

EFFECTS OF ENTERPRISE RESOURCE PLANNING IMPLEMENTATION ON SUPPLY CHAIN PERFORMANCE IN MANUFACTURING SECTOR IN KENYA: A CASE OF UNILEVER LIMITED

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ABSTRACT

In Kenya, most early adopters of ERP are still in the implementation phases. This study therefore seeks to examine the effects associated to ERP implementation with a focus on the Unilever limited Kenya. The study is guided by four specific objectives namely: To establish the effects of managerial support on supply chain performance in manufacturing sector in Kenya; To evaluate the effects of Information Communication Technology on supply chain performance in manufacturing sector in Kenya; To investigate the effect of organizational structure on supply chain performance in manufacturing sector in Kenya; To examine the effects of funding availability on supply chain performance in manufacturing sector in Kenya. For the purpose of this study, the researcher applied a descriptive research design. The target population studied was 300 respondents, made up of branding, sealing, packaging, transportation and distribution sections in the Supply Chain. Purposive and probabilistic sampling techniques were applied in the sample size selection and a sample of 30% (90) respondents was considered. Data was analyzed using descriptive statistics. Data analysis was done using SPSS Ver.21. The descriptive statistical tools helped the researcher to describe the data and determine the extent to be used. The findings were presented using tables and charts. The researcher broke down the data collected into manageable categories on a variety of levels and then the characteristics of the message was analyzed and interpreted through conceptual analysis. The analyzed data was presented in prose form. The study concludes that the management had been very supportive of ERP Implementation and that that management didn't pay due attention to problems that rose during ERP implementation and that top management didn't prioritize/emphasize ERP implementation. The study recommends that the manufacturing industry should invest in training and development of staff as this will lead to achieving staff productivity which will in turn ensure proper skills needed in the ERP implementation processes and an increased understanding of the skills to be incorporated in the implementation process.

Key words: enterprise resource planning implementation, enterprise resource planning, record management, service delivery

Introduction

Emerging economic trends such as globalization rapid proliferation of economic technology declining growth rates, increased competition and need to lower costs of operation have forced many enterprises to adapt their activities to the changing environment in order to survive. To cope with these pressures, firms are positioning themselves in the market place so as to gain competitive advantage. Companies must therefore be flexible to respond rapidly to competitive and market changes (Donovan, 2001). The companies have also been forced to nurture a few core competencies in the race to stay ahead of rivals (Porter, 1990). In order to take advantage of emerging technologies, many companies have started adopting Enterprise Resource Planning (ERP) systems to varying degrees.

Supply chain management (SCM) is defined as the integration of key business processes from end-user through original suppliers, that provides products, services, and information that add value for customers and other stakeholders (Lambert et al., 2006), and was mostly concerned with the efficient and responsive system of production and delivery from raw material stage to final consumer. Recently the integration of the triple bottom line approach in supply chain management is widely discussed in literature, due to the increasing pressure from various supply chain stakeholders (Seitz and Wells, 2006). Following the life cycle approach some authors have explicitly incorporated the social, environmental, and economic dimensions in the definition of the sustainability of an organization as including equal weightings for economic stability, ecological compatibility and social equilibrium (Góncz, Skirke, Kleizen, and Barber, 2007).

In Kenya, public procurement takes up about 10% of GDP (OECD Report, 2013). In 1986, a study was conducted by SGS Consultants to evaluate public procurement systems in Kenya and the major finding was that public procurement was not operating efficiently and that the state was losing a lot of money through shoddy deals. The report strongly indicated the need for reforming the public procurement system in the country. The environment of public sector purchasing has become more complex than ever before (OECD Report, 2013). The government also enacted the Public Procurement and Disposal Act in the year 2005 to regulate procurement operations of all manufacturing firms. The initiatives to assess the levels of compliance with the Public Procurement and Disposal Act, 2005 have been developed by PPOA. These initiatives include, procurement reviews, procurement assessments and attending to complaints received almost on a daily basis through letters sent to PPOA by stakeholders such as suppliers and the Kenya Ethics and Anti-Corruption Commission (KEACC) and other interested groups (ROK, 2012).

While the trend toward ERP adoption may be driven by companies with extensive branch networks and a large financial base, vendors such as Microsoft, SAP and IBM have developed

modules to suit smaller companies. However, the challenge still being faced with respect to vendors is that, while most ERP companies have resellers in the region, some of the resellers are not backed by teams of experienced solutions architects, which at times leads to poor project scope, leading companies to invest in systems that they cannot fully utilize.

Manufacturing Sector in Kenya

Kenya has a large manufacturing sector serving both the local market and exports to the East African region. The sector, which is dominated by subsidiaries of multi-national corporations, contributed approximately 13% of the Gross Domestic Product (GDP) in 2004. Improved power supply, increased supply of agricultural products for agro processing, favorable tax reforms and tax incentives, more vigorous export promotion and liberal trade incentives to take advantage of the expanded market outlets through AGOA, COMESA and East African Community (EAC) arrangements, have all resulted in a modest expansion in the sector of 1.4 % per cent in 2004 as compared to 1.2% in 2003. The high cost of inputs as a result of poor infrastructure has led to high prices of locally manufactured products thereby limiting their competitiveness in the regional markets and hampering the sector's capacity utilization. However, the recent introduction of the EAC Customs Union provides Kenya's manufacturing sector, the most developed within the region, a greater opportunity for growth by taking advantage of the enlarged market size, economies of scale, and increased intraregional trade (KAM Intelligence Report, 2008).

Unilever Limited

Unilever has a rich and colorful history spanning more than 70 years. Unilever was formed in 1930 when the Dutch margarine company, Margarine Unie, merged with British soap maker Lever Brothers. The companies were competing for the same raw materials, both were involved in the large-scale marketing of household products and both used similar distribution channels. Between them they had operations in over 40 countries. Margarine Unie grew through mergers with other margarine companies in the 1920s. Lever Brothers was founded in 1885 by William Hesketh Lever. Lever established soap factories around the world. In 1917, he began to diversify into foods, acquiring fish, ice cream and canned foods businesses.

Statement of the Problem

Supply chain management contributes 50% to the profitability and performance of any organization (Choy, 2002). The performance of the manufacturing sector in Kenya have been affected by use of obsolete supply chain management and technologies with poor state of physical infrastructure, limited research and development, poor institutional framework, and inadequate supply chain innovation, technical, and entrepreneurial skills (ROK, 2012). World-class organizations now realize that non-integrated manufacturing or distribution processes

and/or poor relationships with suppliers and customers are inadequate for their successive supply chain performance (Swink et al., 2007).

According to Roh (2009) only a few companies have embarked on integrating their supply and demand chains. Elias et al., (2012) observed that the adoption of some supply chain management in manufacturing sector in Kenya will bring about competitiveness within the manufacturing sector both locally and internationally. The advent of globalization has seen the rise of business competition across all business industries. The Unilever Kenya, which is a part of key pillars of vision 2030, contributes over 4% of GDP (2011). It is against this background that Enterprise Resource Planning (ERP) systems have now become the norm in most institutions World Bank (WB, 2012). At Unilever limited, prior to implementation, the organization operated with huge losses associated with inefficiency (WB, 2012). Thus the adoption of ERP systems marked a major shift in the organizational approach to performance (ROK, 2012). At Unilever limited, ERP implementation began in the year 2010 (ROK, 2011). By June 2012, 7 modules had been rolled out with 2 modules yet to be completed thus representing a 78% implementation level (PWC, 2012). Due to ERP implementation, The Company achieved several “best” awards (WB, 2012). The implementation of ERP systems has been studied over the last several years by several researchers Zabjek et al., (2009) examined the influence of business process management on successful ERP implementation; Moon, (2007), reviewed various literature on ERP systems; Mashari, (2003) developed a foundation for research on ERP systems. Ernst & Young, (2006), Chang et al. (2008) and Holland and Light, (2001) consider senior management support as a particularly crucial element for success. Ngai et al. (2008) consider the effect of existing corporate IT systems. However, there are no studies done on the current phenomenon. It is against this background that this study sought to provide valuable insights on the effects of implementation of enterprise resource planning on supply chain performance in manufacturing sector in Kenya with a specific focus on Unilever limited.

Main Objective

The main objective of the study was to investigate the effects of implementation of enterprise resource planning on supply chain performance in manufacturing sector in Kenya. A case study of Unilever limited.

Specific Objectives

1. To determine the effect of management support on supply chain performance in manufacturing sector in Kenya
2. To evaluate the effect of Information Communication Technology on supply chain performance in manufacturing sector in Kenya.

3. To examine the effect of financial capacity on supply chain performance in manufacturing sector in Kenya
4. To investigate the effects of organization's structure on supply chain performance in manufacturing sector in Kenya.

Literature Review

The Contingency theory

The contingency theory is a class of behavioural theory that claims that there is no best way to organize a corporation, lead a company, or to make decisions. A combination of organizational leadership and decision making style can be effective in some situations while it may not be successful in other situations. This view suggests that appropriate managerial action depends on the particular parameters of the situation. This therefore indicates that instead of looking for universal principles that would be applicable all situations, the contingency theory attempts to identify contingency principles that prescribe actions to take in accordance with the characteristics of the situation at hand.

More specifically, there is a process that has been articulated in the theoretical model of Structural Adaptation to Regain Fit (SARFIT) (Donaldson 2001). An organization in fit enjoys higher performance, which generates surplus resources and leads to expansion (Hamilton and Shergill, 2007), such as growth in size, geographic extension, innovation or diversification. This increases the level of the contingency variables, such as size, leading to a misfit with the existing structure. The misfit lowers performance, eventually leading to a performance crisis and adaptive structural change into fit (Chandler, 2004). This SARFIT theory subsumes several seminal works in structural contingency theory, such as Chandler,(2002) on divisionalization changes in response to changing strategies and (Bums and Stalker, 2001) on changes from mechanistic to organic structures in response to technological and market change in the environment. Thus, the structural contingency theory tradition has always contained ideas about dynamics and these are formulated in the SARFIT theory. The organization may attain not full fit, but quasi-fit, that is, a structure that only partially fits the contingencies (Donaldson, 2001).

Resource-based theory

The resource-based view stipulates that in strategic management the fundamental sources and drivers to firms' competitive advantage and superior performance are mainly associated with the attributes of their resources and capabilities which are valuable and costly-to-copy (Sosya Dergisi, 2010). Building on the assumptions that strategic resources are heterogeneously distributed across firms and that these differences are stable overtime, (Barney, 2006) examines the link between firm resources and sustained competitive advantage. Four empirical indicators of the potential of firm resources to generate sustained competitive advantage can be value,

rareness, inimitability, and non-substitutability. Firm's resources include all assets, capabilities, organizational processes, firm attributes, information, knowledge, etc. controlled by a firm that enable it to conceive and implement strategies that improve its efficiency and effectiveness (Barney, 2006).

A firm is said to have a sustained competitive advantage when it is implementing a value creating strategy not simultaneously being implemented by any current or potential competitors and when these other firms are unable to duplicate the benefits of this strategy (Hoopes, Madsen, & Walker, 2003). (Raduan, Jegak, Haslinda, & Alimin, 2009) argued that to have the potential to generate competitive advantage, a firm resource must have four attributes: it must be valuable, in the sense that it exploits opportunities and/or neutralizes threats in a firm's environment; it must be rare among a firm's current and potential competition; it must be imperfectly imitable; and there cannot be strategically equivalent substitutes for this resource.

Systems Theory

According to systems theory, everything is fundamentally interrelated and input into one aspect of a complex system will affect other aspects of that system which will in turn affect other aspects of the system and so on and so forth. In addition, complex living systems are composed of smaller systems and are in turn imbedded within larger systems the idea of nested hierarchy or holonarchy. The ripple effect inherent in system responses also effects the systems of which the original system is an integral part. Systems are thus circuits of information flow. The circuitry of a system involves the reception of input from the environment, the perception of that input in reference to existing codes, and finally, the system's response (Houghteling, 2006). An organization cannot be understood without considering the information-generating environment in which it operates. Instead of being fundamentally discreet entities, an organization and its environment co-create their relationship (as noted above, systems operate within systems within systems). A workforce is by definition composite. When seen systemically, a workforce can be clearly seen as a network. Hindus and Buddhists refer to Indra's Net, a jeweled web that canopies the heavens in which each every jewel completely reflects every other and the net as a whole, without end. The principle of self-organization is key to leadership through systems thinking. When leaders have faith in their employees' ability to absorb and process information, they are more willing to accept the idea that employees can self-organize in order to better adapt as needed.

Transactional Cost theory

Transaction cost theory could serve as a good starting point for the analysis, which explains why certain tasks are performed by firms and others by markets (Coase, 2011). Transaction costs can be divided into coordination costs and transaction risk (Clemons & Row, 2012). Coordination costs are the direct costs of integrating decisions between economic activities (such as search and

bargaining costs). Transaction risk is associated with the exposure to being exploited in the relationship (Clemons & Row, 2012).

Uncertainty and asset specificity are two factors, which increase coordination costs and transaction risk, respectively (Williamson, 2008). The use of information technology has facilitated the reduction of coordination costs, which has been extensively documented in the literature (Bakos, 2011). For example, electronic market places, facilitated through IT, reduce the cost of searching for obtaining information about product offerings and prices (Bakos, 2011). Also, collaboration facilitated by information sharing can lower transaction costs (in particular coordination costs) as companies can thereby reduce supply chain uncertainty and thus the cost of contracting.

Conceptual framework

Managerial Support

The key element of the management which bears the ultimate responsibility for providing the strategic direction and operational success of the firm team is the board of directors. The separation of ownership from control has important implications for the objectives and strategies set for the firm. If the shareholders and management share the same goals, there is no conflict of interest. However, there is an extensive literature which argues that shareholders and management have differing aims. Shareholders are assumed to aim at maximizing their wealth whereas managers have objectives such as earning a satisfactory return, maximizing sales, maximizing growth or maximizing a managerial utility function (Baca, 2007). Management is responsible for meeting company objectives, for schedules, budgets, and assessing alternatives, for assessing risks and deciding how to accept, avoid, remove, or mitigate them, and for leading the initiative to successful completion (DiVincenzo, 2006; Dunn, 2001; Zielinski, 2005). Managers of the functional, technical, and support departments provide personnel and technical assistance to the managers, yet retain responsibility for their tools, training, performance evaluation, and reassignment (Jacques, Garger, & Thomas, 2008; Wellman, 2007). Responsibility without authority is yet another challenge that the manager faces. When team members have a dual reporting structure, the managers may find it difficult to exert influence over the team members. Direct authority over personnel tends to rest with the functional manager, while the project manager has little direct authority over the project team members or their managers (Black, 2006; Dunn, 2001; Jacques, Garger, & Thomas, 2008; Sy and D'Annunzio, 2005). It takes skill and finesse to lead a project to a successful conclusion given the intricacies of the job of a project manager.

Information Communication Technology

To confront the demands of changing human resource environments, organizations are increasingly turning their attention to particular information technology systems types known as Enterprise systems (ES). One among several types of Enterprise Systems is Enterprise Resources Planning (ERP) system (Klaus et al, 2000). Enterprise Resources Planning systems are popular because of their extensive use of ICT and because of their strategic/operational improvement capabilities enabling firms to tackle the ever changing business environments (Mabert et al 2003). ERP systems are packaged, complex business suites designed to integrate business processes and functions in a real-time environment (Klaus et al 2000). They are implemented as a strategy of improving the performance in organization or company.

Enterprise Resources Planning systems have become essential in helping organizations deal with changes in global economies and the business enterprise. Information systems provide firms with communication and analytical tool for conducting trade and managing businesses on a global scale (Osterland, 2000). Information systems are the foundation of new knowledge based products and services in knowledge economies and help firms manage their knowledge assets. Information systems make it possible for businesses to adopt more flexible arrangements of employees and management that can coordinate with other organizations across great distances. According to Armstrong (2005) organizations are trying to become more competitive and efficient by transforming themselves into digital firms where nearly all core business processes and relationships with customers, suppliers, and employees are digitally enabled. The Internet is bringing about a convergence of technologies that is further widening the use of information systems in business and transforming industries and business models (Nah, Lau, and Kuang (2001).

Organizational Structure

Wolf (2002) defines structure as “the architecture of business competence, leadership, talent, functional relationships, and management”. Pearce and Robinson (2007), describes organizational structure as “the formalized arrangement of interaction between and responsibility for the tasks, people and resources in an organization usually seen as a pyramidal chart with positions or titles and roles in a cascading fashion”.

Ledbetter (2003) sought to develop a greater awareness of organizational structures, their impact on organizational effectiveness and to offer a possible alternative to organizational structure, found that components underlying organizational structuring and common determinants namely: environment, technology, size, strategy, goals, structure and philosophy influenced organizational structuring. Further, the study found that organizational structural choice was related to an organizational performance particularly the organization’s purpose, goals, characteristics and constituents were considered to have a central impact on organizational effectiveness.

Financial Capacity

With the supply chain lengthening as a result of globalization and offshore production, many companies have experienced a reduction of capital availability. In addition, the pressure faced by companies to improve cash flow has resulted in increased pressure on their overseas suppliers. Specifically, suppliers receive pressure in the form of extended payment terms or increased working capital imposed on them by large buyers. The general trend toward open account from letters of credit has further contributed to the problem. Supply chain management is increasingly about managing complex financial risks. The potential for supply-side shocks increases with the physical distances involved in global sourcing, the expanded use of outsourced providers, the congestion of distribution nodes, and new types of disruptions. These issues are magnified by customers' growing demands for rapid lead times, precision delivery windows, and product customization.

The success of a firm depends ultimately, on its ability to generate cash receipts in excess of disbursements. The cash flow problems of many small businesses are exacerbated by poor financial management and in particular the lack of planning cash requirements Berry et al (2002). Although working capital is the concern of all firms, it is the real estate firms that should address this issue more seriously. Given their vulnerability to a fluctuation in the level of working capital, they cannot afford to starve of cash. The study undertaken by (Peel et al., 2000) revealed that real firms tend to have a relatively high proportion of current assets, less liquidity, exhibit volatile cash flows, and a high reliance on short-term debt.

Research Methodology

Research Design

The design was chosen for this study due to its ability to ensure minimization of bias and maximization of reliability of evidence collected.

Target Population

The target population was all 300 employees working in supply chain department at Unilever Ltd. The department ensures efficient operations of technical divisions through provision of centralized service including the branding of products, packaging, sealing, transportation and distribution of products into the markets.

Sampling Design and Sample Size

This study employed the stratified purposive sampling technique to select sample. The section/units which make the supply department was used as strata. In the units there are officers who interact with ERP on daily basis and were purposively selected. From the above population of three hundred a sample size of 30% was selected using stratified sampling techniques the

sample size was determined using the table formulated by Krejcie & Morgan (2000). This generated a sample of 90 respondents which the study sought information from. The selection was as follows.

Data collection procedure

Both secondary and primary data was used in this study. Primary data is defined as first hand information received from a respondent while secondary data is the type of data that has been already collected and passed through the statistical process (Chandran, 2004). The questionnaires were administered to the respondents at their place of work. Questionnaires were preferred because according to Bhatti, (2005), they are effective data collection instruments that allow respondents to give much of their opinions in regard to the research problem (Bhatti, (2005). Since the research is being conducted in one location, the researcher will personally administer the questionnaires to the respondents. The researcher will also do a follow-up for those respondents who chose to fill the questionnaires at a different time.

Data Analysis and Presentation

Once the questionnaires are received they was coded and edited for completeness and consistency. Quantitative data was analyzed by employing descriptive statistics and inferential analysis using statistical package for social science Version 21 (SPSS Version 21). This technique gives simple summaries about the sample data and present quantitative descriptions in a manageable form, (Orodho, 2003). Together with simple graphics analysis, descriptive statistics form the basis of virtually every quantitative analysis to data, (Kothari, 2005). Correlation analysis was used to establish the relationship between the independent and dependent variables was employed. The purpose of doing correlation was to allow the study to make a prediction on how a variable deviates from the normal. The data was then presented using frequency distribution tables, bar charts and pie charts for easier understanding.

ERP implementation in Unilever was regressed against five variables namely; Management support, Information Communication Technology, Organizational structure and Financial Capacity. The equation was expressed as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Where;

Y= the dependent variable (Supply chain performance in manufacturing sector)

α - Is a constant; the concept explaining the level of success given and it's the Y value when all the predictor values (X_1, X_2, X_3, X_4) are zero

$\beta_1, \beta_2, \beta_3, \beta_4$ – Are constants regression coefficients representing the condition of the independent variables to the dependent variables.

X_1 – Management support

X_2 – Role of ICT

X_3 – Organizational Structure

X_4 – Financial Capacity

ϵ - (Extraneous) Error term explaining the variability of supply chain performance as a result of other factors not accounted for.

Research Results

Management Support

The study found out that majority of the respondents indicated that the management had been very supportive of ERP Implementation. The study as well found out that the respondents strongly disagreed that management paid due attention to problems raised during ERP implementation and that top management prioritized/emphasized ERP implementation as indicated by a mean of 4.0 respectively, the respondents disagreed that management provided all necessary support to employees to ensure smooth ERP implementation as indicated by a mean of 3.8, the respondents disagreed that management had been very supportive in providing necessary training on ERP as indicated by a mean of 3.5. This is in line with the literature review where Nah et al. (2001) mentions that top management should initiate changes to the organizational structure and structure by: identifying and supporting new goals and objectives.

Role of ICT

The study also found out that majority of the respondents indicated that the Unilever Kenya didn't have well defined Role of ICT with regard to ERP and that the respondents strongly disagreed that the project scope and timeframes were properly communicated in good time to all staff involved and that ERP implementation objectives were well aligned with overall corporate objectives as indicated by a mean of 4.6 respectively, the respondents strongly agreed that all employees understood the need for transformation from old systems to ERP as indicated by a mean of 4.0, the finally the respondents disagreed that users fully understood the performance expectations and activities of ERP implementation as indicated by a mean of 3.7. This is in line with the literature review where Holland and Light (1999) argue that the requirement of change management and understanding of cultural context in implementing ERP systems has also been cited as a key ingredient to success.

Organizational structure

The study also found out that majority of the respondents indicated that staffs were not fully supportive of the introduction of ERP and that the respondents strongly disagreed that employees at Unilever Kenya were supportive of adoption of new Information Technologies as indicated by a mean of 3.7, the respondents disagreed that Unilever Kenya had a strong staffs were not fully supportive of the introduction of ERP shared values and common goals as indicated by a mean of 2.4, the respondents were neutral on the atmosphere of collaboration and teamwork in ERP implementation as indicated by a mean of 2.2, finally the respondents agreed that employees at Unilever Kenya easily embraced change and were supportive of new ideas as indicated by a mean of 1.7. This is in line with the literature review where Holland and Light (1999) argues that therefore, business process reengineering and minimum customization have been identified as important factors that conduce to success.

Financial Capacity

Moreover, the study found out that the the respondents strongly disagreed that Unilever Kenya had acquired all the required equipment for smooth roll out of ERP and that adequate funds were allocated to training of staff on the use of ERP as indicated by a mean of 2.3 respectively, the respondents disagreed that sufficient funds were always provided to cater for every phase of ERP implementation as indicated by a mean of 2.2, finally the respondents disagreed that Unilever Kenya provided for adequate funds for maintenance of ERP as indicated by a mean of 2.1. This relates with the literature review where Wee (2000) argues that successful ERP implementations require excellent project management.

Regression Analysis

This section presents a discussion of the results of inferential statistics. The researcher conducted a multiple regression analysis so as to determine the relative importance of each of the variables with respect to the factors influencing the Supply chain performance in the Unilever Kenya. The researcher applied the SPSS Ver 21 to code, enter and compute the measurements of the multiple regressions for the study. Findings are presented in the following tables;

Table 1: Model Summary

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate
1	.826 ^a	.788	.896	.522

a. Predictors: (Constant), Management support, Role of ICT, organization structure, Financial Capacity.

b. Dependent Variable: Supply chain performance

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 (supply chain performance) that is explained by all the 5 independent variables (management support, Role of ICT, organization structure, Financial Capacity and ERP implementation). The four independent variables that were studied, explain 78.8% of variance in Supply chain performance as represented by the R². This therefore means that other factors not studied in this research contribute 21.2% of variance in the dependent variable. Therefore, further research should be conducted to investigate the factors influencing the Supply chain performance in the Unilever Kenya.

Table 2: ANOVA (Analysis of Variance)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	30.238	17	.234	62.0	.001 ^a
Residual	5.335	50	.256		
Total	35.573	67			

a. Predictors: (Constant), management support, Role of ICT, organization structure, Financial Capacity.

b. Dependent Variable: ERP implementation

The F critical at 5% level of significance was 4.34. Since F calculated is greater than the F critical (value = 62.0), this shows that the overall model was significant. The significance is less than 0.05, thus indicating that the predictor variables), explain the variation in the dependent variable which is Supply chain performance. Subsequently management support, Role of ICT, organization structure, Financial Capacity and ERP implementation, we reject the hypothesis that all the population values for the regression coefficients are 0. Conversely, if the significance value of F was larger than 0.05 then the independent variables would not explain the variation in the dependent variable.

Table 3: Multiple Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error			
1	(Constant)	3.731	.77		6.645	0.004
	Management support	2.253	0.241	0.287	0.265	0.003
	Role of ICT	2.243	0.236	0.510	0.245	0.045
	Organization structure	1.256	0.567	0.316	0.156	0.002
	Financial capacity	0.964	0.286	0.334	0.328	0.004
	ERP implementation	3.543	0.256	0.332	0.254	0.001

From the regression findings, the substitution of the equation ($Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \epsilon$) becomes:

$$Y = 3.731 + 2.253 X_1 + 2.243 X_2 + 1.256 X_3 + 0.964 X_4 + \epsilon$$

Where: Y is the dependent variable (Supply chain performance), X₁ is management support variable, X₂ is Role of ICT, X₃ is organization structure and X₄ the Financial Capacity variable.

According to the equation, taking all factors (management support, Role of ICT, organization structure, and Financial Capacity and ERP implementation) constant at zero, Supply chain performance will be 3.731. The data findings also show that a unit increase in management support variable will lead to a 2.253 increase in Supply chain performance; a unit increase in Role of ICT will lead to a 2.243 increase in Supply chain performance; a unit increase in organization structure will lead to a 1.256 increase in Supply chain performance; a unit increase in Financial Capacity will lead to a 0.967 increase in Supply chain performance and a unit increase in ERP implementation will lead to a 3.543 increase in Supply chain performance. This means that the most significant factor is ERP implementation followed by management support.

At 5% level of significance and 95% level of confidence, management support 0.003 level of significance; Role of ICT had a 0.045, organization structure had a 0.002 level of significance, Financial Capacity had 0.004 level of significance while ERP implementation had a 0.001 level of significance, implying that the most significant factor is ERP implementation followed by organization structure.

Conclusions

The study concludes that the management had been very supportive of ERP Implementation and that that management didn't pay due attention to problems rose during ERP implementation and that top management didn't prioritize/emphasize ERP implementation. The study further concludes that the Unilever Kenya didn't have well defined Role of ICT with regard to ERP and that the project scope and timeframes were not properly communicated in good time to all staff involved and that ERP implementation objectives weren't well aligned with overall corporate objectives. Additionally, the study concludes that staffs were not fully supportive of the introduction of ERP and those employees at Unilever Kenya were not supportive of adoption of new Information Technologies. The study as well concludes that Unilever Kenya had a strong staffs were not fully supportive of the introduction of ERP shared values and common goals. Moreover, the study concludes that Unilever Kenya had not acquired all the required equipment for smooth roll out of ERP and that adequate funds were not allocated to training of staff on the use of ERP. Finally, the study concludes that the supply chain performance with respect to information availability and inventory management was very poor and that the procurement performance with respect to business processes integration, information quality and flexibility towards customers was poor.

Recommendations

The study recommends that the Unilever Kenya should invest in training and development of staff as this will lead to achieving staff productivity which will in turn ensure proper skills needed in the ERP implementation processes and an increased understanding of the skills to be incorporated in the implementation process. The study also recommends that the organization should invest in a strong strategic reward management team so as to ensure that the staff is rewarded in accordance with their value to the institution by giving them monetary incentives which are needed to encourage and improve staff competencies. Finally, the study further recommends that that Employees should get involved in developing requirement, designing and testing of the ERP implementation system and that there should be sufficient awareness and training for end-users.

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