resource planning system plays a major role in the management of project resources. ERP projects are capital intensive and whereas different companies adopt different methods while implementing ERP systems, they undergo many challenges and overcoming these challenges determine the level of success of the project. The study focused on ERP systems because of their popularity with information systems (IS) researchers and practitioners and because of their strategic/operational improvement capabilities enabling firms to tackle the ever-changing business environments. The study adopted stratified and random sampling technique. Both descriptive and inferential statistics were adopted for the study. The quantitative data was analyzed by using descriptive statistics which included frequency distribution tables and measures of central tendency (the mean), measures of variability (standard deviation) and measures of relative frequencies. The inferential statistics used included regression model which established the relationship between variables. Data was presented by use of tables and other graphical presentations as appropriate for the ease of understanding. Change management was found to positive significant though weak related to project performance and explained 20.7%. The study recommended that change management to be well adopted in organizations so as to enhance project performance. The study also recommended other studies to be done to establish the other factors that affect project performance in Roads sector in Kenya.

Key Words: *Change Management, Enterprise resource planning, Kenya Urban Rural Authority*

INTRODUCTION

Over the past three decades, organizations worldwide facing pressure from changing business environments have adopted (and are still adopting), sophisticated, off-the-shelf information technology (IT) applications rather than building their IT systems in-house (Gremillion and Pyburn, 2003; Lucas, 2008; Davenport, 2008; 2000; Markus and Tanis, 2000; Willcocks and Sykes, 2000; Lee 2001). For example, Lee (2001) stated that “To survive in hyper-competitive markets, it is essential for the organization to adapt to rapidly changing business circumstances. Global organizations strive for agility and flexibility in order to cope with such changes in the *internal* and *external* environments. “To confront the demands of changing business environments, organizations are increasingly turning their attention to a particular IT systems type known under a generic name: Enterprise Systems (ES).There are several types of Enterprise Systems, including Customer Relationship Management (CRM), Supply Chain Management (SCM), Supplier Relationship Management (SRM), Corporate Performance Management (CPM), and Enterprise Resources Planning (ERP) systems (Markus and Tanis, 2000; Klaus,2000; Møller, 2005).

In this study, the focus is on ERP systems because of their popularity with information systems (IS) researchers (Esteves and Pastor, 2001) and practitioners (Mabert,2003; AMR Research, 2005) and because of their strategic/operational improvement capabilities enabling firms to tackle the ever-changing business environments (Davenport,2008; 2000; Markus and Tanis, 2000; Mabert ,2003).ERP systems are packaged, complex business suites designed to integrate business processes and functions in a real-time environment (Markus and Tanis, 2000; Klaus, 2000; Møller, 2005). Given the capability of ERP systems to tackle some of the difficulties facing modern organizations, some commentators have touted them as the “price of entry for running a business” (Kumar and van Hillegersberg, 2000).

However, the opinions of some commentators in the late 1990s about the relevance and future of ERP systems in organizations differ from the comments attributed to Kumar and van Hillegersberg above. For example, Dempsey (2009) and Stein (2009) predicted that ERP would be dead in the near future. Nevertheless, data from recent IS studies and industry reports show that several thousand business organizations - large and small - around the world have adopted (and are still adopting) such technologies (van Everdingen, 2000; Klaus, 2000; Somersl, 2000; Mabert, 2003; AMR Research,2009; 2005). As organizations worldwide continue to acquire these systems, it comes as no surprise that much of the extant literature on ERP deals with issues relating to their adoption, implementation critical success factors (CSFs), and implementation methodologies (Bingi, 2009; Holland and Light,2009; Esteves and Pastor, 2001; Hong and Kim, 2002).

LITERATURE REVIEW

Temporary organization theory

This theory of the temporary organization is based on the notion that action has a leading role. An empirical reason for adopting action as a primary concept in a theory of temporary organizations is that temporary organizations are almost always motivated by a need to perform specific actions in order to achieve immediate goals. The project on the whole is seen as "the temporary organization (Rolf & Anders, 2004).A good deal of the basic project management theories see project management as being primarily about controlling, planning and scheduling and often assumes that the project work takes place within the boundaries of one organization (Lauri& Gregory, 2009).

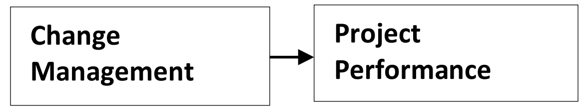
Resourced- Based View Theory

This theory is based on Wernerfelt (1984) work. It assumes that the innovative services provided by an organization to the customers are among the aspects that positively impact its competitive ability. According to Borg and Gall (2009), it is possible for a firm to remain top in the market through efficient use of resources in the implementation of strategic goals. Resource Based Theory is of the view that resources aid in production of goods and services and are classified into organizational, human and physical capital. A study conducted by Currie (2009), reveals that the variations in performance of companies are brought about by the difference in resources utilization. Thus the Resource based view theory is used to explain how business firms gain competitiveness through innovative delivering superior services to customers, and they focus on strategic identification and the use of resources for developing a sustained competitive advantage.

Lewin's Change Management Model

The Lewis‟s change management model was done by Kurt Lewin in 1940s, and still holds true today (Burnes, 1996). The model holds idea that organizational change occurs at three levels; the unfreezing, moving and refreezing. The phases are aimed at ensuring that the unproductive behaviors are discarded and new productive activities introduced (Burnes, 1996).

Conceptual Framework



Independent Variables Dependent Variable

Figure 1: Conceptual Framework

Source: Author (2018)

RESULTS

The effect of change management on Project Performance

The specific objective that the study sought to achieve was to determine the effect of change management on Project Performance. The respondents were requested to indicate their level of agreement on the effect of change management on Project Performance. The table below presented the statistics from the study.

Table 1: The effect of change management on Project Performance

Statements	SD		D		N		A		SA		Mean
	F	%	F	%	F	%	F	%	F	%	
Goal setting meetings are well communicated to staff.	6	8.7	15	21.7	23	33.3	15	21.7	10	14.5	3.12
The organization had proper training workshops and seminars to manage change.	4	5.8	17	24.6	23	33.3	19	27.5	6	8.7	3.09
Implementation of ERP changed operations of the organization to better.	7	10.1	12	17.4	21	30.4	18	26.1	11	15.9	3.20
The organization has clearly outlined job descriptions and roles.	7	10.1	6	10.0	19	31.7	31	51.7	4	6.7	3.20
System implementation positively changed the organizational culture	3	4.3	11	15.9	23	33.3	27	39.1	5	7.2	3.29

From the findings as presented in Table 1, 36.2% of the respondents agreed that goal setting meetings were well communicated to staff with majority of 33.3% were neutral in their decisions while 30.7% disagreed that goal setting meetings were well communicated to staff. On the issue of availability of training workshops and seminars to manage change, 33.3% of the respondents were not sure of it, while 36.2% collectively believed that the organization had proper training workshops and seminars to manage change. However 30.4% were of the opinion that there were no proper trainings workshops and seminars to manage change. Concerning how the implementation of ERP had changed the operations of the organizations, a collective majority of 42% believed that ERP implementation had changed the operations of the organization while 27.5% disagreed on that. However 30.4% were neutral on the issue which means there were not sure of the effect of ERP on organization performance. A collective 20.1% of the respondents disagreed that the organization had clearly outlined job descriptions and roles while a collective majority of 58.4% affirmed the presence of clearly outlined job description and roles. Only 31.7% were undecided on the issue. A collective 46.3% of respondents believed that system implementation positively affected the organization culture while 20.2% were of the contrary opinion. However 33.3% of the respondents were undecided on the same issue.

Generally there was no significant statistical evidence that suggested change management affected project performance of Roads sector in Kenya.

SUMMARY

This chapter presents the discussion of key data findings, conclusion drawn from the findings highlighted and recommendation made there-to. The conclusions and recommendations drawn were in quest of addressing the purpose of this study.

The results showed that change management affected project Performance in the Roads Sector in Kenya. The predictor was found to be significant in determining the project performance. However it was not a strong predictor of project performance as it explained 20.7% of change in project performance. There was slight evidence of staff communication on goal setting meetings at the organization. Seminars and training workshops to manage change were slightly evident from the study. The change management brought about by the implementation of the ERP system was felt by majority and could be assumed to have led to an increase in Project Performance in the Roads Sector in Kenya. Job descriptions and roles were clearly outlined as evidently shown from the study statistics. Regressing results confirmed that change management contributed significantly and had a positive coefficient to Project Performance in the Roads Sector in Kenya. Due to its significance the predictor was deemed useful in explaining the level of project performance in the Roads sector in Kenya.

DISCUSSION

The results showed that change management was significant in determining project performance in the Roads Sector in Kenya as a result of ERP implementation. This concurred with the arguments of Rugman and Hodgetts (2001) and Balogun andHailey (2008) who explained that most of the cases change was driven by the need to develop more integrated systems of working and increasing effectiveness, impact and efficiency in the organization as a way of increasing productivity and increased performance.

Change management had also positive correlation with project performance meaning an increase in one of the variable leads to an increase in the other. It was also very significant. This could be supported by Balogun and Hailey (2008) who noted that organizations change was required to adapt progressively with the change in the business dynamics so as to remain a float with the competition in the business industry. How changes were managed made the difference between success and failure in any organization

CONCLUSION

The study concluded that project planning had no significant effect on project performance in the Roads Sector in Kenya. The study also concluded that data management and risk identification on ERP implementation had no significant effect on Project Performance in the Roads Sector in Kenya. It also revealed that implementation of ERP system resulted in change management to the organization and hence an effect on Project Performance that the majority of respondents agreed with.

Thus change management explained 20.7% of the project performance which we could say though significant it’s not a strong determinant of project performance.

RECOMMENDATION

Based on the findings, the following recommendations were made. The study recommended that change management should be enhanced as this would contribute significantly to Project Performance in the Roads Sector in Kenya. KURA documented strategies, should guide them when they go astray and they should fall back and look at their failures and obstacles and then change course. They should look at both the internal and external factors that derail smooth implementation of strategy and develop policies along this line to mitigate and offer corrective measures. Risk identification should be well done though insignificant to project performance it could add value and ensure success of projects in the Roads Sector in Kenya.

Suggestion for further studies

The study determined the effect of Enterprise Resource Planning system on Project Performance: a case of Kenya Urban Roads Authority. Further studies should be carried out in different governmental bodies in Kenya for comparison. Studies could also be directed to establish challenges facing project performance among other governmental bodies.

A study also should be done to find the other effects since only change management was found to be significant and explained 20.7% of project performance thus the other predicators that explains 79.3% needs to be identified.

REFERENCES

Ackerman, R.H. (2007), "Organizational culture and performance: proposing and testing a model", Organization Science, Vol. 4 pp.209-25.Bourgeois, J and Brodwin, N. (2009). Commitment in the Workplace: Theory, Research and Application, Sage, London.

Bourgeois, L.J. and Brodwin, D.R. (2007), Strategic implementation: five approaches to an inclusive phenomenon, Strategic Management Journal.Vol.5.pp 241-64

Akwara, J. A. (2012). *Challenges of Strategy Implementation at the Ministry of Cooperative Development and Marketing*. Unpublished MBA project, School of Business, University of Nairobi.

Bagire, V. and Namada, J. (2013) Managerial Skills, Financial Capability and Strategic Planning in Organizations. *American Journal of Industrial and Business Management*, 3(1), 480-487

Camerer, J and Vespalian, L.C. (2008), "Leadership style, organizational culture and performance: empirical evidence from UK companies", International Journal of Human Resource Management, Vol. 11 pp.766-8

Johnson, G. and Scholes, P. (2015) Exploring *Corporate Strategy*. London: Prentice Hall.

Johnson, G. and Scholes, K. (2012); *Exploring Corporate Strategy: Texts and Cases*(6thEd), New Dheli,Prentice Hall of India Private Ltd.

Lim, M. (2017). Examining the literature on organizational structure and success. College Mirror, 43, 1, 16-18

Maina, S. (2011). *Use of performance appraissal as a strategic management tool at Toyota East Africa Limited*. Unpublished MBA project, School of Business, University of Nairobi

Nadkarni S. and. Barr, P. S (2008) Environment Context, Managerial Cognition, and Strategic Action: An Integrated View," *Strategic Management Journal*, Vol. 29, No. 13, 2008, pp. 1395-1427.

Nnamani, E., Ejim E.P. and Ozobu, A. (2015) Effect of Strategy Formulation on Organizational Performance: A Study of Innoson Manufacturing Company Ltd Emene, Enugu. *World Journal of Management and Behavioral Studies,* 3 (1): 09-20

Ongale, S. K. (2012). *Challenges of Strategy Implementation at the Mission for Essential Drugs and Supplies*. Unpublished MBA project, School of Business, University of Nairobi.

Pearce, J.A. and Robinson, R.B. (2015) *Strategic Management: Strategy, Formulation, Implementation and Control*. (6thEd). Boston: McGraw-Hill.

Rumelt, R. (2011) Setting Strategy in the New Era, *The McKinsey Quarterly*.

Seijts, G.H. and Latham, G.P. (2000), *The construct of goal commitment: measurement and relationships with task performance*, in Goffin, R. and Helmes, E. (Eds), *Problems and Solutions in Human Assessment*, Kluwer Academic, Dordrecht, pp. 315-32.

Seyed, A.A., Yashar,S., Mohammadreza, D., and Jamshid, A., (2012) Relationship between Organizational Culture and Strategy Implementation: Typologies and Dimensions. *Global Business and Management Research: An International Journal,* 4(4): 286-299.

Thompson, A.A. and Strickland, .J. (2008) *Crafting and Executing Strategy; Text and Readings*. (15th Ed). Boston: McGraw Hill.

Verbeeten, F. (2008), Performance management practices in public sector organisations impact on performance, *Accounting, Auditing and Accountability Journal*, Vol. 21 No. 3, pp.

Yator, R. and Shale, N. I. (2014). Role of information communication technology on service delivery at the ministry of interior and coordination of national government: A case of immigration service. *International Journal of Social Sciences and Entrepreneurship, 1* (12), 863-876.

Machuki, V., and Aosa, E., (2011). The Influence of the External Environment on the performance of Management, 5, 11.