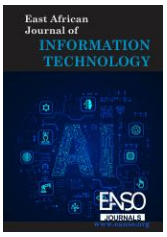

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Original Article

USER INVOLVEMENT IN THE IMPLEMENTATION OF THE ENTERPRISE RESOURCE PLANNING SYSTEMS IN PUBLIC UNIVERSITIES.

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ABSTRACT

In a close examination of previous studies on whether the implementation of ERP systems in universities has been successful or a failure, most of the studies revealed that it was a success while a few indicated that the implementation was below average. This study sought to evaluate user involvement in implementing ERP systems in public universities. This research was guided by the Information Systems Success Model and the Diffusion of Innovation Theory. The researcher adopted a survey research design and the area of the study was at Kisii University. The target population comprised of 930 respondents. The researcher used questionnaires for data collection from the sample size of 76 respondents who were picked randomly and 64 questionnaires were returned. The collected data was analyzed using descriptive statistics methods of mean and standard deviation and inferential statistics methods of correlation and regression analysis. Then the results were presented in the form of tables. The overall result showed that the extent of user involvement was to a large extent achieved (M=2.09; SD=.802) in the implementation of the ERP systems in public universities in Kenya. The study concluded that the extent of user involvement had a statistically significant influence on the ERP system implementations in public universities in Kenya. The study recommended that there was a need for improved quality user involvement and commitment level on the ERP system implementations because they lead to quality information systems.

INTRODUCTION

An Enterprise Resource Planning (ERP) system refers to the application solution that integrates business functional units and data into a single system to be shared within an organization. Even though the initial implementation of enterprise resource planning systems was observed in manufacturing industries, universities have taken up the systems to provide institutional-wide automation for their operations (Ferrell, 2003).

Despite the inexhaustible advantages of enterprise resource planning systems, their implementation has been better said than done (Venkatesh *et al*, 2003; Marchewka, Liu & Kostiwa, 2007). With more users seeking to link application systems to departmental operations, public universities are seeking ways to integrate their processes in a bid to cut on operational costs, offer timely response to their clients and interact with their stakeholders in 'real-time'. To keep up with the management apprehension in the 21st century as noted by Nyandiere *et al.* (2012), universities have turned to enterprise resource planning to substitute their legacy systems.

Upon accomplishment, these systems are anticipated to provide increased efficiency and effectiveness of operations, diminish overhead costs in ICT, get better decision making, improve resource management as well as building business innovation while supporting strategic change (Sullivan & Bozeman, 2010). Several current studies seeking to establish the effect of some of these factors in the implementation of enterprise resource planning systems in public universities in Kenya have been undertaken. Prior studies in developed societies such as Shah *et al.* (2011) cited factors such as top management support, user involvement, vendor support, overlooking of change management aspects, turnover of the vendors team member, transfer of top management in beneficiary institutions as crucial factors affecting the successful implementation of ERP systems in institutions.

As eluded above, user involvement is of great significance in the ERP system implementation. Various studies have distinguished that user involvement and user participation are important factors affecting project outcomes (Kappelman, McKeeman & Zhang, 2006; Khang & Moe, 2008; Ngai *et al*, 2008; LePage, 2009). Inadequate user involvement has even been identified as contributing to a distressed enterprise resource planning system (Havelka & Rajkumar, 2006). Millerand and Baker (2010) asserted "that the user concept itself is underdeveloped in theory". On the other hand, Locke, Schweiger and Latham (1986) argued that "user involvement is a tool, not a panacea".

Any system implementation must track the best approach, for better outcomes. There are two strategies to implementing the enterprise resource planning systems in an organization: reengineering business processes and the ERP customization (Shehab *et al*, 2004). Despite these approaches, the implementation of the ERP systems in public universities has been described as a challenging undertaking (Rabaa, Bandara & Gable, 2009). One study found that in 60% to 80% of higher education contexts, the ERP implementation failed to meet the projected outcomes and the results of implementation were found insufficient (Mehlinger, 2006).

Public universities have made considerable investments in enterprise resource planning (ERP) system implementation to get better institutional business operations (Mehlinger, 2006). Allen, Kern, and Havenh (2002) notes that separate legacy systems were "incongruent" and have led to "replica resources and services." ERP enables public universities to merge disparate data and legacy systems and adopt best-of-breed processes and contemporary technology. According to Abugabah and Sanzogni (2010), higher

education institutions spent more than $5 billion in ERP investment during the last few years. Enterprise resource planning (ERP) system used in public universities integrates administrative functions that have been supported by separate legacy systems in the earlier period (Zornada & Velkavrh, 2011).

The literature reviewed asserts that most researchers have emphasized on other factors, which they deem critical for the successful implementation of ERP system giving less attention to the user involvement and user factors (Shah *et al.,* 2011). This creates a gap in this study that needs to be investigated.

A research done at Cleveland State University in the United States by Swanson (1974) identifies the "renowned wisdom" that "users ought to be 'involved' in management information systems development and implementation, unfortunately, what is meant by involvement is rarely clear". The author did suggest that the measurement of involvement should be based on their activities whether as a user or as a facilitator of its development. The user's attitude is to learn and use of the software only when the top management support and make available appropriate incentive for that. Enjoyment in helping others refers to a motivation to help others without expectation of a return (Papadopoulos *et al*, 2013). In a review of the literature on system implementation, enjoyment in helping others is described as self-sacrifice (Svetlik, Stavrou-Costea & Lin, 2007). According to Arumugam (2001), he disputes that being short of celebration when success and extreme results have been achieved, tends to promote bad performance.

Diverse factors applicable to the ERP system implementation success or failure have been explained in the past research; however, mostly the studies have been carried out in developed countries (Moohebat, Asemi & Jazi, 2010). Presently developing countries like Australia are equally devoted to adopting the ERP systems in their universities, nevertheless, the factors affecting the ERP implementation in developed countries need also to be researched in the context of developing countries like Kenya. The past research confirms that the success of the ERP system implementation is problematic. Implementation of the ERP system is not an easy task as it is anchored on socio-technical factors relating to people, organization and technology. The failure pace of the ERP system implementation is disappointing (Moohebat, Asemi & Jazi, 2010; Leon, 2008).

Varied challenges commonly faced by organizations during the ERP implementation has been significantly addressed in past research (Spitze, 2001; Thavapragasam, 2003). A study done in New Zealand by Leon (2008) mentioned that 69%, 28% and 13% failure rate of the ERP systems due to people, process and technological troubles respectively. It shows that people problems are more significant as opposed to the best ones.

Numerous factors affect the ERP adoption in organizations (Shah *et al.,* 2011). These factors include user involvement (Francoise, Bourgault, & Pellerin, 2009; Rasmy *et al.,* 2005). The involvement of the users during the phase of defining organizational information needs may decrease the resistance of the users towards the ERP system implementation. User involvement leads to better user requirements,

achieving a better quality system and system usage (Motwani, Subramanian & Gopalakrishna, 2005).

The factors explored in developed countries have not been found different, this research on the evaluation of user involvement in the implementation of the ERP system in public universities in Kenya which is a developing country found a contextual gap to fill hence the motive of this study.

Implementation of the ERP system, just like any other information systems, encounters several issues and challenges posts Mahammadreza, Ahra and Soudabeh (2015). It is fascinating that only 63% of organizations considered their ERP projects successful around the world in 2014, and this rate is much lower for Iranian organizations in Asia where ERP was new to them and had failed in most of the cases. This was attributed to technological factors and individual factors like lack of user involvement. Furthermore, a research done in Thailand converges with the findings of Helo, Pornthep and Kongkiti (2008) noting that unlike other information systems, the major problems of ERP implementation are not technologically related issues, but mostly organizational and human-related issues. The cited issues encompass resistance to change, organizational culture, incompatible business processes, project mismanagement, top management commitment and human-related issues that have been often given less attention.

In central Europe, a study done by Hussain and Fadi (2014) confirms that technological and administrative challenges influencing the ERP system implementation in public universities in Europe have been described but they have not considered how users as a challenge too are incorporated in the implementation of the ERP system. It is in these contextual gaps that this research is geared towards filling.

THEORETICAL FRAMEWORK

This paper was developed drawing on the theory of Diffusion of Innovation by Rogers (1962). The theory was used to present theoretical stamina to the study. Besides the employment of Diffusion of Innovations Theory, the study further advocated for the use of Information Systems Success (ISS) model to further review key variables in this study.

Diffusion of Innovations Theory

Diffusion of Innovations (DOI) theory was infused by Everett M. Rogers in 1962 and later improved in 2009. It is a comprehensively used theory in social science disciplines. The theory has its basis in communications and seeks to explain how an idea or product gains momentum and spreads through a specific population or social environment. The result of this diffusion is that users take up new thoughts or innovation. Adoption, as brought out in the theory, assumes that users react differently to innovation compared to previous products or innovations. This facilitates the diffusion process (Wang'ombe & Kyalo, 2015).

Diffusion of Innovations Theory postulates that theoretically, 49%-87% of the discrepancy of an innovator's rate of adoption is explained by its perceived attributes, type of innovation-decision, and nature of social systems that the innovation is diffusing and the extent of the agents' promotion hard work in diffusing the innovation (Nzuki, 2012). The theory is useful to both the developers and the users of ERP

systems in evaluating how these systems are implemented in various projects.

As argued by Rogers (1995), an innovation such as the use of enterprise systems in the management of higher education institutions is regarded as technological innovation. This is realized as a result of the paradigm shift to integrated information systems from stand-alone information systems. As postulated by Sahin (2006), the process of implementing innovations as explained at length by Rogers (2009) in the book, Diffusion of Innovations, the researches cited in the publication border on various disciplines including education and technology.

This research borrows heavily from the third (decision) and fourth (implementation) steps in the Diffusion of Innovation theory. With the employment of the ERP systems in the management of public universities in Kenya interpreted as an innovative line of attack in the study, diverse institutions are assumed to have undergone the first, second, and third processes in the diffusion of innovations theory as advanced by Rogers (2009). These include gathering knowledge about the ERP systems, persuading stakeholders to support the selected systems in automating their institutional operations and making the decision to implement the systems. While guided by the diffusion of innovations theory, the researcher sought to establish user involvement experiences during the implementation phase of the ERP systems in public universities.

Kisii university being one of the public universities in Kenya, it has not been left behind too in the implementation hence with enough involvement of users in the implementation of the ERP system it can substantially improve its performance.

Information Systems Success Model

Further, this research also engaged Information Systems Success Model. The information systems success model as highly developed by DeLone and McLean (2009) is based on earlier research in communications by Shannon and Weaver as well Mason's theory on Information Influence. As highlighted in the model, three key pillars of information systems success are advanced. These embrace System Quality, Information Quality and Service Quality. The original D&M Information System Success Model was subsequently sophisticated to include net benefits as a gauge of success (Delone & Mclean, 2014).

The theoretical model makes use of a causal relationship to scrutinize the success of the implementation of information systems in public universities. Information Systems Success Model as revised by DeLone and McLean constitutes of six interrelated dimensions which influence success in the implementation of an information system. These include information quality, system quality and service quality as independent factors. These influence the intention to use, user satisfaction and net benefits derived from the implementation of an information system.

According to the model, an information system such as an enterprise resource planning system can be examined in terms of information, system and service quality. These subsequently determine system use, intended use, target user satisfaction and net benefits from the deployment of the system. Benefits from the implementation of an enterprise resource

planning system aid to find out the feasibility of the implemented system (DeLone & McLean, 2009).

The information systems success model was useful in studying integrated institutional management information systems and their usage in public universities in Kenya. By using the model, the objectives of the research study were best addressed to ascertain not only challenges but also both user involvement and user factors in the deployment of these systems in the management of public universities.

EMPIRICAL LITERATURE

The challenge institutions encounter refer to the decision on the extent of users' involvement during the implementation process. Lack of user involvement is noted as a leading cause of user confrontation (Aloini, Dulmin, & Mininno, 2007; Barker & Frolick, 2003; Shah *et al*, 2011). Aloini, Dulmin, and Mininno (2007) classified limited user involvement as a threat factor negatively impacting the implementation outcome.

Plentiful factors may affect ERP adoption in organizations (Shah *et al.*, 2011). These factors include user involvement (Francoise, Bourgault, & Pellerin, 2009; Rasmy *et al.*, 2005). The involvement of the users during the phase of defining organizational information needs may decrease the resistance of users towards the ERP system implementation (Motwani, Subramanian & Gopalakrishna, 2005). User involvement may lead to better user requirements, achieving a better-quality system and system usage (Motwani, Subramanian & Gopalakrishna, 2005).

User involvement (UI) and user participation (UP) on information system projects have been studied for over 30 years. Melville *et al* (2004) confirm that the use of enterprise resource planning systems in higher education institutions is advantageous to their performance. There is a general assumption that UI of some sort is valuable to ERP system success (Nah & Delgado, 2006; Wagner & Piccoli, 2007) even to the point of calling it an "institutionalized practice" (Howcroft & Wilson, 2003).

Research done at Turkey shows that User Involvement (UI) "can be defined as a subjective psychological state of the individual and is explained as the importance and personal relevance that users attach either to a particular system or to information system in general, depending on the user's spotlight" (Barki & Hartwick, 2008). Subsequent study has confirmed this definition and empirically supported this separate construct (Barki & Hartwick, 2008; Kappelman, McKeeman, & Zhang, 2006).

Recent research by Hsu *et al.* (2013) is commencing to consider of information system development from a service provider perspective as consumers have become more involved with the design, development, and implementation of these systems. User involvement in information systems implementation efforts may begin by assuming that such participation will provide valuable input to various technical decisions to be made. However, their participation may have a greater value because those decisions are more socio-technical than purely technological practice (Damodaran, 1996; Wang *et al*, 2006).

According to Harris and Weistroffer (2009) based on the meta-analysis of 28 papers finds substantive evidence for user involvement to positively impacting user satisfaction which they argue is a proxy for system success. Chen, Liu, and Chen (2011) advocate that significant components of UP can provide further insights into the impact of user participation, such as the user (decision-making capabilities) positively impacting information system operation quality.

This study is substantiated by Ives and Olson's (1984) statement that "the benefits of user involvement have not been strongly demonstrated". Numerous researches of this topic have been performed in the last thirty years on this topic that generally supports the benefits of user involvement, but a number of studies report insignificant or conflicting results.

Define Roles in Information System Projects

According to Salminen (2000), the defining roles of the organization during the change process is of great importance. Responsibilities and authorities in the change process are clearly defined, the change project organization facilitates participation and effective control, and everyone knows what his/her role is during the change. Barczak, McDonough, and Athanassiou (2006) outlined that "clearly defined roles and responsibilities enable individual team members to know what their particular tasks are … and hold each responsible for those activities". The roles, responsibilities and authorities are clearly defined and communicated during the change process.

It has been asserted that implementing an information system is actually a change project. Cameron and Green (2004) express it in this way: "Information Technology based change involves people doing special things in different ways, with different inputs and different outputs". They believe that it would be important for information technology people to learn about managing change and to understand what organizational change actually is.

Research conducted in China demonstrates that user roles (the titles, positions, or responsibilities held on projects) are generally not well understood. Leonard (2004) notes that users are often regarded as "an inferior party" by information technology gurus. Iivari *et al*. (2010) diminish the user role to that of a static entity, a source of individual task productivity, regardless of how the user is defined. This may be compelling for research because of its simplicity, but it ignores social, organizational and technical factors.

Hsu *et al.* (2010) argue that effective UI (as measured by "quality interactions" that allow users some extent of control over the development process) influences project outcomes. Similarly, Chen, Liu, and Chen (2011) and Havelka and Rajkumar (2006) attests that ambiguous role definitions may negatively impact UP. As a result, research efforts have been made to improve the basic constructs of a user's role.

In America, Ives and Olson (1984) noted two roles: primary users (use the output) and secondary users (generate input or run the system). Damodaran (1996) identifies multiple user roles: resource pool of user expertise, "Top management", "Middle management",

user representatives and end-users. Mahanti (2006) affirms a number of stakeholders including executives, middle management, customers, developers, testers, analysts, finance personnel, and HR representatives. Kearns (2007) exclusively studies the executive manager.

Keil and Robey (1999) studied how troubled software development projects became troubled projects. They identified six roles that helped trigger de-escalation of the project's priority: top management, internal information system auditor, external auditor/consultant, information system users, information system project team member and information system management. Howcroft and Wilson (2003) suggest three roles in participatory practices: manager, employee and developer. Tudhope, Beynon-Davies and Mackay (2000) suggest various user roles within the rapid application development methodology; these include the executive sponsor, visionary (business analyst), ambassador (user representative) and advisor (end users).

A study of enterprise resource planning system implementations promotes two types of external roles: consultant and vendor (Wang *et al*., 2008). Developers can state that they try to keep user requirements in mind while they work, but this has been deemed insufficient in practice (Iivari, 2009). Jiang and Klein (2000) study of project risks used three types of constituents: management, users and IT staff.

Upton and Staats (2008) accentuate the importance of chief executive officer-level involvement in strategic information technology projects. Kamadjeu, Tapang and Moluh (2005) document the significance of executive sponsorship and support on overall project success. However, Biffl *et al.* (2006) suggest that extra effort may be necessary to mentor loosely engaged executives into becoming active participants. Wu & Wang (2006) outlines four user roles in their study of ERP project success: managers and stakeholders, customers, suppliers, and employees.

Millerand and Baker (2010) affirm that user and developer roles are not static thus should not be defined as such no matter how convenient for the researcher. They draw on the organizational theory that acknowledges that users can have multiple simultaneous roles, which they identify as user representatives, co-developers, and co-users. This multiple role-play is designated "enactment" in their theory development section, which contributes to their Integrative Design Model. Further, these users can have multiple relationships that include objects, actions and settings.

Terry (2008) reports on a survey of electronic commerce projects that highlight new characteristics of users given the advent of electronic business or internet technologies. The study of forty-four recently completed projects considers a new user type named "customer users" described as remote customers who may not be known to the organization. They are the ultimate end-users but are beyond the accepted definition of users, they are not staff and do not fall under the control structures of the organization. Harris and Weistroffer (2009) suggest that ERP system complexity increases the need for increased user involvement to capture the right requirements.

The challenges of dealing with individual and group issues are impacted by role perceptions

as a result to increasingly diverse workforce issues, and could well be noted by the abdication of performance management tasks, and hypersensitivity towards multiplicity issues – to the point of paralysis – in supervising performance (Arumugam, 2001).

He additionally alludes to the fact that there tends to be a gap between the formal and informal cultures, resulting in mixed perceptions of end-users to the system. This tends to create conflict and causes end-users to take the path of least resistance; this often tends to generate mediocre performance.

METHODOLOGY AND MATERIALS

The researcher adopted a survey research design because it is used to obtain information concerning the current status of the phenomena to describe what exists with respect to the variables or conditions in a situation without changing the environment. The researcher targeted the ERP system users (staff of Kisii University) who were 930. The sample size for this study was 76 respondents of Kisii University derived using Yamane's (1967) formula. Only 64 questionnaires were well completed and returned for analysis. The study relied on both primary and secondary data sources. Primary data was gathered using structured questionnaires. In addition to the primary data, secondary data from journals and e-books were also used to provide more information to this study. The researcher used structured questionnaires, which were designed carefully according to the objective of the study. The collected data was analyzed by using descriptive statistics methods of mean and standard deviation and inferential methods of correlation and regression analysis. Then the results were presented in the form of APA tables.

STUDY FINDINGS

The objective of the study was to examine the extent of user involvement in the implementation of the enterprise resource planning system in public universities. The respondents were issued with questions concerning the user involvement such as Interaction Quality (quality of inputs provided to the system organization is an indication of user involvement); Interaction Nature (whether the user role and their assigned responsibility with respect to the system tasks are instrumental behind user involvement in the project); Commitment level (level of commitment of the users is an indication of increasing user involvement) and Psychological Stance (increase in importance and relevance of the project to the users is an indication of increasing user involvement). For the success of the ERP implementation in public University. The respondents were required to provide their opinion based on the Likert scale of: 1 = Very Large Extent (VLE), 2 = Large Extent (LE), 3 = Moderate Extent (ME), 4 = Small Extent (SE) and 5 = No Extent (NE).

Table 1: Extent of User Involvement

Statement	N	M	SD
Interaction Quality	64	1.95	.785
Interaction Nature	64	2.16	.718
Commitment Level	64	2.00	.777
Psychological Stance	64	2.25	.926
Overall Result	**64**	**09**	**.802**

Table 1 showed the preliminary descriptive results of the research. The finding indicated that the respondents agreed that largely interaction quality was achieved (M=1.95; SD=.785); interaction nature (M=2.16; SD=.718); commitment level (M=2.00; SD=.777) and psychological stance (M=2.25; SD=.926). The overall result showed that the extent of user involvement was to a large extent achieved (M=2.09; SD=.802) in the implementation of the ERP systems in the university. The study also carried out correlation analysis to test whether there was a relationship between the extent of user involvement and the ERP system implementation. The results were summarized in *Table 2*.

Table 2: Correlation Analysis between Extent of User Involvement and the ERP System Implementation

		Extent of User Involvement	ERP System Implementation
Extent of User Involvement	Pearson Correlation	1	.854**
	Sig. (2-tailed)		.000
	N	64	64
ERP System Implementation	Pearson Correlation	.854**	1
	Sig. (2-tailed)	.000	
	N	64	64

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

The results of correlation analysis revealed a strong positive (r =.854; p-value <.05) relationship between the extent of user involvement and the ERP system implementation as indicated in the SPSS output in *Table 2*.

We do therefore reject the null hypothesis because the p-value <.05 and conclude that there was a significant relationship between the extent of user involvement and the ERP system implementation in public universities in Kenya. From this result, therefore, it is implied that if the extent of user involvement were practiced it would result in effective ERP system implementation. The coefficient of determination was calculated, R^2 = .7293, indicating that the two variables share about 72.93% of their variance. This means that there was evidence of an overlap between the two variables.

The research also carried out regression analysis to establish the level of significance of the extent of user involvement and the ERP system implementation. The finding is shown in *Table 3*.

Table 3: Regression Analysis of the Extent of User Involvement and the ERP System Implementation

Model	Unstandardized Coefficients	Standardized Coefficients	T	Sig.

		B	Std. Error	Beta		
1	(Constant)	9.863	1	9.863	167.651	.000
	Extent of User Involvement	3.648	62	.059		
	Goodness of fit:					
	$R=.854$; $R^2=.730$					
	Adjusted $R^2=.726$; $F=167.651$; $p<.05$					

a. Dependent Variable: ERP system implementation

In *Table 3,* R is the correlation coefficient. It provides a moderate degree of positive correlation (r=.854) between the extent of user involvement and the ERP system implementation. R-square of .730 measures part of the ERP system implementation that was explained by the extent of user involvement. It showed that approximately 73.0% of the variation in the ERP system implementation was attributed to variation in the extent of user involvement**.** The adjusted R-square provides an idea of how the model may be generalized. It should be as close to R square as much as possible if not the same. In this case, the difference for the final model is small; i.e. .004 or 0.4%. This means if the model was derived from the population rather than a sample, then it would have accounted for approximately 0.4% less variance in the ERP system implementation. The overall model was statistically significant (*F*-ratio =167.651; p-value<.05). The null hypothesis was rejected. The extent of user involvement, therefore, had a positive influence on the ERP system implementation in public universities in Kenya.

Un-standardized coefficient values were used to construct the regression equation. The Beta coefficient for the extent of user involvement was 3.648(p-value<.05) and was statistically significant. It made a unique contribution in explaining the ERP system implementation. Table 4.3 and model 4.1 shows that optimum regression equation showing the relationship between the extent of user involvement and the ERP system implementation was

$$Y = 9.863 + 3.648\ x_1$$

Regression model 4.1 has a strong degree of positive correlation (r=.854) between the extent of user involvement and the ERP system implementation. The model is 73.0% explained by the variation in the extent of user involvement and is statistically significant.

Discussion of the Extent of User Involvement

The finding above agrees with Hsu *et al* (2013) who highlighted that user involvement in information systems implementation efforts provide valuable input to various technical decisions to be made. Further, the results of the study concurred with Harris and Weistroffer (2009) who argued that support for user involvement positively impacting user satisfaction that they argue is a proxy for system success. Moreover, the finding of the study was in line with Chen, Liu, and Chen (2011) who suggested that significant components of user participation can provide further insights into the impact of user participation, such as the user (decision-making capabilities) positively impacting information system process quality.

Based on the related literature that concurred with the results of the study, the study reaffirms the management of the public universities in Kenya to ensure that users are ever involved in the implementation of the ERP systems during the planning stages and the execution phases. The user involvement was significant to the quality of the information systems adopted in the universities. However, the lack of user involvement normally results in user resistance to the implementation of the new information systems. Therefore, there is a need for user involvement in the implementation of ERP systems in public universities in Kenya.

CONCLUSION

The study concluded that the extent of user involvement had a statistically significant influence on the ERP system implementations in public universities in Kenya. In addition, the results of correlation analysis revealed a strong positive relationship between the extent of user involvement and the ERP system implementation. From the study results, it then implied that if the extent of user involvement was practised it could result in effective ERP system implementation in the university. Further, the regression analysis results showed that the extent of user involvement was statistically significant to the ERP system implementation. It made a unique contribution in explaining the ERP system implementation.

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