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RESEARCH ARTICLE

ADOPTION OF ENTERPRISE RESOURCE PLANNING SYSTEM IN KENYA: A CASE STUDY OF KENYA ORDNANCE FACTORIES CORPORATION

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ABSTRACT

Despite the extensive benefits of ERP systems, organizations commonly face a hostile attitude from potential users who resist the ERP system implementation process. Customization of ERP is possible but big modifications are complex, costly and difficult in upgrading. The study sought to find ways to actualize effective adoption of ERP and understand the problems of ERP adoption in KOFC. The research was carried out through a Case Study with KOFC Corporation using questionnaires and individual interviews. The study findings showed that recent surveys confirm that majority of the respondents have some idea of other Information Systems yet they are not very comfortable with the current ERP mostly because they feel it was customized in a complicated way. The main conclusions drawn from this research were that current approaches to adopting ERP are deficient because they failed to embrace a holistic approach, instead opting for a narrow one which proves to have not worked and that a lack of communication between major stakeholders at corporation and the contractor level has hindered ERP adoption. This research argues for a multi-pronged model to reduce incidences of resistance. One that takes into account customer views, management of company policies, implementation issues (including proper resourcing and review policies), the need for developer support infrastructures, and a means of communication networks.

INTRODUCTION

Enterprise Resource Planning (ERP) is a System that attempts to integrate all Departments and functions across an organization onto a single computer system that can serve those entire different departments's particular needs (Bidgoli and Hossein, 2004). In order to achieve integration, most ERP systems use a unified database to store data for various functions found throughout the organization. For instance, functions such as Human Resources, Supply Chain Management, Customer Relations Management, Finance functions, Manufacturing functions and Warehouse Management functions were all once stand alone software applications, usually housed with their own database and network, today, they can all fit under one umbrella - the ERP system (Khosrow–Puor and Mehdi, 2006). Organizations consider the ERP system their backbone and a vital organizational tool because it integrates varied organizational systems, and enables flawless transactions and production.

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ERP systems can run on a variety of computer hardware and network configurations, typically employing a database as a repository for information (Khosrow–Puor and Mehdi, 2006). ERP's scope usually implies significant changes to staff work processes and practices. Generally, three types of services are available to help implement such changes: consulting, customization, and support (Auerbach Publications, 1999). Implementation time depends on business size, number of modules, customization, the scope of process changes, and the readiness of the customer to take ownership for the project. ERP covers almost every essential functional unit of a firm's operations including accounting, financing, procurement, marketing, and sales among others (Turban *et al.,* 2008). This information processing tool becomes the bridge that helps different isolated functional units share and update their data immediately, so managers can continually revise strategies based on data from all departments.

A Gartner group study was carried out in 1300 European and American companies in the year 2013 and found that 32% of ERP projects were delivered late and thus unable to achieve the true benefits of implementation. Also by doing comparative

analysis between the identified issues for companies in NCR Some issues ware proved to be crucial for small companies but not for large enterprises such as proper system implementation strategy, clearly defined scope of implementation procedure, proper project planning and minimal customization of the system selected for implementation, because of some limitations faced by the small companies as compared to large enterprises.

1.2 Statement of the problem

Kenya Ordinance Factories Corporation (KOFC) is located in Uasin Gishu County of the former Rift Valley province. It is a military manufacturing institution with 400 workers. However, through experience and observation, there has been encountered a worrying trend among KOFC workers, principally in their willingness to embrace the ERP technology. The key concerns included, unsatisfactory ERP services seeking behavior, lack of interest among personnel in joining the ERP support group, staff failure to seek for support whenever they have difficulties in utilizing the ERP system, and poor staff attendance of ERP awareness lectures. For instance, KOFC records indicated that ERP trainings are attended by only 2.5% of workers; awareness lectures were attended by 17%, (KOFC annual report, 2010). Within the context of KOFC it was not understood why such scenario is prevalent. Lack of knowledge about ERP, negative attitudes towards automation stigma were cited in the corporation's annual report (2010) as possible factors that may had negatively influenced the embracing of ERP services seeking behavior among potential clients. There was no empirical study that had been conducted to shed light about the influence of drivers about ERP, preparation towards ERP, infrastructure and staff motivation in KOFC. To enhance and ensure utilization and effectiveness of these services, it was critical that the factors that influenced ERP services seeking behavior among workers was understood and tackled accordingly. This research seeks to establish the ERP knowledge level on; drivers about ERP, preparation towards ERP, infrastructure and staff motivation in KOFC.

Purpose of the study

The purpose of this study is to determine the barriers on adoption of Enterprise Resource Planning at Kenya Ordnance Factories; with a view to proposing guidelines for the way forward.

Specific objective

The specific objectives of this research are to:

i. Identify the barriers to the successful adoption of ERP programme
ii. Evaluate drivers relevant to supporting manufacturing staff in coping with ERP
iii. Explore staff stakeholder views related to ERP adoption
iv. Formulate recommendations on the best ways of ERP adoption in KOFC

Theoretical review

In the early 1970s, the production-oriented information systems were known by the name MRP (Material Requirement Planning). MRP at its core is a time phased order release system that schedules and releases manufacturing work orders and purchase orders, so that sub-assemblies and components arrive at the assembly station just as they are required (Siriginidi, 2000). Some of the benefits of MRP are reduction of inventories, improved customer service, enhanced efficiency and effectiveness (Siriginidi, 2000).

In the 80s, competitive pressures increased and users became more sophisticated, MRP evolved and expanded to include more business functions such as product costing and marketing. In the late 1980s, MRP expanded from a material planning and control system to a company-wide system capable of planning virtually all the firm's resources. This expanded approach was MRPII (Material Requirement Planning two). A major purpose of MRPII was to integrate primary functions (such as production, marketing and finance) and other functions such as personnel, engineering and purchasing into the planning process to improve the efficiency of the manufacturing enterprise (Chen, 2001; Chung and Snyder, 2000; Mabert *et al*., 2001). MRPII had certain extensions like rough cut capacity planning and capacity requirements planning for production scheduling on the shop floor as well as feedback from manufacturing shops on the progress of fabrication. Since the 1980s, the number of MRPII installations had continued to increase, as MRPII applications became available on mini and micro computers (Siriginidi, 2000). Like MRP, MRPII focused on the manufacturing process. The next stage of MRPII evolution was just-in-time (JIT) methodology that combined with the plummeting price of computing to create the islands of automation in late 1980s.

The Gartner Group of Stamford, CT, USA, coined the term ERP in the early 1970s to describe the business software system that is the latest enhancement of an MRPII system (encompasses all MRPII modules). A key difference between MRPII and ERP is that while MRPII has traditionally focused on the planning and scheduling of internal resources, ERP strives to plan and schedule supplier resources as well, based on the dynamic customer demands and schedules (Chen, 2001). In the mid 1990s ERP expanded including "back-office" functions such as order management, financial management, warehousing, distribution production, quality control, asset management and human resources management. it then evolved to handling more "front-office" functions, such as sales force and marketing automation, electronic commerce and supply chain management systems. ERP implementation encompasses the entire value chain of the enterprise, from prospect and customer management to order fulfillment and delivery (Chen 2001, Chung and Snyder, 2000).

Most of the current ERP systems are based on the client/server solution model (Rao, 2000; Siriginidi, 2000). In a client/server environment, the server stores the data, maintaining their integrity and consistency and processes the requests of the user from the client desktops unlike the old mainframe systems. The load of data processing and application logic is divided

between the server and the client (Gupta, 2000). Currently, ERPs are managed through browser/Web server architecture in order to deliver e-business capabilities (Scheer and Habermann, 2000; Yen *et al*., 2002).

Modern ERPs are built with a clear separation of functional components. The user interface is implemented using graphical user interface (GUI) techniques deployed on client machines. Powerful server machines host the databases and business logic written as server procedures. The databases are built using relational database technology. These technologies in general have allowed the users to architect the system in such a way that installation, customization and extensions are possible in shorter timeframes. Each user has a login identification with defined role, responsibilities and privileges (Rao, 2000, Rao, 2000)

2.2 RELATED LITERATURE

2.2.1 Drivers to ERP adoption in manufacturing institutions

In their subsequent studies of ERP adoption in small- and medium sized companies in US and Sweden, Mabert *et al*. (2000) and Olhager and Selldin (2003) measure performance from two perspectives: "ERP performance outcomes" and "areas benefiting from ERP"

Table 2.2. E-readiness Assessment in Kenya

ERP Performance Outcomes	Areas Benefiting from ERP
Quickened information response time	Availability of information
Increased interaction across the enterprise	Integration of business operations/processes
Improved order management/order cycle	Quality of information
Decreased financial close cycle	Inventory management
Improved interaction with customers	Financial management
Improved on-time delivery	Supplier management/ procurement
Improved interaction with suppliers	Customer responsiveness/flexibility
Improved cash management	Personnel management
Lowered inventory levels	Decreased information technology costs
Reduced direct operating costs	

Source: bridges.org

JD Edwards has carried out a few ERP implementations in Kenyan companies, primarily in the petroleum, soft drinks and manufacturing sectors. Business Management Software Solution, Application and Services (SAP) has been implemented in a large number of companies primarily in the power, transport and petroleum sectors. Since Kenya Power and Lighting Company (KPLC) implemented the SAP R/3 system in 1997, a number of other companies have also implemented similar products. In 2006, three government corporations namely: Kenya Ports Authority, TelKom Kenya Ltd., and Kenya Pipeline embarked on ERP implementation. The major focus is on large ERP and inventory management systems. The smaller ERP systems include Navision, Accpac, Great Plains, and Sun Accounts systems. There is no clear data on the total installed base but the Table below is an indication of the market.

Table 2.2. ERP Installations in the Kenyan Market

ERP	TARGET	COMMENTS
SAP R/3	Large enterprises and Governments	Current installations include: KPLC, KEN-GEN, Kenya Ports Authority, Kenya Pipe Line, Caltex
Oracle Financials	Large enterprises and Governments	Government of Kenya – Treasury
Baan	Large enterprises	Bidco, Firestone, Unga
Sage Line	Small and Medium sized enterprises	KWAL, General Motors
Ebizframe	Small and Medium sized enterprises	ACFC, Kenya Tea Development Authority
ACCPAC	Small and Medium sized enterprises	James Finley, BASFEA
Sun Systems	Small and Medium sized enterprises	Uniliver Kenya, EABL
JD Edwards	Large/ Medium enterprises	Shell & BP

Source: symphony consulting (2006)

Moreover, global markets already give businesses throughout the world access to similar resources. Competitive pressures are causing many routine business processes to converge on similar world-class standards of efficiency and quality. This means that decision making, could become the key link in the value chain whereby companies can still achieve superior performance (CIMA, September 2007). Managerial decision making is something of a black box. Most companies have a strategic planning process and a governance process at board level that is usually formalized. But the planning process can often generate reports rather than decisions and the board's role in decision making is often just to oversee or ratify. Usually only routine operational decisions, for example credit management, have fully documented processes.

Most decisions are taken by line management outside formal processes. So what is in the management's black box is the decision making process which is usually illustrated as a proposal being considered by participants in the context of the organization and its strategic position. Alternatives, risks and potential outcomes are considered and then a decision is reached. There may also be a post audit and a feedback loop. The decision making process is subject to human error as the participants have personalities, prejudices and a self-interest bias (CIMA, September 2007).

Discussion of how management accountants can improve this process with members of CIMA's Forum contributes some important insights (Mankins and Steele, 2006); The decision should not be shown as the end of the process. It is important that decisions are managed through implementation and on to subsequent decisions to achieve impact. The outcome of the decision making process must be an impact on the business's performance. The organization's enterprise governance and strategic planning process provide the context in which issues are framed. The organization's culture and leadership style are also important determinants of how decisions are framed as is the role finance will play in the process. Management accountants are keen to work with the business to improve decision making. They can provide the metrics and analysis to support evidence based decision making. Management

accountants' invitation to participate rests on their ability to provide timely and accurate management information efficiently and their ability to work closely with the business to combine financial expertise with business understanding to inform decision making (Mankins and Steele, 2006).

2.2.2 Barriers to adoption of ERP system

Despite the extensively mentioned benefits of ERP systems, organizations commonly face a hostile attitude from potential users who resist the ERP system implementation process. The adoption of such an integrative package requires reengineering of business process. In order to consider as success, an ERP implementation, has to be accepted by the employees, who will be the users of the systems. This has also been identified as a critical success factors for ERP deployment and users' acceptance of the systems. Furthermore, the selection of the vendor plays a vital role for the successful implementation of ERP. Because, vendor should support the company from the planning stage up to life time maintenance, there should be trust and cooperation between each other. In early research findings, barriers were identified as Age, Education and training, IS experience, User involvement and participation, Top Management support, Organizational Culture, Vendor and Customer Partnership and Complexity of the system (Aladwani 2001; Al-Mashari *et al.,* 2003; Umble *et al.,* 2003).

Zviran *et al*. (2005) indicated that there is a relationship between age and user satisfaction. Older people are more likely to fear new technology and be hesitant to change (Holsapplem *et al*., 2005). However, younger have often been introduced to information technology (IT) earlier. They might be more easily satisfied by relatively new IS implementations such as ERP systems indicating that ERP adoption in organizations will be greater among younger users than among older ones.

Users with more formal education tend to use computers more often and have greater IT satisfaction (Holsapplem *et al*., 2005). Therefore, it is predicted that ERP user adoption in organizations positively correlates with education level such that higher educated users increase ERP user adoption in organizations. Training users to use ERP is important because ERP is not easy to use even with good IT skills (Woo 2007). (Nah *et al.*, 2003) argued that sufficient training can assist increase success for ERP systems adoption in organizations. There is a relationship between computer experience and user satisfaction (Zviran *et al*., 2005). A more experienced user has more knowledge of specific problems and consequently is generally able to employ an information system Such as ERP more effectively (Holsapplem *et al*., 2005) meaning that higher level of user IS experience increase ERP adoption in organizations

User involvement increase user satisfaction and acceptance by developing realistic expectations about system capabilities (Esteves *et al*., 2003). User involvement is essential because it improves perceived control through participating throughout the whole project plan hence high levels of user involvement and participation increase ERP adoption in organizations Top management support has been identified as the most important success factor in ERP system implementation projects. Al-Mashari *et al.* (2003) argued that top management support does not end with initiation and facilitation, but must extend to the full implementation of an ERP system. Aladwani (2001) found that user's perception of top management support has a positive effect on user satisfaction hence the adoption of the system in the organization.

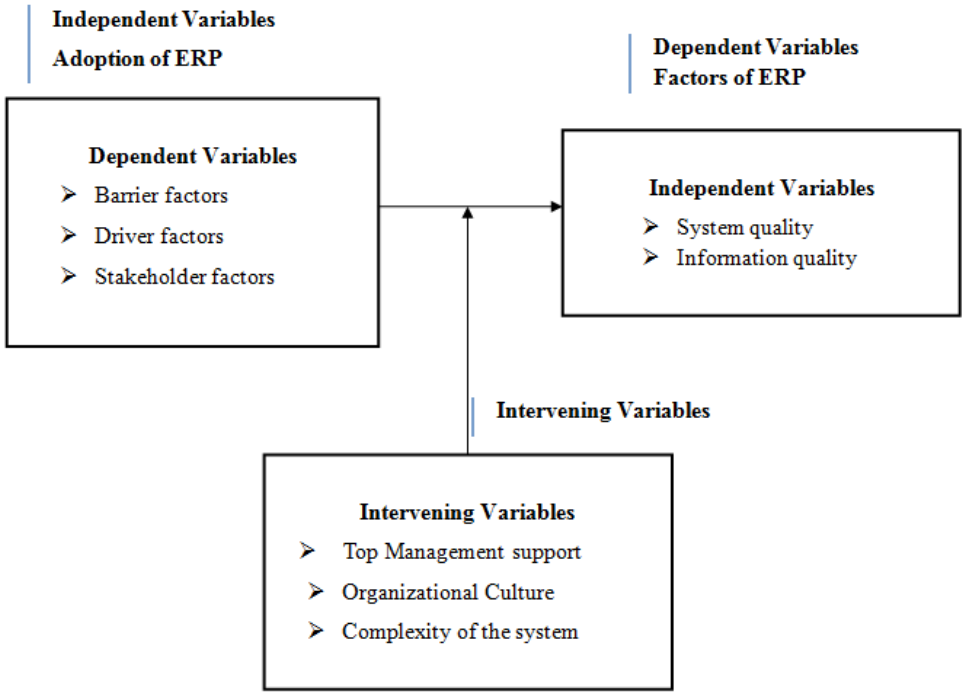
Zhang *et al*. (2002) revealed that adapting the implementation to the prevailing cultural style was one important cause of project implementation failures. The difference of cultures between Western countries where ERP systems are developed and where these ERP systems are implemented makes culture an important determinant of implementation success. Thus, organizations and western ERP vendors should adapt ERP packages to fit organization's culture to ensure ERP implementation success. A good partnership between the software vendor and customer organization is positively associated with ERP systems implementation success (Somers and Nelson 2004). Also, the good relationship between the ERP buyer and vendor should enhance the satisfaction of the ERP users hence adoption of the system in the organization. According to Soh *et al*. (2000) ERP systems require continual investment in new modules and upgrades to add functionality to achieve better fits between business and system. Consequently, vendor continues support is an important factor for users satisfaction hence adoption of the system which is only possible if the vendor and the Customer Organization are in partnership.

Complexity is the degree to which a certain innovation is difficult to understand and use (Rogers, 2003). It is also suggested that the perceived complexity of an innovation leads to resistance due to lack of skills and knowledge (Rogers, 2003). This resistance to new technologies leads to lower satisfaction and resistance to the system negatively affecting adoption of the system in the organization hence systems should be simple and easy to understand.

Zviran *et al.* (2005) indicated that there is a relationship between age and user satisfaction. Older people are more likely to fear new technology and be hesitant to change (Holsapplem *et al.,* 2005). However, younger people have often been introduced to information technology (IT) earlier. They might be more easily satisfied by relatively new IS implementations such as ERP systems. Users with more formal education tend to use computers more often and have greater IT satisfaction (Holsapplem *et al.,* 2005). Therefore, it is predicted that ERP user satisfaction positively correlates with education level. On the other hand, training users to use ERP is important because ERP is not easy to use even with good IT skills (Woo 2007). Nah *et al.* (2003) argued that sufficient training can assist increase success for ERP systems. However, lack of training may lead to failure. User involvement increase user satisfaction and acceptance by developing realistic expectations about system capabilities (Esteves *et al*., 2003). User involvement is essential because it improves perceived control through participating throughout the whole project plan. Top management support has been identified as the most important success factor in ERP system implementation projects. Al-Mashari *et al.,* (2003) and Aladwani (2001) argued that top management support does not end with initiation and

facilitation, but must extend to the full implementation of an ERP system Zhang *et al.* (2002) revealed that adapting the implementation to the prevailing cultural style was one important cause of project implementation failures. The difference of cultures between Western countries where ERP systems are developed and where these ERP systems are implemented makes culture an important determinant of implementation success. A good partnership between the software vendor and customer organization is positively associated with ERP systems implementation success (Somers and Nelson 2004). The level of complexity decreases over time as users get more and more used to the system. As users start working with the system and learning about its limits, bugs and problems reports and requests for adjustments and new factions become more rampant during the post implementation stage (Musaji, 2005). An internal IT/ERP Expertise is very crucial to provide continuous system maintenance, fine tuning and user support (Musaji, 2005; Kumar *et al*., 2003).

Figure 2.1 . Conceptual Framework Diagram



METHODOLOGY

Research Design

In this study, a case study approach was applied. The approach is effective while focusing a research on one organization, KOFC. Cohen and Manion (1995) describe a case study as one where the researcher typically observes the characteristics of an individual unit – a child, a class, a school or a community. A case study approach facilitated our drive to probe deeply into KOFC's response to ERP, by devoting time and energy concentrating on specific aspects of ERP in one manufacturing institution. The case study approach provides the focus that is required, emphasizes depth of study, and is based on the assumption that reality can only be understood through social constructions and interactions, and that the context in which the phenomena under study is situated and is complex.

Data analysis, presentation and interpretation

A total of 180 questionnaires were distributed out to the respondents. Out of the 180 questionnaires, 163 were returned, translating to 90.6% which is acceptable given that some respondents went for off duty and therefore could not return the questionnaires on time. 15% of the respondents were between the age of 20 and 29 years, 42% between the age of 30 and 39, 40% between the age of 40 and 49 and 3% were 50 years and above.

Respondent distribution in terms of level of education

19% of the respondents had a Secondary certificate, 1% had a College certificate, 60% had a College Diploma, and 20% had a University degree. The table below shows respondents level of education distribution.

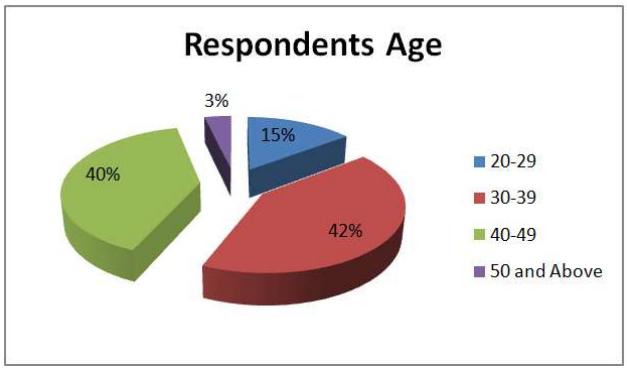


Fig 4.1. Respondents age

4.2 Respondent distribution in terms automation targets and objectives

As per the respondent's comments, 81% agree that the KOFC's ICT policy makes reference to automation targets and objectives while 19% think otherwise.

The table below shows respondents responds to KOFC's ICT policy reference to automation targets and objectives.

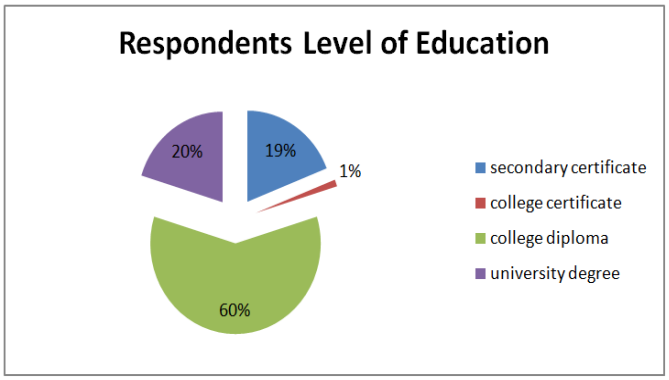


Fig. 4.3. Respondents level of education

As per the respondent's comments on automation targets and objectives, 81% agree that they are adhered to while 19% thought otherwise.

4.3 Respondent distribution on whether KOFC management encourages staff in use of ERP

As per the respondent's comments, 79% agree that the KOFC's Management encourages staff in the utilization of ERP while 21% think otherwise. The table below shows respondents views to KOFC's Management position about staff's utilization of ERP.

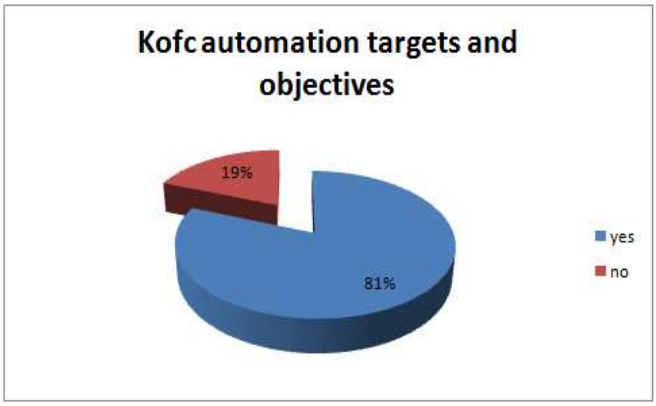


Fig 4.4- KOFC automation targets and objectives

Respondent distribution in terms of Experience in information systems

As per the respondent's comments, 77% have experience in information systems while 23% have none. The table below shows respondents responds to experience in information systems.

Fig. 4.5. KOFC management encourages staff in use of ERP

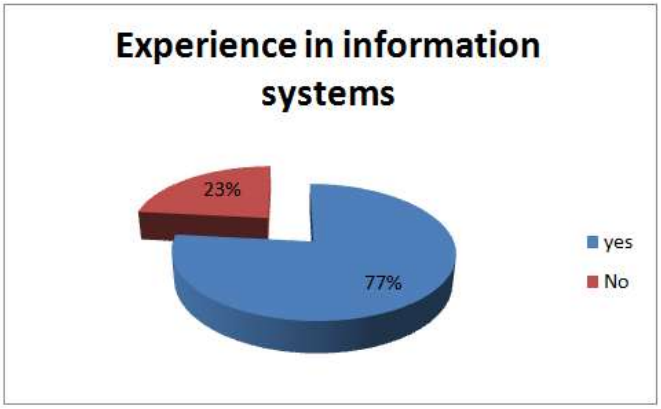


Fig 4.6. Experience in information systems

Respondent distribution in terms of Forces driving ERP

To determine the forces driving ERP, it is prudent to establishing the usage of the system within the target organization. This can be arrived at by identifying the support the staff get from the management and or the role the staff play in support of the implementation of the ERP system. Upon the filling of the questionnaires by the respondents, on whether staff were adequately prepared to cope with ERP or not, it was revealed that out of the total respondents, 10.4 % strongly agreed, 51.5 %, Agreed, 14.7 %, were Uncertain, while 6.7% Disagreed with the observation and 16.6 % strongly Disagreeing. On whether staff need to often undergo courses on ERP and computing, it was revealed that out of the total respondents, 46.6 %, strongly agreed, 39.3 %, Agreed, 1.2 %, were Uncertain, while 4.3% Disagreed with the observation and 8.6 % Strongly Disagreeing. On whether staff were attended seminars on ERP training conducted by the contractor, it was revealed that out of the total respondents, 22.7 %, strongly agreed, 34.4 %, Agreed, 15.3 %, were Uncertain, while 11.0% Disagreed with the observation and 16.6 %. Strongly Disagreeing.

On whether KOFC management supports short courses on automation which in effect supports adoption of ERP, it was revealed that out of the total respondents, 11.7 %, strongly

Table 4.1. Forces Driving ERP

	SA		A		U		D		SD		Sum	Mean
KOFC staff were adequately prepared to cope with ERP	17	10.4%	84	51.5%	24	14.7%	11	6.7%	27	16.6%	436	2.674847
KOFC staff need to often undergo short courses on ERP and computing	76	46.6%	64	39.3%	2	1.2%	7	4.3%	14	8.6%	308	1.889571
KOFC staff attended seminars on ERP training conducted by the contracted contractor	37	22.7%	56	34.4%	25	15.3%	18	11.0%	27	16.6%	431	2.644172
KOFC management support short courses on automation which in effect supports adoption of ERP	19	11.7%	39	23.9%	28	17.2%	51	31.3%	26	16.0%	515	3.159509
Employees were given chance to chart with the contractor so as to be part of customization of ERP	20	12.3%	37	22.7%	25	15.3%	61	37.4%	20	12.3%	513	3.147239

Table 4.2. Barriers To ERP Successful adoption

	SA		A		U		D		SD			
	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	Sum	Mean
KOFC IT staff support us in the implementation of ERP	62	38.0%	71	43.6%	0	.0%	30	18.4%	0	.0%	324.00	1.9877
KOFC staff are confident and good enough to facilitate ERP environment	49	30.1%	66	40.5%	21	12.9%	22	13.5%	5	3.1%	357.00	2.1902
Employees were given chance to chart with the contractor so as to contribute to ERP customization	16	9.8%	39	23.9%	29	17.8%	65	39.9%	14	8.6%	511.00	3.1350
The contractor who customized our systems did it in a complicated way	27	16.6%	45	27.6%	58	35.6%	27	16.6%	6	3.7%	429.00	2.6319

Table 4.3. Drivers To ERP delivery

	SA		A		U		D		SD			
	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	Sum	Mean
KOFC staff who show lots of commitment to embracing ERP should be rewarded as a good show award	72	44.2%	62	38.0%	6	3.7%	20	12.3%	3	1.8%	309.00	1.8957
KOFC staff show lots of initiatives in their day today interaction with ERP by consulting amongst themselves and the IT staff	56	34.4%	55	33.7%	17	10.4%	35	21.5%	0	.0%	357.00	2.1902
I would encourage an employee's who is joining the corporation to avoid use of paper but utilize ERP	71	43.6%	69	42.3%	8	4.9%	15	9.2%	0	.0%	293.00	1.7975

Table 4.4. Staff Stakeholders Views

	SA		A		U		D		SD			
	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	Sum	Mean
I rate the progress of ERP initiative within my department above average	63	38.7%	39	23.9%	20	12.3%	36	22.1%	5	3.1%	370.00	2.2699
Use of ERP has improved my working atmosphere	39	23.9%	61	37.4%	17	10.4%	40	24.5%	6	3.7%	402.00	2.4663

agreed, 32.9 %, Agreed, 17.2 %, were Uncertain, while 31.3% Disagreed with the observation and 16.0 % Strongly Disagreeing. On whether staff were given chance to chat with the developer so as to be part of ERP customization, it was revealed that out of the total respondents, 12.3 %, strongly agreed, 22.7 %, Agreed, 15.3%, were Uncertain, while 37.4% Disagreed with the observation and 12.3 % Strongly Disagreeing as per the chat below.

Specific research findings

To determine the barriers to ERP successful delivery, it is prudent to establishing the usage of the system within the target organization. This can be arrived at by identifying the support the staff get from the management and or the role the staff play in support of the implementation of the ERP system. Upon the filling of the questionnaires by the respondents, on whether IT staff supports in the implementation of ERP, out of the total respondents, 38.0 % strongly agreed, 43.6 % Agreed, non were Uncertain, while 18.4% Disagreed with the observation and none Strongly Disagreed. On whether staff are confident and good enough to facilitate ERP, it was revealed that out of the total respondents, 30.1 % strongly agreed, 40.5 % Agreed, 12.9% were Uncertain, while 13.5% Disagreed with the observation and 3.1 % Strongly Disagreed. On whether staff were given chance to chat with the developer so as to be part of ERP customization, it was revealed that out of the total respondents, 9.8 % strongly agreed, 23.9 % Agreed, 17.% were Uncertain, while 39.9% Disagreed with the observation and 8.6 % Strongly Disagreed as per the graph below.

Drivers supporting adoption of ERP in KOFC

To determine the drivers to ERP successful delivery, it is prudent to establishing the staff morale on the system within the target organization. This can be arrived at by identifying the support the staffs contribute in support of the implementation of the ERP system. Upon the filling of the questionnaires by the respondents, on whether staff showing lots of commitment to embracing ERP should be rewarded as a good show award, out of the total respondents, 44.2 % strongly agreed, 38 % Agreed, 3.7% were Uncertain, while 12.3% Disagreed with the observation and 1.8 % Strongly Disagreed On whether staffs show lots of initiative in their day today interaction with ERP by consulting amongst themselves and the IT staff, out of the total respondents, 34.4 % strongly agreed, 33.7 % Agreed, 10.4% were Uncertain, while 21.5% disagreed with the observation and none Strongly Disagreed On whether staff would encourage new coming once on utilization of ERP, out of the total respondents, 43.6 % strongly agreed,42.3 % Agreed, 4.9% were Uncertain, while 9.2% Disagreed with the observation and none Strongly Disagreed

Staff Stakeholders Views on adoption of ERP

To determine the staff stakeholder's views on ERP successful delivery, it is prudent to establishing the staff feeling on the available ERP resource. This can be arrived at by getting staff comments on the available ERP System. Upon the filling of the questionnaires by the respondents, on how they rate the progress of ERP initiative within their individual module, out of the total respondents, 38.7 % strongly agreed, 23.9 % Agreed, 12.3% were Uncertain, while 22.1% Disagreed with the observation and 3.1 % Strongly Disagreed On their opinion on the effect of ERP on working atmosphere, out of the total respondents, 23.9 % strongly agreed, 37.4 % Agreed, 10.4 % were Uncertain, while 24.5% disagreed with the observation and 3.7 % strongly Disagreed

Discussion of the findings

Barriers to adoption of ERP

The study found out that KOFC staffs were not satisfied with the preparation on ERP adoption but did not pinpoint it while the developer was within otherwise the management would have intervened. The study also indicated that the staff did not attend ERP contractor's seminars conveniently. This concurred with Aladwani (2001) who indicated that despite the extensively mentioned benefits of ERP systems, organizations commonly face a hostile attitude from potential users who resist the ERP system implementation process, yet ERP implementation in a company affects the whole organization. In line with that, according to Umble *et al.* (2003), in order to consider as success, an ERP implementation has to be accepted by the employees, who will be the users of the systems which has also been identified as a critical success factors for ERP deployment and users' acceptance of the systems.

Drivers to adoption of ERP

The study found out that staff showing lots of commitment to embracing ERP should be rewarded as a good show award, staffs show lots of initiative in their day today interaction with ERP by consulting amongst themselves and the IT staff and that old staff would encourage new coming once on utilization of ERP. This concurred with Woo (2007) who argued that training users to use ERP is important because ERP is not easy to use even with good IT skills and Nah *et al.* (2003) who argued that sufficient training can assist increase success for ERP systems. However, lack of training may lead to failure.

Stakeholders views related to ERP adoption

The study found out that KOFC staff rate the progress of ERP initiative high within individual modules and that the working atmosphere is better working with the ERP than the old manual system.

Conclusion

Barriers to ERP adoption

According to respondents on whether staffs were adequately prepared to cope with ERP, on average they were Uncertain, which means majority of the staff were not involved. On the need for staff to undergo short courses on ERP and computing, on average staff answered in the positive meaning given a chance they can utilize the ERP system. On whether staff attended seminars conducted by the contracted contractor, on average staff were uncertain meaning that majority were not involved. On whether the KOFC management support short

courses on automation which in effect support adoption of ERP, on average the staff disagreed. On this the management must change the approach if the ERP system is to be utilized. On whether employees had a chance to chat with the contractor so as to form part of customization, on average staff who responded disagreed meaning that majority of the staff were not involved.

According to respondents on the barriers to ERP successful adoption, on the issue of IT staff supporting in ERP, on average the staff agrees that the IT staff actually support them. On whether KOFC staffs are confident and good enough to facilitate ERP environment, the staff were in agreement on the subject matter. On whether contractor did the customization in a complicated manner, the respondents were uncertain an indication that staffs were not happy with the way customization was done.

Drivers to ERP adoption

According to respondents on the drivers to ERP adoption, on issue of good show award to those who show commitment to embracing ERP was on average agreed upon. On whether KOFC staff show lots of initiatives in their day today interaction with ERP by consulting amongst themselves and the IT staff was agreed upon by majority of the respondents. On whether KOFC staff would encourage a new staff to utilize the ERP system as opposed to the manual one was greeted with agreement by the majority respondent.

Staff stakeholders views on adoption of ERP

According to respondents on staff stakeholder's views to ERP adoption, on issue of progress rating to ERP initiative within respective departments, on average they agreed with the point. On whether use of ERP has improved the working atmosphere, the respondents were on average in agreement.

Recommendations

On the basis of the above findings, the research therefore recommends:

- That to encourage staff to become involved in ERP, a reward in the form of a good show award be prepared for them. And, importantly, related to pedagogical training, there follows the recommendation that staff receive meaningful pedagogical training, in a structured way, that is aimed specifically at preparing them for integrating ERP into their working, covering the modules: benefits of ERP, practical advice on the changing role of staff, including supporting infrastructures such as networks, as well as guidance on what works and what does not.
- KOFC as an organization should develop its ERP adoption strategy. This strategy should be readily accessible to staff, supported by a local definition of the term ERP, details of the approach to be adopted (such as voluntary and or blended, etc.), including a rationale of why the organization got involved in ERP. Next, this strategy should be communicated to all staff with a part to play in shaping the direction of ERP especially the supper users. Then, the strategy should be communicated to the staff. Following that, staff should receive training on ERP.
- This research showed that two types of training were necessary to prepare staff for ERP: technical training (to cope with the software platform to be used targeting the systems administrators, as well as to cover necessary computer skills to other personnel); and training on ERP pedagogy. There was a great deal of evidence to show that technical training predominated and that pedagogical training to help staff prepare for ERP was largely omitted. Staff should also be given time to engage in ERP activities.

Suggestion for future study

A study of this magnitude cannot be exhaustive on a single study. The research therefore suggests a follow up study on the following:

a. Other models of ERP in relation to manufacturing institutions
b. Establish other factors apart from barriers, drivers and stakeholders views that affect adoption of ERP.
c. Investigation on ERP adoption in other institutions apart from manufacturing institutions.

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