EFFECTS OF E-PROCUREMENT ON PROCUREMENT PERFORMANCE IN HOSPITALITY INDUSTRY IN KENYA: CASE OF SAROVA CHAIN OF HOTELS

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ABSTRACT

The advent of the internet has definitely made a change in the modern way of procurement functions. The role of procurement has changed considerably due to advancement in information technologies and information systems. For any organization to be in the frontline in modern business, it has to adopt the rapid change in technology and methods of doing things. Studies that have been carried out on electronic procurement clearly indicate that electronic procurement is a key factor on modern competitive companies in terms of efficiency and effectiveness of supply chains. A number of researches have been done on the business process implications of adopting electronic procurement but none has focused on effect of e-procurement on procurement performance at Sarova Chain of Hotels. This study ought to fill the existing research gap by conducting a study to establish to establish the effect of e- procurement performance at Sarova Chain of Hotels. The study was guided by technology acceptance theory, Schumpeter theory, innovation diffusion theory and transaction cost theory. This research adopted a descriptive research design. The study population comprises of 112 members of staff in different managerial levels currently working in the procurement department at Sarova Chain of Hotels. Random sampling technique was used to select 68 respondents. The researcher administered a questionnaire to each member of the target population. Quantitative data collected was analyzed using SPSS (Version 20) and the results presented through percentages, means, standard deviations and frequencies. A multivariate regression model was applied to determine the relative importance of each of the four variables with respect to procurement performance. The study revealed that through e-tendering, compliance to procurement policy has improved, e-sourcing provides a means to better understand competition and creates competitive intelligence. It was clear that enterprise resource planning ensures that the products are on the shelf in just the right quantity. Electronic procurement has the potential to reduce the total cost of acquisition. Thus the study concludes that adoption of e-tendering, e-sourcing, enterprise resource planning, E-informing were positively related to procurement performance. The study recommends that Sarova Chain of Hotels should fully adopt E–procurement system, enterprise resource planning, E-informing systems and E-sourcing system as all were found to enhance procurement processes in the Hotel sector.

Key Words: *e-procurement, procurement performance, hospitality industry, Kenya, Sarova chain of hotels*

INTRODUCTION

In today's world, E-business has become part and parcel of everyday life in many business circles as a large number of organizations are involved in one form of e-business or another such as e-procurement. The effect of e-business and in particular e-procurement on internal customer service is being addressed in this study because e-business and internal customer

service are all important issues in today's globalised world which is characterized by stiff competition among organisations. Research by Aboelmaged (2010) suggest that e-business activities bring three types of benefits to the organization: value benefits (perceived by both buyers and sellers as a result of reduced search and costs), revenue benefits (allowing the organization to exploit new opportunities such as disintermediation, free service, etc.), and logistics benefits (finding the proper position in a supply chain). The rapid growth of competition in the market and the consequent changes in economic conditions impose organizations and firms to implement new technologies to stay competitive. Those firms which have not implemented technology at the proper time are at the risk of losing customers or suppliers (Croom, 2011).

Globally, e-procurement has gained popularity especially with the advent of technology. In United States of America for instance, rapid development of e-procurement was reported in early 2000 just before the recession. By the end of the same year, it was reported that all state functions were maintaining web presence in at least some stage of their procurement processes with some participating in online bidding, (Reddick, 2004). In Malaysia, the government at some point issued a statement calling for all suppliers to use the e-procurement system (Croom & Brandon-Jones, 2011). Chew, Temkin and Hudson (2003) pointed out that Malaysian public sector are going through a rapid change especially as far as adoption of technology is concerned. Adoption of e-government and particularly e-procurement is inevitable for the government. A review conducted by Commonwealth of Australia indicates that the National governments of Italy, New Zeeland, Scotland, New South Wales and Western Australia in 2005 revealed that these countries were already using e-procurement system for public procurement activities.

In Africa, the concept of e-procurement is just gaining popularity especially in the public sector. To deal with the problems of lack of accountability and transparency in procurement activities in the public sector, Most African countries have resorted to legal reforms and adoption of procurement. Tanzania for instance put into place e-procurement systems to allow e-sharing, e-advertisement, e-submission, e-evaluation, e-contacting, e-payment, e-communication and e- checking and monitoring to ensure all public procurement activities are conducted online (Gabbard, 2010).

In Kenya, The Kenyan government made it mandatory for procurement of all public goods, works and services to be procured through online platforms. For County governments in particular, there is a directive for all procurement and finance operations to be conducted online. For instance, the government introduced integrated financial management information system (IFMIS) that is mandatory for all the 47 counties. IFMIS was introduced to improve governance by providing real time financial information and effectively programs, formulate budget budgets. It also enhances transparency and accountability and acts as a deterrent to corruption and fraud (USIAD, 2008).

E-Procurement

Information and communication technologies are changing the way organizations do business, particularly the adoption of e-business and e-commerce. The scope of e-business includes information exchange, commercial transactions and knowledge sharing between organizations (Croom & Brandon-Jones, 2005), whereas e-commerce focuses only on commercial transactions (Handfield, Straight & Stirling, 2002). Some of the technologies associated with e-commerce include websites, e-mail, extranets, intranets and electronic data interchange (EDI).

Integration of information across firms within supply chains is a requirement for efficient, responsive operations (Hannon, 2004); integrated information has been described as the glue that holds supply chains together. Having considered how e-procurement has been defined and described, the next section goes on to consider current use of e-procurement.

Firms in diverse industries use electronic procurement (e-procurement) in an attempt to increase the efficiency of the purchasing/supply management function and to reduce costs. Presutti (2003) defined e-procurement as a technology solution that facilitates corporate buying using the internet. Jap (2003) defined e-procurement as business-to-business purchasing practice that utilizes electronic commerce to identify potential sources of supply, to purchase goods and services, to transfer payment, and to interact with suppliers. E-procurement is part of a broader concept called information technology (IT), which the American Heritage Dictionary (2005) defines as the development, installation, and implementation of computer systems and applications.

According to Kaufmann and Carter (2004), e-procurement continues to grow and was projected to reach $3 trillion in transactions in 2004, up from $75 billion in 2002. Presutti (2003) refers to a Deloitte Consulting survey of 200 multi-national firms, which suggests the use of e-procurement is growing. Approximately 30 percent of firms in the sample had at least a basic e-procurement system in place. A total of 61 percent of the sample had planned to implement e-procurement systems or were at least considering it (Presutti, 2003).

Hospitality Industry in Kenya

Hotel institutions are arguably the most expressive aspect of hospitality. It has therefore become an important element in the management of destinations. In Kenya the Ministry of planning and National development report that hotels and restaurants accounted for 34 percent or Kenya shillings 13.483 billion in tourism earnings for 2005, attest to the significance of hotels and restaurants in Kenya's tourism industry. The accommodation and food component has always formed a large portion of the inclusive tour product and this aspect of the tour is arguably a key consideration in the customers' quality perception of the whole travel experience (Amit & Zott, 2011).

There has been consistent growth in the hospitality industry in Kenya. This growth can be attributed to the general growth in the Kenyan economy and steady increase in tourism earnings (US$286,000 in 2002 to US$855 million in 2007). General business pressures, the

achievement of the coveted five-star rating and membership to international hotel associations have created the need for effective key performance indicators (Gefen, Karahanna & Straub, 2003). Despite the development of performance measurement systems in the hospitality industry, various researchers (Handfield, Straight & Stirling, 2002) have pointed to the reluctance of the hospitality industry to use balanced measures and rely solely on financial measures. Jap (2003) contends that overall lack of management skills and expertise often makes organizations in developing countries to concentrate more on introducing and copying performance measurement systems from the Western world, which are not always the best suited to local circumstances. This raises the question what are the key performance indicators in the Kenyan hospitality.

Sarova Chain of Hotels

The global hotel industry is dominated by hotel chains. Sarova chain of Hotels is a well known brand in the hospitality industry in East Africa which has been operational in the industry since 1975 with at least eight chain hotels including Sarova Whitesands Resort & Spa, Sarova Panafric, Sarova Stanley, Sarova Mara, Sarova Taita Hills, Sarova Lion Hill, Sarova Salt Lick and Sarova Shaba (Kaufmann & Carter, 2013). The Hotel Chain has been well known due to the exceptional service delivery to its diverse customers in different parts of East Africa in terms of refreshments and accommodation. With the vision of being the preferred hospitality company in the ownership and management of hotels, resorts and lodges in the key markets of Africa, the management of Sarova Hotels has put emphasis on having productive employees by having a motto of providing dynamic and challenging work environment which fosters personal and professional growth (www.sarovahotels.com).

Competition has increased in the recent years with new modern hotels coming up with buildings with the current state of art but what has made Sarova group to stand out is the service offered by its diverse employees (Kaufmann & Carter, 2013). Records from the HR department indicate that currently, Sarova Hotel has 3050 employees who work in the front and back offices.

STATEMENT OF THE PROBLEM

The competition of today's global marketplace is driving companies to reshape their supply-chain to reduce overall cost and eliminate inefficiencies. The procurement management requirements normally include quality, timeliness, cost (more than just the price), minimizing business, financial and technical risks, maximizing competition, and maintaining integrity (Knudsen & Sweden, 2003).Companies are moving further towards virtual integration, where a network of third party suppliers, manufacturers and distributors replaces the traditional functions of the firm which, in former decades, were under direct ownership (Lamming, 2012). Firms use e-procurement for strategic and operational reasons such as reducing cost of materials, components or services; innovation; access to new technology and R&D; higher quality; taking costs off the balance sheet and many others (Min & Galle, 2003).

Sarova chain of hotels has in the past been experiencing challenges in procurement of items. These challenges includes high cost of procurement, delays in delivery time, quality of

products delivered and sometimes events of stock out. According to the procurement department in the hotel chain, Sarova changed its suppliers seven times in 5 years, between 2008 and 2010 citing delays in delivery and quality of products. The hotels chain lost Kshs. 23,456,107 in the same period due to procurement related challenges (Daily Nation, 22nd February 2013). To counter the challenge of delays in delivery time, the firms adopted a system of procuring in advance to ensure that there are no events of stock out. This culminated in another challenge of storage cost and spoilage of items especially the perishable goods. Since Sarova procures huge quantities of perishable goods, the firms needs an efficient procurement systems that ensures that quality stocks are supplied in time and that there are no events of stock out. This will ensure efficiency in operations with reduced cost. Sarova is adopting e-procurement as developed and functionality in procurement are becoming more and more sophisticated. E-procurement is envisioned to allow a re-evaluation of some of the central issues within procurement management.

Several empirical studies have been done on areas of e-procurement and procurement performance. Neef (2011) did a study on problems related to the adoption of e-procurement for indirect purchases in India. Narasimhan and Kim (2002) did a study on measuring the effectiveness of public procurement in Finland. Locally, Nolan (2009) did a study on effect of strategic procurement in project implementation in World vision Kenya. Munene (2013) conducted a study in incorporating green purchasing as a best practice in procurement of in-flight products at Kenya Airways Limited. Further, Lewa (2013) also did a study electronic procurement adoption in Kenya Ports Authority. However, despite the massive inquiry into these areas, none of these studies have been conducted to determine the effect of e-procurement on procurement performance in hospitality industry. Therefore, this study sought to establish the effect of e-procurement on procurement performance at Sarova Chain of Hotels.

OBJECTIVES OF THE STUDY

1. To determine the role of e-tendering on the procurement performance at Sarova Chain of Hotels.
2. To examine the role of e-sourcing on the procurement performance at Sarova Chain of Hotels.
3. To establish the role of enterprise resource planning on the procurement performance at Sarova Chain of Hotels.
4. To find out the role of e-informing on the procurement performance at Sarova Chain of Hotels.

LITERATURE REVIEW

Theoretical Review

This study is based on Technology Acceptance Theory (TAM) is a theoretical model that evaluates the effects of things like system characteristics on user acceptance. TAM assumes that a computer user generally acts quite rationally and uses information in a systematic

manner to decide whether to adopt, or not to use this technology in the workplace. Rajagopal and Bernard (1993) identified three major determinants of technology acceptance that relate to cognition and effectiveness and were suggested by previous research studies. He began with the TRA and adapted this as a basis for causal links between perceived usefulness, perceived ease of use, attitude towards using technology and behavioral intention to explain technology adoption.

Relative advantage refers to the degree to which an innovation is perceived as providing more benefits than its predecessor. Relative advantage results in increased efficiency, economic benefits and enhanced status. Past research has found that relative advantage of an innovation is positively related to the rate of adoption. Research suggests that when user perceives relative advantage or usefulness of a new technology over an old one, they tend to adopt it .In the context of banking sector, benefits such as immediacy, convenience and affordability to customers have been reported (Rajkumar, 2011).

TAM model, proposed is primarily intended to foretell users' acceptance of Information Technology and usage in an organizational perspective. By focusing on the attitude explanations of intention to use a specific technology or service, TAM model deals with perceptions as opposed to real usage, suggests while a new technology is presented to the potential adopter, two attitude-affecting factors, Perceived usefulness and perceived ease of use, influence their decision about how and when they will use it. As an extension of TAM, Sanders (2005) proposed the Theory of Reasoned Action (TRA). The main point of this theory is that human behavior originates from their intentions and behavioral intention (BI) is a kind of cognitive activity which consists of two facets, namely attitude and subjective norm. To sum up, according to TRA both attitude and subjective norm component of individual behavior is determined by salient belief.

According to Smart and Harrison (2003), principally Technology Acceptance Model TAM is used to test clients' intent to assent or to refuse the use of a particular technology and in this case cashless payments. TAM was developed by Davis in 1989, and explains the logic used by a customer to accepts or decline a certain technology based on "it's perceived ease of use" and "its perceived usefulness.
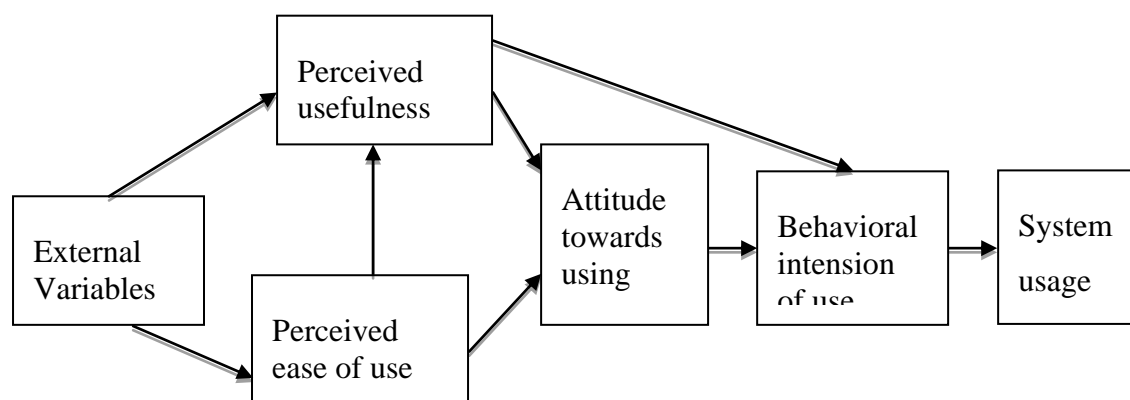

Figure 1: TAM Model (*Source:* Davis, 1989)

Perceived ease of use is "the level at which a potential consumer of a technology believes a technology or a potential system is effortless. Perceived usefulness to be the level at which a potential user of a technology perceived the use of the technology will enhance their performance. E-procurement systems adoption success depends on users acceptance, which in turn depends on perceived usefulness and usefulness. Therefore, for procurement performance to be enhanced, there need to users acceptance.

EMPIRICAL REVIEW

E-procurement is more likely to be beneficial in dispersed supply chains as it helps coordination. Different actors in supply chains have got different power, legitimacy and urgency to implement e-procurement and e-procurement can have an effect on trust in supply chain relationships. Lack of assistance and the structural inertia of large organizations in supply chains can be a disincentive to implement e-business. Different industries show different propensities to e-procurement adoption, related to existing use of information exchange infrastructures prior to the advent of the internet (Carter, Kaufmann, Beall, Carter, Hendrick & Petersen, 2004).

The greatest benefits of e-business occur when its application is fully integrated throughout the supply chain (Wahid, 2010). Some literature has pointed to the possibilities of greater integration and collaboration across e-business-supported supply chains, (Smart & Harrison, 2003). E-procurement is more likely to be adopted if it is perceived that suppliers have capability to deal with it; there are difficulties in integrating information systems across firm boundaries in supply chains if suppliers lack capability.

The potentials of e-procurement have already been proven in a number of studies (Aberdeen Group, 2011). According to these studies, e-procurement enables companies to decentralize operational procurement processes and centralize strategic procurement processes as a result of the higher supply chain transparency provided by e-procurement systems. A company's procurement function is subdivided into strategic and operational processes since activities and priorities in these two areas are entirely different, (Kaufmann, 2009). Supplier management, the pooling of purchase requisitions and procurement-oriented product development are tasks that are typically assigned to strategic procurement. Prior to e-procurement, strategic procurement often had to deal with administrative routine work as well, such as individual transactions, converting purchase requests into purchase orders or ensuring the correct allocation of invoices received. Strategic aspects are frequently neglected in the process, with the buyer having little influence over the choice of suppliers and the purchased products (Industrial Distribution, 2011).

Despite the potentials promised by the vendors of such systems, e-procurement got off to a slow start. A study by Eyholzer and Hunziker (2010) shows that only 18 percent of the Swiss companies analyzed used electronic product catalogs, auctions or requests for quotations in procurement in the year 2000. Other studies show similar proportions for other countries (Industrial Distribution, 2011). A study by Wyld (2004) reports that currently almost half of all American companies use e-procurement systems.

E-procurement adoption has to be managed well to achieve the firm's performance goals. There are several key success factors, related to both the competency of the e-procurement service provided by an online auction intermediary and to the organization's own internal capabilities. One key success factor relating to e-procurement is technical capability of the system (Johnston, 2005). Johnston (2005) specified technical service quality in terms of system quality (security, reliability, easy to use, accessibility) and service quality (e.g. responsiveness of service). In addition, trust in the service provider is another major success factor for electronic service adoption (Rotchanakitumnuai & Speece, 2009).

Although Carr and Smeltzer (2012), cautioned that increased use of information technology may not improve the level of trust between buyer and sellers, many scholars have shown that increased use of e-procurement can enhance the buyer-seller relationship (Gadde & Snehota, 2010). The greater use of e-procurement and inter-organizational systems can enhance trading partners' relationship (Archer and Yuan, 2010; Croom, 2011) and the online auction intermediary can be considered one of the trading parties of the e-procurement system. The main attributes related to trust in the service provider are benevolence, integrity and capability (Smeltzer & Carr, 2003). Benevolence is the perception that trusted parties will do positive actions rather than only maximize profit. Integrity means the trusted parties will be honest and have transparent policies.

Organizational factors also have a major influence on the deployment of e-procurement (Rajkumar, 2011). Organizational readiness is an important driver for increasing internal process improvement, enhancing learning and innovation including the knowledge of purchasing personnel, their computer skill and resources. Management support is another key influence on new electronic service adoption (Rotchanakitumnuai & Speece, 2004). Positive management support for e-procurement can ensure system adoption success. Training is the best support to enable personnel to use the e-procurement more efficiently. Croom and Brandon-Jones (2007) found that governance structure is one key success factor of e-procurement implementation management. E-procurement makes the procurement process more transparent and helps organizations achieve good governance impacts (Hui et al., 2011).

RESEARCH METHODOLOGY

This study adopted a descriptive survey design. Descriptive survey research designs are used in preliminary and exploratory studies to allow researchers to gather information and summarize, present and interpret data for the purpose of clarification, (Orodho, 2003). According to Mugenda and Mugenda (2008), the purpose of descriptive research is to determine and report the way things are and it helps in establishing the current status of the population under study.

The target population of this study was the 112 employees working in procurement department at Sarova chain of hotels. The focus on this population is based on the fact that these people are the ones in a better position give the information that the study sought to collect since they work in the said institution and in the department the study is interested in.

The researcher selected 50% of 112 employees in the procurement department. This will give rise to a sample size of 56 respondents for the study. Adèr (2008) argues that if well chosen, samples of about 10% of a population can often give good reliability. Further, Cooper and Schindler (2003) indicated that, statistically, in order for generalization to take place, a sample of at least 30 must exist. Therefore, the choice of 50% in this study yielding a sample size of 68 will be adequate to collect reliable data for generalization.

The study used random sampling technique to 10% of 112 employees in the procurement department. According to Cooper and Schindler (2003), random sampling frequently minimizes the sampling error in the population. This in turn increases the precision of any estimation methods used. In random sampling, each item or element of the population has an equal chance of being chosen at each draw (Kothari, 2008).

The study used primary data collected using a structured questionnaires. A drop and pick later administration method was employed where the questionnaires were given out to the respondents and then collected later. To establish the validity of the research instrument the researcher sought the opinions of experts in the field of study especially the researcher's supervisor and lecturers. Reliability of the research instrument was enhanced through a pretest that was done in Hilton hotel. The logic behind using another hotel other than the ones targeted in the study is in order not to pre-empty what the study is all about to potential respondents and also not to bother the respondents with the pretest study and the actual study.

The data was then analyzed using descriptive statistics. The descriptive statistical tools (SPSS Version 20 and Excel) helped the researcher to describe the data. Correlation inferential analysis was employed for analysis. The researcher further employed regression model to study the relationship between e-tendering, e-sourcing, enterprise resource planning and e-informing on one end and procurement performance on the other end. The relationship of the equation was a linear equation as shown below;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_4 X_{5+} \varepsilon$$

Where:

Y= Procurement Performance; β_0= constant term; $\beta_{1-}\beta_4$= Beta coefficients (intercepts for independent variables); X_1=e-tendering; X_2= e-sourcing; X_3= enterprise resource planning; X_4 = e-informing; $X_{5=}$ e-payment and ε = Error term.

RESEARCH RESULTS

Effect of E-tendering on Procurement Performance

The first objective of the study was to determine the effect of E-tendering on procurement performance at Sarova Chain of Hotels, Results obtained from correlation results found a strong positive correlation between procurement performance at Sarova Chain of Hotels and E-tendering, prediction results from the regression model show that a unit increase in E-tendering would lead to an increase in procurement performance at Sarova Chain of Hotels.

The findings are in support of the literature by Rajkumar (2011), who found out that strong positive correlation between and E-tendering and procurement performance.

Descriptive statistics further showed that E-tendering influences procurement performance to great extent, E-tendering enables the selection of a suitable supplier at a time appropriate to the circumstances, open e-tendering often lead to unscrupulous suppliers being awarded contracts, tenders should only be called from a limited number of firms carefully selected as being capable of doing the work to standard, bid selection is always based on lowest tender but this may not always be the most economical solution in the long term, the findings are in support of the literature by , Rajkumar (2011) that open system of e-tendering leads to the purchase of inferior materials and speeding up of the work and that the organisation has a well-established e-tendering system. The study further established that E- tendering eliminates paperwork, rework and errors. the findings are in line with the research by Hannon (2004) Centralized tracking of transactions offered by E- tendering system enables full reporting on requisitions, items purchased, orders processes and payments made.

Influence of E-Sourcing On the Procurement Performance

The second objective was to determine whether E-sourcing influences procurement performance at Sarova Chain of Hotels, results obtained from correlation model showed that a strong positive correlation between procurement performance at Sarova Hotels and institutional E-sourcing, prediction results from the regression model show that a unit increase in E-sourcing would enhance procurement performance at Sarova Hotels. The findings are in line with the research by Wahid (2010), who found out that strong positive correlation between E-sourcing and procurement performance.

Further, the results obtained from descriptive statistics affirmed that that E-sourcing influences procurement performance at Sarova Chain of Hotels to great extent. E-sourcing streamline the bidding process, E-sourcing enables suppliers from anywhere in the world to compete for a buyer's business, the findings are in support of the literature by Kaufmann and Carter (2004) that purchasing processes should be evaluated and improved before adopting e-procurement tools such as e- sourcing, In reverse e- sourcing, suppliers compete dynamically for a buyer's business and typically bid down the price of an item to be purchased and that E-sourcing reduces purchase prices.

The study also revealed that participating in e-Sourcing helps the management of Sarova Chain Hotels to better understand potential supplier's culture by improving transparency and providing a clearer framework for how the Hotel operates. The findings are in line with the research by Smart and Harrison, (2003) that e-Sourcing events force discipline in the supplier's sales process.

Influence of Enterprise Resource Planning Procurement Performance

The third objective aimed to establish the weather enterprise resource planning influences the procurement performance Sarova Chain Hotels, the study also found a strong positive correlation between procurement performance at Sarova Chain of Hotels and enterprise

resource planning, prediction results from the regression model show that a unit increase in enterprise resource planning would enhance the procurement performance at Sarova Chain of Hotels.

Results from descriptive statistics showed that, enterprise resource planning affects procurement performance to great extent. ERP systems provide a tightly integrated solution to an organization's information system needs, ERP gives a Sarova Chain of Hotels an integrated real-time view of its core business processes, the study findings are in line with the research by Lamming (2012), that ERP allows organizations to use one system that integrates the entire business process and creates an enterprise-wide view of significant corporate information, ERP systems track business resources such as cash, raw materials, and production capacity and that organizations has not hesitated to adopt ERP systems due to their high cost and risk. Further the study established that ERP eliminates time wastage at Sarova Chain of Hotels and this helps to enhance organization's productivity, efficiency and profitability, ERP can is used to simplify the task at Sarova Chain of Hotels of reducing overages, improving production and delivery schedules and more (Presutti, 2003). ERP makes it simple and easy for Sarova Chain of Hotels to optimize on efforts rather than to create an informed guess about volumes, processes and more.

Influence of E-informing on Procurement Performance

The fourth objects was determine whether E-informing influences procurement performance at Sarova Chain of Hotels, Results from correlation results showed a strong positive correlation between procurement performance at Sarova Chain of Hotels and E-informing prediction results from the regression model showed that a unit increase in E-informing would lead to an increase in procurement performance at Sarova Chain of Hotels, the study further established that E-informing influences procurement performance to great extent, E-informing facilitates effective communication within at Sarova Chain of Hotels, E-informing enhances procurement performance of an at Sarova Chain of Hotels and that e-informing enables Sarova Chain of Hotels to decentralize operational procurement processes and centralize strategic procurement processes, the finding are in line with the research by Al-Mashari et al,(2003), Internet can be used to buy goods and services from known or unknown suppliers, e-procurement revolution is expected to enhance the status and influence of the purchasing function within hotel industry, electronic procurement has the potential to reduce the total cost of acquisition, organizational characteristics and organizational influences are significant motivators to the use of e-procurement. The findings are in line with the literature by Kennedy and Sanders (2005) E- informing helps of Hotels better understand a potential supplier's culture by improving transparency and providing a clearer framework for how an organization is going to procure services.

REGRESSION ANALYSIS

In this study, a multiple regression analysis was conducted to test the influence among predictor variables. The research used statistical package for social sciences (SPSS V 21.0) to code, enter and compute the measurements of the multiple regressions. The model summary is presented in the table below.

Table 1: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.638	.407	.398	.200345

Adjusted R squared is coefficient of determination which tells us the variation in the dependent variable due to changes in the independent variable. From the findings in the above table the value of R squared was 0.407 an indication that there was variation of 40.7 percent on procurement performance at Sarova Chain of Hotels due to changes in E-tendering, E-sourcing. Enterprise resource planning and E-informing at 95 percent confidence interval., This shows that 40.7 percent changes in procurement performance at Sarova Chain of Hotels could be accounted to E-tendering, E-sourcing, Enterprise resource planning and E-informing. R is the correlation coefficient which shows the relationship between the study variables. From the findings shown in the table above it is notable that there extists strong positive relationship between the study variables as shown by 0.638.

The study further tested the significance of the model by use of ANOVA technique. The findings are tabulated in table below.

Table 2: Summary of One-Way ANOVA results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.918	3	4.306	6.223	0.015
	Residual	41.52	60	0.692		
	Total	54.438	63			

Critical value = 2.49

From the ANOVA statistics, the study established the regression model had a significance level of 0.3% which is an indication that the data was ideal for making a conclusion on the population parameters as the value of significance (p-value) was less than 5%. The calculated value was greater than the critical value (6.223> 2.49) (2.49 value obtained from the ANOVA tables) an indication that E-tendering, E-sourcing, Enterprise resource planning and E-informing all affect the procurement performance at Sarova Chain of Hotels. The significance value was less than 0.05 indicating that the model was significant. In addition, the study used the coefficient table to determine the study model. The findings are presented in the table below.

Table 3: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.508	1.131		1.333	.001
E-tendering	.624	.131	.541	4.763	.013
E-sourcing	.763	.142	.651	5.373	.002
ERP	.614	0.132	0.541	4.652	.013
E-informing					
	0.634	0.101	0.541	6.277	.014

From the data in the above table the established regression equation was:

$$Y = 1.508 + 0.624X_1 + 0.763 X_2 + 0.614 X_3 + 0.634 X_4$$

From the above regression equation it was revealed that holding E-tendering, E-sourcing, Enterprise resource planning and E-informing to a constant zero, the procurement performance at Sarova Chain of Hotels would be at 1.508, a unit increase in E-tendering would lead to an increase in procurement performance at Sarova Chain of Hotels by factors of 0. 624, a unit increase in E-sourcing would lead to increase in procurement performance at Sarova Chain of Hotels by factors of 0. 763, a unit increase in Enterprise resource planning would lead to an increase in procurement performance at Sarova Chain of Hotels by a factor of 0. 614 and a unit increase in E-informing would lead to an increase in procurement performance at Sarova Chain of Hotels by factors of 0. 634. All the variables were significant as their significant value was less than ($p<0.05$).

Pearson Correlation

After the descriptive analysis, the study conducted Pearson correlation analysis to indicate a linear association between the predicted and explanatory variables or among the latter. On the correlation of the study variable, the researcher conducted a Pearson moment correlation. From the finding in the table 4, the study found a strong positive correlation between procurement performance at Sarova Chain of Hotels and E-tendering as shown by correlation factor of 0.553, this strong positive relationship was found to be statistically significant as the significant value was 0.001 which is less than 0.05. The study also found strong positive correlation between procurement performance at Sarova Chain of Hotels and E-sourcing as shown by correlation coefficient of 0.711; this too was also found to be statistically significant at 0.003 confidence level. The study further found a strong positive correlation between procurement performance at Sarova Chain of Hotels and enterprise resource planning as shown by correlation coefficient of 0.672, this too was also found to be statistically significant at 0.002 confidence level and finally the study finally found a strong positive correlation between procurement performance at Sarova Chain of Hotels and E-

informing as shown by correlation coefficient of 644 at 0.000 level of confidence. The findings concur with Wahid (2010), who found out that strong positive correlation between E-informing and procurement performance. The findings further agree with Rajkumar (2011), who found out that strong positive correlation betweenE-tendering and procurement performance.

Table 4: Correlations matrix

		Procurement performance	E-tendering	E-sourcing	Enterprise resource planning	Ownership concentration
Procurement Performance	Correlation Coefficient	1	0.553	0.711	0.672	0.644
	Sig. (2-tailed)	.	0.476	0.439	0.335	0.958
E-tendering	Correlation Coefficient	0.553	1	0.142	0.037	1
	Sig. (2-tailed)	0.001	0.0012	0	0.003	0.002
E-sourcing	Correlation Coefficient	. 711	0.142	1	0.046	0.008
	Sig. (2-tailed)	0.003	0.011	0.004	0	0
Enterprise resource planning	Correlation Coefficient	0.672	-0.037	0.046	1	0.124
	Sig. (2-tailed)	0.002	0	0.001	.	0.002
E-informing	Correlation Coefficient	0.644	1	0.008	0.124	1
	Sig. (2-tailed)	0	0.001	0.003	0	.

CONCLUSIONS

The study revealed that through e-tendering, compliance to policy at Sarova Chain of Hotels has improved as the hotel can quickly procure products and services from preferred suppliers and are unable to create maverick purchase therefore the study concludes that e-tendering had a positive impact on the procurement performance at Sarova Chain of Hotels.

The study established that participating in e-sourcing enables the hotels management to better understand competition and creates competitive intelligence; E-sourcing ensures that Sarova hotels get quality goods for best prices, e-sourcing provides a means to leverage new technology for working with a potential buyer in the future thus the study concludes that E-sourcing had appositive influence on the procurement performance at Sarova Chain of Hotels.

The study noted that ERP gives a Sarova Chain of Hotels an integrated real-time view of its core business processes, ERP systems provide a tightly integrated solution to Hotels' information system needs and that ERP systems track Hotels resources such as cash, raw materials, and production capacity, thus the study concludes that enterprise resource planning enhanced the procurement performance at Sarova Chain of Hotels.

The study revealed that e-informing influences the procurement performance of Sarova Chain of Hotels to a great extent, electronic procurement has the potential to reduce the total cost of acquisition, and theretofore the study concludes that E-Informing enhanced the procurement performance at Sarova Chain of Hotels.

RECOMMENDATIONS

The study recommends that Sarova Chain of Hotels should endeavor to adopt E-tendering as E-tendering was found to enhance faster communication during procurement thereby saving time. Moreover, E-tendering eliminates paper and copying costs and documents issued are in good control. In addition, E-tendering provides fast, reliable exchange of information, a transparent audit trial, and clearer comparison of bids submitted. However, since IT system could crash preventing distribution of documents there is need to allocate finances to ensure high level of security to protect the integrity of data thus guaranteeing systems process reliability.

From the findings and deductions of the study, it is recommended that Sarova Chain of Hotels should fully adopt and employ E-sourcing system as it has the advantage of transparency in the purchasing process. Clearly, the Sarova Chain of Hotels should take advantage and enjoy the potential benefits of E-sourcing by incorporating it in its procurement processes.

Based on the literature reviewed and conclusions from the study, Sarova Chain of Hotels should incorporate and fully employ enterprise resource planning in its procurement structures. Enterprise resource planning will make the management of new procurement processes easier and eliminates inefficiency in procurement which stems from improper reporting. An enterprise resource planning system has the potential improve Sarova Chain of Hotels procurements' data quality and as result they can make better procurement decision. Having the right enterprise resource planning system in place means improved procurement, inventory, and demand forecasting this essentially implies improving the entire procurement processes and making it more responsive.

Another recommendation to Sarova Chain of Hotels is that they should fully adopt E-informing systems as the E-informing system was found to enhance innovation process thus enhancing the procurement processes in the public sector. By gathering and distributing procurement information both from and to internal and external parties using internet technology, Sarova Chain of Hotels stand to enhance greater transparency in procurement

through electronic publishing of tender notices and contract awards. This in turn is likely to enhance accountability and reduce the instances of corruption.

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