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The Influence of Top Management Support on Knowledge Sharing during the Implementation of ERP Systems in Kenya

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Abstract:

This study was motivated by the high failure rate of ERP systems around the world during the implementation stage. Most studies report failure rates of between 65% and 75%. Many developed countries such as Kenya have embraced Top Management Support as a technique of improving knowledge sharing in organizations and is seen to be important in minimizing ERP implementation problems. This paper investigated the influence of top management support on the KM infrastructure capability during the implementation of ERP systems in organizations listed in the NSE in Kenya, with the aim of establishing whether these organizations have embraced top management support in ERP implementation. Three hundred and six (306) questionnaires were distributed to senior managers and users of ERP systems in the companies listed in the NSE. One hundred and eight four (184) responses were received representing a 60% response rate. The study employed factor analysis, univariate analysis, multivariate regression analysis and Structural Equation Modeling (SEM) to investigate the relationship among variables and measure the strength and direction of relationships between constructs. Data was cleaned and analyzed using SPSS version 20 and AMOS version 21. Results showed that most of the organizations regard top management as an important component which contributes to successful ERP implementations. The study recommends higher levels of involvement of top management as this improves on the levels of knowledge sharing which is important for ERP implementation success.

Keywords: ERP systems implementation, top management support, KMIC, enterprise resource planning, knowledge management, resource-based theory, social capital theory

1. Introduction

Many organizations today are looking for ways in which they can improve their businesses in response to the growing global competition. One approach that has been used in this regard is the implementation of information systems such as Enterprise Resource Planning (ERP) systems (Annamalai & Ramayah, 2011). Businesses of all sizes are using these systems in order to improve their efficiency, profitability and business performance (Kilic et al., 2015).

During the ERP implementation process, vast amounts of knowledge about the existing organizational processes and knowledge contained in legacy systems is required and the environment to do this exhausts a great part of the implementation team effort (Vandaie, 2008). The challenge therefore becomes creating an environment that enables the sharing of the various forms of knowledge during the ERP implementation. Top management has an important role to play in this regard.

Knowledge Management (KM) is one way through which organizations can minimize knowledge sharing difficulties, especially during implementation of ERP systems. In an ERP environment, knowledge management makes the knowledge transfer between consultants, IT staff, business process engineers, and management possible (Guo et al., 2006). Firms often ignore knowledge sharing until it is too late, as people do not easily or willingly share what they know (Brown & Vessey, 1999). This often leaves a large gap in knowledge among ERP implementation personnel, and people do not easily share what they know (Jones & Price, 2005). KM has become recognized as a significant source of competitive advantage with Murray (2002) positing that success in business and projects can be achieved through effective implementation of sound KM strategies and adopting knowledge-based strategies.

Top management support being one of the KM infrastructural dimensions in organizations has shown greatest success in Knowledge Management. This has been through appointment of a senior-level executive to assume the mantle of full-time chief knowledge officer (Gopal & Gagnon, 1995). Senior management establishes incentives for those employees who support organizational norms by demonstrating their commitment to KM efforts (Kulkarni, 2006). Other infrastructural dimensions include organizational culture, organizational structure and IT support.

Little has been done on the influence of Top management support on KM infrastructure capability in ERP implementation particularly in Kenya. The purpose of this research is examining the influence of Top management support on KM infrastructure capability during implementation of ERP systems. This research conceptualized the role of Top Management support on KM infrastructure capability in Enterprise Resource Planning Implementation and hypothesizes that:

→ Ho: There is no significant relationship between top management support and KM infrastructure capability.

2. Literature Review

This section explains the views and the theories that were used as theoretical foundations of this research. The theories are the Social Capital Theory (SCT), Dynamic Capability View (DCV) and the Resource-Based Theory (RBT). Several research studies that relate to top management support, KM infrastructure capability and Enterprise Resource Planning (ERP) are also examined.

2.1. Social Capital Theory

The social capital theory (SCT) emphasizes the central importance of networks of personal relations developed over time that provide the basis for trust (Nahapiet & Ghoshal, 1998). Social capital enables societies to function properly by encouraging individual and collective action. Encouraging connections amongst the individuals of an organization through interaction is important for building trust as it leads to a mutually beneficial social corporation (Putnam (1993).

2.2. Dynamic Capability View of the Firm

The Dynamic Capability View (DCV) of the firm states that in a highly competitive market, firms constantly renew their organizational capabilities in order to remain relevant (Winter, 2003; Teece, Pisano & Shuen, 1997). Organizations must create the capacity to anticipate market changes in order to survive in the dynamic market (Teece, Pisano & Shuen, 1997), which requires organizations to adapt through the development of new knowledge to generate new skills and capabilities (Hamel & Prahalad, 1994).

2.3. Knowledge-Based View of the Firm

Emergent from the RBV, the knowledge-based view defines firms as bodies that generate, integrate, and distribute knowledge (McEvily & Chakravarthy, 2002; Nguyen, 2010). Knowledge is considered a strategic asset and firms gain competitive advantage through its acquisition, transfer and subsequent use (Nonaka, 1991; Prahalad & Hamel, 1990). It has been argued that in any competitive landscape, especially in the new economy, intangible assets are more important and likely to produce a competitive advantage because they often are state unobservable, truly rare and can be more difficult for competitors to imitate (Jackson, Hitt & DeNisi, 2003; Nguyen, 2010).

2.4. Resource Based Theory

The RBV of the firm enables organizations to use resources such as top management support together with KM process capabilities of creation, retention, transfer and application to transform organizational knowledge into a valuable, rare, inimitable and un-substitutable (Barney, 1991) resource for competitive advantage. The theory underpinning this study is therefore the resource based view theory (RBV), which posits that firm-specific factors are as important as industry forces in determining competitive advantage over time.

From a human agency perspective, the top management team members are the primary human agency that translates external influences into managerial actions such as changing organizational structures and establishing policies based on their perceptions and beliefs imbedded in institutional practices. Top management's boundary spanning role significantly affects IT project performance by either facilitating or impeding the importation of external knowledge and the integration of internal knowledge for the success of innovations (Mitchell, 2006). Top management is viewed as the agency responsible for changing the norms, values, and culture within an organization, and in turn, this enables other organizational members to adapt to a new technology artifact such as ERP systems. The norms, values, and culture engendered by the top management permeate to the individual level in the form of procedures, rules, regulations, and routines, which serve as powerful templates that guide individual behavior (Liang et al., 2007; Purvis et al., 2001).

Top management in organizations plays a major role in driving IT implementations and usage (Reich & Benbasat, 1990). The role of top management includes formal monitoring of progress (Garrity, 1963) and incentives (Bhattacharjee, 1996), which result in increased and progressive usage IT in companies (Jarvenpaa & Ives, 1991). Top managements participation and involvement positively contributes to increased assimilation of technologies (Chatterjee et al., 2002a), and can reverse failing IT related implementations (Akermans & van Helden, 2002; Liang, et al., 2007). An important strategic role played by top managers is the development of belief structures to manage concepts and stimuli from the environment and use these beliefs as a basis for inferences to guide organizational behavior (Walsh, 1988; Liang et al., 2007). Moreover, organizational strategies, decisions, and behavior are guided by top managers' mental image of a desired future organizational state and any choices made on the direction of a business are a reflection of the top management's values and cognitive bases (Hambrick & Mason, 1984).

ERP systems are high impact systems that encounter strong resistance from organizational elements such as functional departments and employee associations. The positive beliefs of top managers about the usefulness of ERP systems result in managerial actions intended to assimilate such systems. Such actions include top management publicly championing ERP implementation, which in turn lends legitimacy to the assimilation process (Liang et al., 2007). Other actions include top management involvement as discussed below.

2.5. Top Management Support and Knowledge Sharing during ERP Implementations

From a human agency perspective, the top management team members are the primary human agency that translates external influences into managerial actions such as changing organizational structures and establishing policies based on their perceptions and beliefs engrained in institutional practices. Top management's boundary spanning role significantly affects IT project performance by either facilitating or impeding the importation of external knowledge and the integration of internal knowledge for the success of innovations (Mitchell, 2006). Top management is viewed as the agency responsible for changing the norms, values, and culture within an organization, and in turn, this enables other organizational members to adapt to a new technology artifact such as ERP systems. The norms, values, and culture engendered by the top management permeate to the individual level in the form of procedures, rules, regulations, and routines, which serve as powerful templates that guide individual behavior (Liang et al., 2007; Purvis et al., 2001). Top management in organizations plays a major role in driving IT implementations and usage (Reich & Benbasat, 1990). The role of top management includes formal monitoring of progress (Garrity, 1963) and incentives (Bhattacharjee, 1996), which result in increased and progressive usage IT in companies (Jarvenpaa & Ives, 1991). Top management's participation and involvement positively contributes to increased assimilation of technologies (Chatterjee et al., 2002a), and can reverse failing IT related implementations (Akkermans & van Helden, 2002; Liang et al., 2007). An important strategic role played by top managers is the development of belief structures to manage concepts and stimuli from the environment and use these beliefs as a basis for inferences to guide organizational behavior (Walsh, 1988; Liang et al., 2007). Moreover, organizational strategies, decisions, and behavior are guided by top managers' mental image of a desired future organizational state and any choices made on the direction of a business are a reflection of the top management's values and cognitive bases (Hambrick & Mason, 1984).

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2.5.1. Top Management Involvement

The role of top management in a project such as in the implementation of an ERP system covers formulation of real and justified goals based on the awareness of the opportunities and limitations provided by IT (Somers & Nelson, 2001; Zhang et al., 2003). Top management must be involved in approval and they should explicitly identify ERP projects as a top priority in order to garner support from the general audience of employees. This advocacy and support as a symbol of enterprise priority reinforces the commitment of all the employees in the ERP project (Bingi et al., 1999; Murray & Coffin, 2001; Sumner, 1999). Senior management must be committed with their own involvement and willingness to allocate valuable resources to the implementation effort, which involves providing not only an appropriate amount of time and resources to get the job done, but also the necessary personnel for the implementation (Roberts & Barrar, 1992).

Organizations that have achieved the greatest success in KM are those that have appointed a senior-level executive to assume the mantle of full-time chief knowledge officer (Gopal & Gagnon, 1995). Motivating people to cooperate voluntarily is one of the key challenges organizations today face (Smith & McKeen, 2003). Top management can exert substantive influence on organizational members' activities by creating and fostering beliefs and values about the meaning of KM. This involves participation in articulating business vision, working with and monitoring consultants, implementing change management, enhancing internal communication, ensuring employees are properly trained and incentivizing those employees who support KM initiatives. A brief discussion is provided next on each of these components of top management involvement.

2.5.2. Top Management Involvement in Business Vision

Through an articulated and communicated vision, it is important for top management to stimulate a sense of involvement and contribution among employees. Trust and openness are commonly cited as two of these explicitly stated values that promote knowledge management behaviors and should be actively stimulated by senior management (Gold et al., 2001). Every business should have a clear and appealing overall business vision spelling out the role of ERP systems in business processes. Without enunciating system requirements in the business vision, ERP implementations only come into the business process as an afterthought, leading to failed implementations (Ngai et al., 2008). The strategic goals of the ERP project should be clearly spelt out, identifying project expectations, results, benefits and the milestones to be achieved (Nah et al., 2001; Umble et al., 2003). Organizations should prepare clear business plans and with clarity on project resources and timing, a focus on the costs and defining the risks of the implementation (Ngai et al., 2008; Loh & Koh, 2004). This ensures that a model is put in place, which provides a clear picture of the business after the implementation of the project is complete and shows the expected changes in business processes and working procedures (Holland and Light, 1999, Nah et al., 2001).

2.5.3. Top Management Involvement and External Expertise from Consultants

Firms planning to implement ERP systems hire external consultants who understand the ERP software, to help them through the implementation process (Soh et al., 2000). These consultants are required to transfer knowledge to the organization's implementation team by transferring the technical know-how and skills (Al-Mashari & Zairi, 2000). Sharing of this information goes beyond written documentation and training manuals as it involves transfer of tacit knowledge about the package from the consultants assigned to work side by side with organization's implementation team members. This kind of knowledge cannot be easily captured in manuals

(Osterloh & Frey, 2000) and one source of ERP implementation failure has been explained as where external consultants are allowed to work alone and are not monitored. Management should therefore ensure that external consultants share what they know so that the organization can capture as much of the external consultants' knowledge as possible before these consultants transition off the team (Jones & Price, 2005). This involves a level of change management.

2.5.4. Top Management Involvement and Change Management

Change management is an important knowledge sharing factor during ERP implementations. There is need to plan an effective change management process and these plans should be shared with all those involved in the implementation process (Jones & Price, 2005). ERP systems typically require organizations to get rid of most of their organizational memory about technical infrastructures and especially about their business processes. Implementing ERP systems means that organizations must learn to function in radically different ways than what they have learned during the course of past experiences with legacy systems. Ignoring this essential characteristic of ERP implementation can heavily hamper the success of the whole project (Vandaie, 2008). Change management involves continuous communication of the need for change.

2.5.5. Top Management Support and Communication

Communication difficulties between stakeholders are a major impediment to the successful deployment of ERP systems (Hartwick & Barki, 2001; Ko et al., 2005). Implementation teams are composed of employees, IT personnel, and consultants all of whom possess different knowledge. There should be a defined way of enhancing the knowledge transfer among these team members because of their varied backgrounds, skill and interests (Soh et al., 2000). This involves a level of intense communication and training of employees on the importance of the new system and the whole implementation process.

2.5.6. Top Management Support and Training of Employees

A large part of change management is training (Jones & Price, 2005) and top management ought to prioritize training and ensure that all those involved in the ERP implementation receive training to develop new and improved skills for dealing with new challenges brought about by the change. This enhances users knowledge about the business rules and processes embedded in the ERP software (Lee & Lee, 2000) since properly trained participants tend to appreciate the overall impact of the ERP system better (Jones & Price, 2005; Al-Mashari & Zairi, 2000). In situations where users are not trained to use a new system, they tend to sit back and watch as consultants implement the system and there is lack of ownership of the whole implementation process leading to complete failure (Somers & Nelson, 2001; Yin & Li, 2011). Those employees who show interest in assimilating the new system and in other KM related initiatives should be motivated by way of behavior-based incentives.

2.5.7. Promotion and Incentives

Behavior-based incentives serve as the basis for influencing a change in the way employees do their jobs. These incentives are designed to motivate employees to share information about practices that can be adapted to their needs with colleagues (Porter, 1985). Senior management should establish incentives for those employees who support organizational norms by demonstrating their commitment to KM efforts (Kulkarni, 2006). It is the combination of KM infrastructural dimensions structure and incentive systems that make up an organization's overall KM structure (Gold et al., 2001). A culture that encourages and rewards experimentation and thinking about whether things are being done the best way, rather than focusing attention largely on meeting deadlines is deemed to be the most conducive to knowledge sharing (Jones & Price, 2001). Incentives are critical to the knowledge transfer process, acting as signals for employees to engage in knowledge transfer and when these incentives are absent, it becomes more difficult to effect successful knowledge transfer amongst employees (Szulanski, 1996). Top management should therefore ensure that ERP implementation teams are given compensation and incentives for successfully implementing the system on time and within the assigned budget. Incentives and risk-sharing agreements aid in working together to achieve common goal in organizations (Wee, 2000). Although top management involvement is both time consuming and complex especially while dealing with employees, consultants and implementing change, actual participation by senior managers presents a good platform for communication and knowledge sharing amongst employees and communities. This communication can be aided by appropriate IT tools.

3. Methodology

The study adopted a positivist approach because the goal of the research was to describe phenomena that one can only directly observe and objectively measure. Positivism advocates the application of the methods of the natural sciences to the study of social reality and beyond. The study adopted the descriptive and causal designs because the objective was to find out whether there existed Top management support as a KM practice among organizations listed in the NSE.

The total population was three hundred and fifteen (315), comprising CEOs/general managers, marketing managers, human resource managers, IT managers and finance managers each of the 63 companies listed in the NSE. Only one representative of the five categories was to be selected from each organization. Following on the determination by Gold et al. (2001), these categories were chosen because they are the ones that deal directly with KM infrastructural and process capability.

The study used simple random sampling to select 306 from 315 of TMT of listed firms in the NSE. The Taro Yamane's sample size selection formula for a finite population given below as

$$n = \frac{315}{1 + 315 * 0.01^2} = 306$$

was applied (Unoren et al., 2009). Purposive sampling was used to select five top management team members from each firm.

3.1. Measuring Top Management Support Infrastructure

A five-item measure was adopted from Carpenter and Fredrickson (2001) for top management involvement and a four-item measure adopted from Kankanhalli et al. (2005) for provision of incentives.

Item Code	Item Wording
	Senior Management in our organization.....
TMS1	are interested in knowledge management
TMS2	are well aware of the concepts of knowledge
TMS3	invests substantially in human and financial resource for knowledge management
TMS4	emphasizes the importance of knowledge management to organizational members
TMS5	participate in and lead in knowledge management activities (e.g. knowledge sharing and utilization
	Promotion Kankanhalli et al. (2005)
	Our Organization....
TMS1	provides financial incentives for knowledge sharing
TMS2	Places emphasis on contribution to knowledge sharing activities in personnel evaluation of work performance
TMS3	sufficiently provides opportunities for education and training as incentives for knowledge sharing activities
TMS4	sufficiently rewards employees if their contribution or sharing of knowledge leads to organizational performance cost reduction
TMS5	respects and acknowledges the honors of employees who contribute to knowledge sharing activities

Table 1: Items of Measure for Top Management Support

Cronbach Alpha was used to assess the reliability of the data. The test also was used to determine the questions that would be dropped in order to enhance the reliability of the instrument. The test revealed that a number of items in the constructs were reduced as they brought down the alpha value to below the cut-off point of 0.7. This reduced the number of questions from 128 to 79.

In this study, convergent validity of constructs was investigated by examining the correlation coefficient between measures of the same constructs to find out whether they were measuring the same construct. Positive and significant correlations below 0.8 among pairs of item measures indicate converge validity. Three hundred and six (306) structured questionnaires were distributed to respondents by personal delivery. Permission to distribute the questionnaires in the targeted firms was sought from relevant officials in those firms.

In this study, all of these requirements were met. First, no risk or harm was involved in participating in the survey. Second, the respondents' participation was completely voluntary and they were also free to withdraw their consent or discontinue participation at any time during the process without any consequence. Moreover, any information provided by respondents was protected and kept strictly anonymous, confidential, and private.

3.2. Data Analysis

Exploratory data analysis was conducted to provide results about the general properties of the data collected. Top management construct was refined by utilizing principal component analysis on the initial items comprising each construct. Each principal component analysis extracted factors, and factor loadings greater than 0.5 were retained for each principal component extracted (Hair et al., 2010). To assess the factorability of items, the researcher examined this indicator (i.e. Kaiser Meyer-Olin Measure of Sampling Adequacy). For every EFA, it was found that manifest variable had a KMO Measures of Sampling Adequacy above 0.78, which is above the threshold of 0.6 (Kaiser, 1974). When applying EFA, the results showed a clear factor structure with an acceptable level of cross loadings.

SEM was applied to obtain the path coefficients of the final research model. Parameter estimates and their associated 95% confidence intervals were reported to provide point and interval estimations of the SEM estimate. A p-value of less than 0.05 was considered statistically significant for the structural path. SEM was performed using AMOS version 21.0 and the path coefficients between variables and their corresponding constructs and between constructs were interpreted in terms of magnitude, direction and significance. The results of the model were reported and relevant hypothesis accepted or rejected as appropriate depending on the path coefficient.

4. Results

4.1. Reliability, Validity and Confirmatory Factor Analysis

Top management support was posited as a one-dimensional construct measured by the nine items TMS1, TMS2, TMS3, TMS4, TMS5, TMS6, TMS7, TMS8 and TMS9. The top management support construct was reviewed for reliability and convergent validity prior to SEM analysis. Top management support had a KMO measure of sampling adequacy of 0.877, which was above the threshold of 0.6. Exploratory factor analysis using PCA with promax rotation revealed that all the factor loadings were above the acceptable threshold of 0.5. Item total correlations of TMS1, TMS2, TMS3, TMS4, TMS5, TMS6, TMS7 and TMS9 were 0.659, 0.700, 0.735, 0.682, 0.673, 0.659, 0.687 and 0.669 respectively, which was above the 0.3 threshold. TMS1, TMS2, TMS3, TMS4, TMS5, TMS6,

TMS7 and TMS9 were therefore maintained for measurement model estimation as they achieved the required thresholds for reliability and convergent validity. Additionally, the items of measure TMS1, TMS2, TMS3, TMS4, TMS5, TMS6, TMS7 and TMS9 had factor loadings of 0.754, 0.788, 0.815, 0.771, 0.776, 0.732, 0.753 and 0.740 respectively, which accounted for 71.41% of the variability in top management support. A Cronbach's coefficient alpha of 0.896 for top management support indicated that the measuring scale was reliable.

The composite reliability value of Top Management support construct exceeded the cut-off value of 0.7 and the values of average variance extracted (AVEs) are more than 0.5 (Bagozzi et al., 1991; Hair et al., 2010). Thus, one can confirm that the measurement, outer, model possesses an adequate level of convergent validity as shown in Table 2.

CFA was performed on Top management support as a dimension of KMIC provide a confirmatory test of the measurement theory. When a CFA model exhibits goodness-of-fit and displays construct validity, the validity of the measurement theory is supported. This is the prerequisite for the structural theory testing, the second step in SEM (Hair et al. 2006). The fit statistics of the overall structural model were then assessed and the individual parameter estimates examined to test the hypothesized theoretical relationships. The results discussed above are for the top management support are presented in Table 2.

First order constructs	Cronbach's alpha			EFA		CFA		T-values
		Item	Item total correlation	KMO	PCA component loading	Standardized Regression Weights (λ)		
Top management support	0.896	TMS1	0.659	0.877	0.754	0.724		
		TMS2	0.700		0.788	0.759		9.747
		TMS3	0.735		0.815	0.787		10.108
		TMS4	0.682		0.771	0.736		9.451
		TMS5	0.673		0.776	0.749		9.615
		TMS6	0.659		0.732	0.676		8.67
		TMS7	0.687		0.753	0.700		8.972
		TMS9	0.669		0.740	0.684		8.773
		Variance extracted		71.41%				
Items deleted		TMS8						
Composite reliability		0.900						
Average variance extracted (AVE)		0.529						

Table 2: Summary for Top Management Support Construct

4.2. Hypothesis Testing

The hypothesis for top management support and KM infrastructure was stated as;

H₀: There is no significant relationship between top management support and KM infrastructure capability.

Top management support was found to have a positive and significant relationship with KM infrastructure capability. The path coefficient was positive and significant at 0.05 level of significance ($\beta = 0.853$, t -value=6.470, p -value=0.000). The null hypothesis H₀ is therefore rejected and consequently there is a positive and significant relationship between top management support and KM infrastructure capability. These results are shown in Table 3.

			Standardized Estimate	Estimate	S.E.	T-value	P
TMS	<---	KMIC	0.853	0.933	0.144	6.470	***

Table 3: Regression weights of KMIC and ERP Implementation Success

5. Discussion

The results of this study indicated that employees in companies listed in the NSE in Kenya view top management as responsible for KM infrastructure in their organizations. Top management in organizations plays a major role in driving IT implementations and usage (Reich & Benbasat, 1990). The role of top management includes formal monitoring of progress (Garrity, 1963) and incentives (Bhattacharjee, 1996), which result in increased and progressive usage IT in companies (Jarvenpaa & Ives, 1991). Top managements participation and involvement positively contributes to increased assimilation of technologies (Chatterjee et al., 2002a), and can reverse failing IT related implementations (Akkermans & van Helden, 2002; Liang et al., 2007). An important strategic role played by top managers is the development of belief structures to manage concepts and stimuli from the environment and use these beliefs as a basis for inferences to guide organizational behavior (Walsh, 1988; Liang et al., 2007). In this study, the direction of the relationship is positive and the coefficient significant meaning that top management support leads to a positive impact on the knowledge transfer climate of an organization as discussed by Hung et al. (2012).

Whereas Kankanhalli et al. (2005) argued that trust does not necessarily influence an employee level of knowledge sharing, this might not hold true for top management support. Hung et al. (2012) confirmed in their study that top management support and internal incentives of the client organization have a positive impact on knowledge transfer climate during ERP implementation. Leadership is defined as the use of non-coercive influences to direct and coordinate the activities of group members toward goal attainment (McLean & Smits, 2003). Top management's boundary spanning role has been found to significantly affect IT project performance by

importing external knowledge and integrating internal knowledge (Mitchell, 2006). Top management publicly championing the new systems lends legitimacy to assimilating the ERP system. Legitimacy is especially important since ERP systems are high impact systems that could encounter strong resistance from organizational elements such as functional departments, regional cliques, unions, employee associations (Liang et al., 2007).

6. Conclusion

This study concludes that top management is seen to strongly support KM infrastructure in the companies listed in the NSE in Kenya. The item which contributed highly to this finding was the provision of incentives. Respondents related incentives and bonuses to top management support. However top management support should also include articulating and communicating business vision in order to stimulate a sense of involvement and contribution among employees.

7. Recommendations

The norms, values, and culture engendered by the top management permeate to the individual level in the form of procedures, rules, regulations, and routines, which serve as powerful templates that guide individual behavior. Top management advocacy and support as a symbol of enterprise priority, may reinforce the commitment of all the employees in the enterprise to the project. Top management commitment results in organizational commitment, which is a key factor influencing ERP implementation success. We recommend that top management leads by actively participating in ERP implementation projects other than delegating to other departments. Personal participation in driving reward systems, the vision, the change initiatives, communication and training will enhance knowledge sharing and increase the success rate of implementation of innovations such as the ERP systems.

Senior management in organizations must always be involved in approval of IS related systems and they should explicitly identify ERP projects as a top priority in order to garner support from the general audience of employees. This advocacy and support as a symbol of enterprise priority reinforces the commitment of all the employees in the ERP project implementation.

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