



**FACTORS INFLUENCING IMPLEMENTATION OF THE PROCURE TO PAY
SYSTEMS WITHIN THE CENTRAL GOVERNMENT MINISTRIES IN KENYA
A CASE OF MINISTRY OF HEALTH**

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Abstract

This study investigated the factors influencing the implementation of the Procure to Pay systems within the central government ministries in Kenya. The government of Kenya targets to fully implement the Procure to Pay systems by mid-year 2017 with the goal of enhancing accountability and transparency in the procurement of goods, works and services in the public sector, (Ochieng and Muehle, 2014). The findings of this proposed study were to provide information to support implementation of the Procure to Pay systems within ministries in Central government Ministries in Kenya in line supporting Kenya's 2013-2018 strategic plan. The study concludes that change management initiatives is the first important factor influencing implementation of Procure to Pay Systems with factors such as Process reorganization, staff involvement and personal guidance influencing implementation of Procure to Pay Systems in the government ministries in Kenya. Organizational re-engineering is the second important factor that influences implementation of Procure to Pay Systems in the government ministries in Kenya. The study concludes that training is the third important factor that influences implementation of Procure to Pay Systems in the government ministries in Kenya, with Practices such as training sessions, Seminar discussions and Workshop programmes to a large extent guidance influences implementation of Procure to Pay Systems in the government ministries in Kenya.

Keywords: Procure to Pay Systems, Procurement

1. INTRODUCTION

Procure to pay system refers to the processes involved right from placing an order to payment. It is a form of electronic procurement which can be business-to-consumer or business-to-government purchase business-to-business or and sale of work, supplies, and services through the internet (Baily, 2008)

The quick introduction of automated procurement systems over the years has produced a backlash response to all the hype about automated systems such as the Procure to Pay systems value, value that was largely unfulfilled during the first “wave” of deployment. This is because of the combination of zealous solution providers and eager-to-automate end users obscured a very important fact: Properly deployed, electronic procurement can deliver tremendous value to enterprises, and in various ways. However, proper deployment requires up-front detailed planning and a lot of time and effort (Aberdeen, 2005).

According to Baily (2008) Procure to Pay system can be executed with a software application that includes features for supplier management and complex auctions. The Procure to Pay value chain comprises indent management, e- tendering, e- auctioning, vendor management, catalogue management and contract management (Otieno, Muthoni, and Mungai, 2013)

1.1.1 Procure to Pay Systems trends in the world

Procure to Pay systems in the public sector is emerging all over the world. According to Aberdeen (2001) the Procure to Pay systems manages tenders through a web site. Top management support and training of employees are examples of strategies for the successful implementation of organization automated system (Henriksen and Mahnke, 2005)

The issues in building efficient automated government procurement solutions have been identified, as being of organizational, technical, legal nature, and procedural (CEN, 2005). An investigation into the implementation strategy of Procure to Pay systems in Ireland public sector concluded that fundamental changes are essential in the public institutions procurement environment to realise the full efficiency of Procure to Pay systems approach (Lee, 2001).

There have been subsequent studies on change management initiatives in regarding automation of the government systems recently (Golden et al., 2003). There has been a balance in the context of , outcomes, process management practice, change management practice, and performance gains. As the successful implementation of automated government systems is related to the efficient planning and management of people, information, and the development of the relevant policies and plans, focus to these areas can ensure success and the achievement of government systems automation (Krishna and Walsham, 2005; Bahatnagar, 2002). Therefore, systems automation needs to be understood as a tool to bring reforms in public procurement processes (World Bank, 2006).

1.1.2 Procure to Pay systems in the public sector of Kenya

Kenya National Treasury announced the official launch of an electronic procurement system in their Integrated Financial Management Information System (IFMIS) Department. The goal of

this implementation is to bring the use of public money under greater transparency and accountability, easing the difficulty and improving the management of the process, (Ochieng and Muehle, 2014). According to the Procurement Report (2014), the various aspects of electronic procurement are dissected, analyzed, and then reassembled to illustrate how effectively a solution can be in transforming an organization's entire P2P process. The public sector organizations use Procure to Pay systems for contracts to achieve benefits for example increased efficiency and cost savings, faster and cheaper in government procurement (Acher 2005) and improved transparency, to reduce corruption, in procurement services. In Kenyan market, research conducted by Humphrey, et al. (2003) revealed that conducting e-commerce is mostly meant for provisions that enable the firms identify trading partners that they could contact off-line with a view to doing business. The follow-up to an initial contact generally is to taking place through other channels such as e-mail, hyperlink, the telephone, fax or the post. Despite the benefits of e-procurement as recognized by managers such as better coordination with suppliers, quicker transaction times, higher flexibility, better supplier integration, and lower costs Kahiu (2015) it is clear that adaptation of e-procurement is still very low (Gunasekaran, and Ngai, 2008). According to Mitra et al. (2000), the most common forms of e-commerce in Kenya market are e-procurement, ebanking and of late ebanking. According to Kahiu (2015) good links in customer information infrastructure with suppliers and stakeholders leads to effective implementation of e-procurement. Procurement regulations were positively and significantly correlated with effective and efficient implementation of Procure to Pay systems.

According to Kahiu (2015) another notable function of the Procure to pay system in Kenya is the Supplier portal that will allow suppliers to access the status of their purchase or service order issued and payments. This means all government suppliers must be duly registered with the Registrar of Companies and own a tax compliance certificate among other details such as business contacts, IFMIS number to access the Kenya Supplier portal. The Kenya Supplier Portal has been designed to facilitate efficient collaboration with suppliers by granting them access to view information about their orders and payments, such as open orders and invoice statuses, to submit address or contact changes, and to respond to tenders at any given time when they have a registered account with IFMIS system.

1.2 Statement of the Problem

Manual systems of Procurement cost the Kenyan government up to \$1 billion. This is a value that could be brought down by 90% to \$100 million with automation (Kamau, 2015). The Integrated Financial Management Information System (IFMIS) core strategic objective is to ensure full development and implementation of existing and additional modules and functionalities as envisioned in IFMIS Strategic Plan (2013-2018) among other core objectives in the 18 Ministries, Departments, and Agencies of the Central Government of Kenya (Muehle and Ochieng, 2016).

Procure to Pay systems (P2P) as one of the modules is aimed at increasing efficiency, cost savings, promote faster and cheaper government procurements, improve transparency, and reduce corruption in government procurements. The 2013-2018 strategic plan comprehensively

mapped out the direction that IFMIS department will adopt for the next five years delivering efficient services to our citizens. It is about ensuring that the days of wasteful spending using taxpayers money is over (Ochieng, 2015). P2P system implementation is underway, but poor rollout and adoption poses a great risk of Technology Assisted Corruption that can arise with gaps in the system. This may occur through system attacks which may in the long run be more expensive to maintain (Kamau, 2015).

The e-government strategy paper (2004), states that e-procurement was one of the medium term objectives which was to be fully implemented by June 2007. Despite this, implementation still remains a challenge as previous research findings shows that most of the procurement processes in public sector are still manual (PPOA, 2013). An investigation into the implementation strategy of Procure to Pay systems in the Irish public sector concluded that fundamental changes are required in the public sector procurement environment to achieve the benefits of Procure to Pay systems approach (Lee, 2001). From the previous attempts made by the government since Year 2014, it is evident from the study by Gunasekaran and Ngai (2008) that the adoption of Procure to Pay system still remains a major challenge. It is against this background that this study seeks to find out the factors influencing implementation of P2P systems within the central government ministries in Kenya, in line with the 2013-2018 Government of Kenya Strategic e-procurement plan.

1.3 Objectives of the study

The objective of this study was to analyze the correlation between the variables; change management initiatives, level of technological infrastructure, stakeholders technical training, organizational re-engineering process and the implementation of Procure to Pay systems within the central government ministries in Kenya.

1.4 Research Questions

1. How do the change management initiatives influence the implementation of Procure to Pay systems within the central government ministries in Kenya?
2. How does the level of technological infrastructure influence the implementation of Procure to Pay systems within the central government ministries in Kenya?
3. How does the technical training of the stakeholders influence the implementation of Procure to Pay systems within the central government ministries in Kenya?
4. How does the organizational re-engineering process influence the implementation of Procure to Pay systems within the central government ministries in Kenya?

2. LITERATURE REVIEW

2.3 Conceptual Framework

This section assesses the research variables derived from literature to test whether there are significant relationships between the independent variables and the dependent variable. It focuses on the determinant variables identified in the study, which would be associated with implementation of the P2P systems.

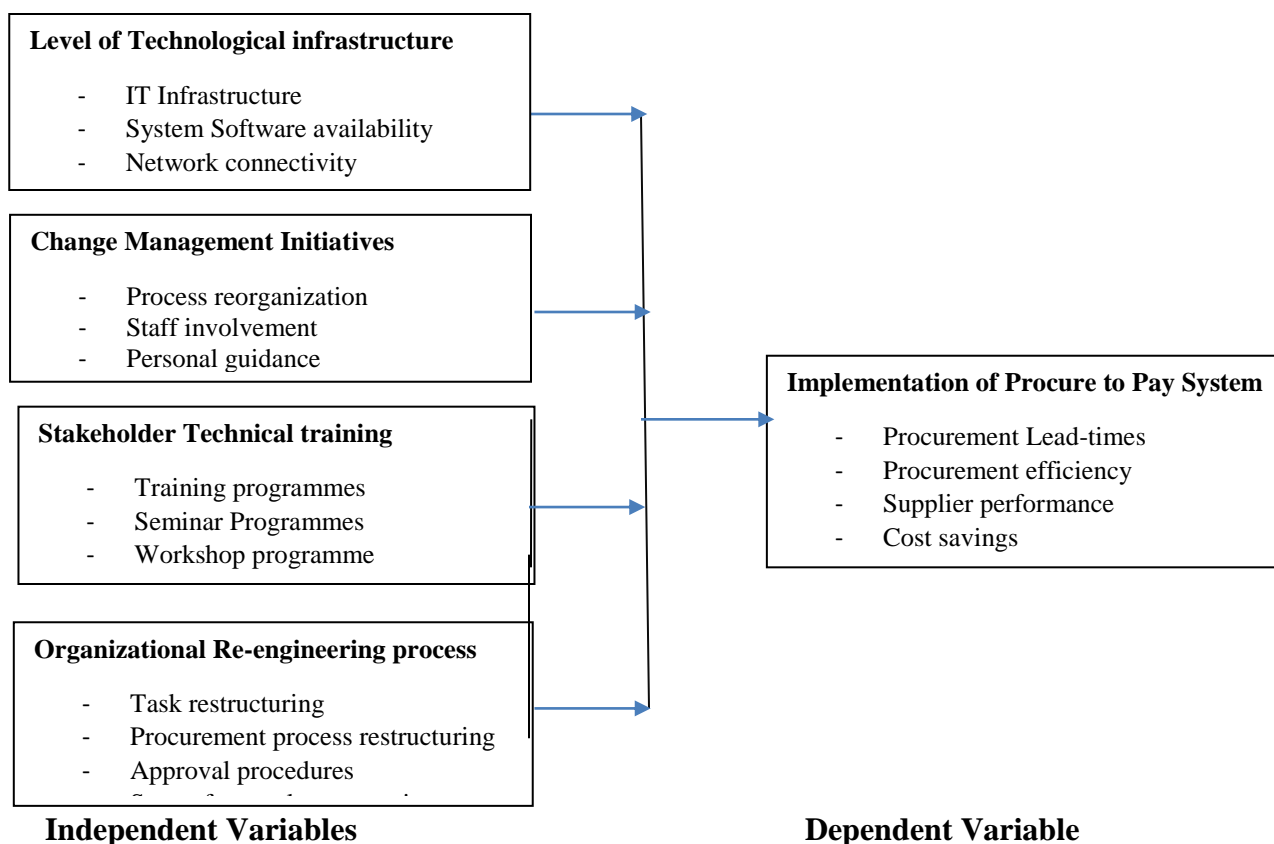


Figure 1: Conceptual Framework

3. RESERCH METHODOLOGY

3.1 Introduction

The design was suitable so as to establish the factors influencing the implementation of Procure to Pay systems in Central Government Ministries in Kenya. The population was chosen basing on its suitability to provide information. The results were tested using the multiple regression model so as to identify the correlation between the dependent and the independent variables.

4. RESERCH FINDINGS AND DISCUSSION

4.1 Training Programmes

Table 4.1 Training

	Mean	Std. Deviation
Top management supports regular training for staff	3.41	1.012
Seminar discussions improves the use of the Procure to Pay system	1.38	0.707
Training and coaching programmes improves staff skills and knowledge in using the Procure to Pay system	1.41	0.837

Workshop Programmes improves the use of the Procure to Pay system	1.38	0.660
There is committed budget to support training programmes	3.53	0.842
Overall Mean	2.22	

Training is the organized procedure by which people learn knowledge or skills for a definite purpose with the objective to achieve a change in the behaviour of those trained (Jones and George, 2005). Respondents were asked various questions that are indicators training and implementation of Procure to Pay systems. The data collected being ordinal categorical, where 1 represented ‘Strongly agree’, 2 representing ‘Agree’, 3 representing ‘Disagree’ and 4 representing ‘Strongly disagree’. The findings were presented in descriptive tables with the mean being used as the appropriate measure of central tendency. Table 4.1 presents the findings.

The respondents were asked whether there is a committed budget to support staff training, and from the results the institution does not set aside budget to cater for trainings mean which was registered as the highest (mean=3.53).

The results also indicated that the institution is not fully committed to supporting the trainings to its staff (mean=3.41). This findings are utterly surprising because an effective and efficient system incorporates appropriate tools and procedures that support technical training for its staff for them to gain qualifications that enhance their ability to perform, enabling them to make better decisions, work as a team, and adapt to change, while increasing efficiency, quality, productivity and job satisfaction(Chimwani, Iravo, and Tirimba, 2014).

The respondents were asked whether training and coaching programmes improves staff skills and knowledge in using the Procure to Pay system and from the results respondents strongly agree with this statement (mean=1.41), which is consistent with a study by Emmanuel (2007) findings, that in Africa, training on application of best procurement practices could greatly support implementation of effective procurement practices in many public and private organizations. The respondents were also in strong agreement that Seminar programmes supports the implementation of the P2P system (mean=1.38). The results show a strong agreement that workshop programmes also contribute highly (mean=1.38), whereby such programmes helps in improving immediate and longterm work and also enables individuals to create value consistently (Chimwani, Iravo, and Tirimba, 2014).

4.2 Organizational Re-engineering

Table 4.2 Organizational Re-engineering

	Mean	Std. Deviation
Decision making and approval procedure restructuring improves the use of the Procure to Pay system	1.97	0.822

Tasks restructuring and reorganization improves the use of the Procure to Pay system	1.38	0.660
Changes in staff level of control has improved the use of the Procure to Pay system	1.41	0.665
There has been general restructuring of the procurement procedures to support implementation of Procure to Pay system	3.50	0.803
Overall Mean	2.065	

From the results there is a strong disagreement that there has been general restructuring of the procurement procedures to support implementation of Procure to Pay system within the institution (mean=3.5). The results further indicates that decision making and approval procedures restructuring improves efficiency in the use of the Procure to Pay system (mean=1.97) which is consistent with Wen (2002) findings that restructuring results in better efficiency which leads to a higher profitability. The respondents were also in strong agreement that changes in staff level of control improves the use of the Procure to Pay system (mean=1.41). The respondents also strongly agreed that tasks restructuring and reorganization improves the use of the Procure to Pay system (mean=1.38). This is consistent with Cabrey and Haughey (2014) findings that strategic initiatives inevitably require substantial changes strongly influenced by behavioral and cultural change which involves people doing things differently.

4.3 Change Management Initiatives

Table 4.3 Change Management Initiatives

	Mean	Std. Deviation
Change management initiatives have been put in place to support the Procure to Pay system	3.50	0.762
Personal guidance and counseling sessions improves the use of the Procure to Pay system	1.47	0.761
Staff involvement improves adoption of the Procure to Pay system	1.34	0.745
Sufficient time to adapt improves the use of the Procure to Pay system	1.31	0.592
Overall Mean	1.91	

The respondents were asked whether change management initiatives have been put in place to support the Procure to Pay system within the government institution, and from the results respondents strongly disagreed with this statement (mean=3.50), indicating that despite the positive contribution that change management has, the government has not yet put in place

measures to ensure that it is done prior to an introduction of a new system. The respondents however strongly agreed that personal guidance and counseling sessions improves the use of the Procure to Pay system (mean=1.47) which is consistent with the findings of Cabrey and Haughey (2014) study on Change Through Strategic Initiatives which stated it is virtually impossible for organizations to implement their chosen strategies without undertaking the kind of strategic initiatives that inevitably require substantial behavioral and cultural changes behavior is strongly influenced by context: factors such as culture, rewards, recognition, incentives and established norms all play a significant role. This means that managing the context is crucial where change initiatives are concerned. On the other hand, behavioral change involves people doing things differently, so particular attention also needs to be paid to project work specifically aimed at stakeholder engagement, employee involvement and communication. The results also indicates strongly that staff involvement improves adoption of the Procure to Pay system (mean=1.34). The strongest positive indicator was the need for sufficient time to adapt to a new system by staff which improves the use of the Procure to Pay system (mean=1.31). This positive indicators of change management are consistent with the findings of the study by Bourda (2013) on Change Management Theories and Methodologies that a structured approach to change management is beneficial as it moves organizations away from merely reacting to resistance to change to providing a solid framework for engaging and mobilizing impacted employees.

4.4 Technological Infrastructure

Table 4.4 Technological Infrastructure

	Mean	Std. Deviation
There is reliable internet connectivity to support the use of the Procure to Pay system	1.44	0.759
There is sufficient ICT infrastructure to support the use of the Procure to Pay system	2.25	0.803
There is the Procurement to Pay software to support the use of the Procure to Pay system	1.41	0.798
There are knowledge management systems to improve the use of the Procure to Pay system	1.94	0.564
Overall Mean	1.76	

The results indicates that there is sufficient ICT infrastructure to support the use of the Procure to Pay system (mean=2.25) within the government institution. This is very essential according to Rajiv and Srinivasan (1997) findings that IT-enabled processes enhance organizational performance which enhances the quality and efficiency of organizational processes where they are deployed. There is strong agreement that there is reliable internet connectivity to support the use of the Procure to Pay system within the institution (mean=1.44) and that there is the

Procurement to Pay software to support the use of the Procure to Pay system is available (mean=1.41). Results also indicates strongly that there are knowledge management systems to improve the use of the Procure to Pay system (mean=1.94). These results are consistent with Whinston and Fan (2001) findings that increased digitization of key customer-facing and procurement processes enhanced organizational performance.

4.5 Implementation of the Procure to Pay systems

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	Mean	Std. Deviation
What extent has Procurement Lead-times been reduced through the use of the Procure to Pay system?	1.25	0.568
What extent has procurement efficiency improved through the use of the Procure to Pay system?	1.31	0.535
What extent has supplier performance improved through the use of the Procure to Pay system?	1.28	0.523
What extent has there been cost savings through the use of the procure to Pay system ?use of the Procure to Pay system	1.44	0.759
Overall Mean	1.32	

Respondents were asked various questions that are indicators of the implementation of the Procure to Pay systems within the institution. Table 4.6 presents the findings. The results strongly indicate that Procurement Lead-times has been reduced through the use of the Procure to Pay system (mean=1.25), and also procurement efficiency has improved through the use of the Procure to Pay system (mean=1.31). The results strongly indicate that supplier performance has improved through the use of the Procure to Pay system (mean=1.28). The results also indicate strongly high cost savings through the use of the Procure to Pay system (mean=1.44) which is consistent with Narasimhan and Jayaram, (2008) result findings that new procurement practices develops a linkage with suppliers and improves the overall organizations performance.

5. SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Major Findings

The general objective of the study was to determine factors influencing implementation of the Procure to Pay systems within the government ministries in Kenya. The study specifically determined the influence of Technical training; Level of Technological Infrastructure; Change management initiatives, Organization reengineering on implementation of the Procure to Pay

systems in Kenya. The reviewed literature identified some of the common factors that play an important role in implementation of Procure to Pay systems in Kenya. Further, it was revealed that the type of training structures in place, Technological infrastructure available, Change management Initiatives, and organizational reengineering significantly influenced implementation of the Procure to Pay Systems.

5.2 Conclusion

Based on the study findings, the study concludes that implementation of the Procure to Pay Systems within the government ministries in Kenya is affected by change management initiatives followed by organizational re-engineering being the major factors influencing implementation of Procure to Pay Systems in the government ministries in Kenya.

The study concludes that change management initiatives are the first important factor influencing implementation of Procure to Pay Systems in the government ministries in Kenya. The optimal model of the study shows that change management initiatives has a significant influence on implementation of Procure to Pay Systems. This shows that change management initiatives has a positive influence on implementation of the Procure to Pay Systems. Change management factors such as Process reorganization, staff involvement and personal guidance influences implementation of Procure to Pay Systems in the government ministries in Kenya. Organizational re-engineering is the second important factors that influence implementation of Procure to Pay Systems in the government ministries in Kenya.

The study concludes that training is the third important factor that guidance influences implementation of Procure to Pay Systems in the government ministries in Kenya. The optimal model of the study shows that staff training has a significant influence on effective implementation of Procure to Pay Systems. Practices such as training sessions, Seminar discussions and Workshop programmes to a large extent guidance influences implementation of Procure to Pay Systems in the government ministries in Kenya.

5.3 Recommendations

Implementation of Procure to Pay Systems in the government ministries in Kenya is hindered by lack set budgets to sponsor staff for training course which plays a big role in improving their knowledge and skills with the introduction of new systems. Thus the public institutions should give a budget allocation for specialized training courses and refresher courses for staff. It is important that staff appraisal is done regularly to identify the organizations training needs before new systems are introduced. There is also a need for institutions to adopt a culture of learning with the use seminars and workshops to compliment the main trainings that staff undertakes.

To ensure that change management initiatives supports implementation of the Procure to Pay Systems within the government ministries in Kenya, top management and leadership support is critical in every stage of implementation. High priority should be given to developing change management initiatives. Therefore, enough time and resources should be given to support the change process. During the first stages of introduction, proper communication should be done to ensure that all the staff understand fully the essence of the new systems and the impact it going

to bring to the institution. It is also important that staff are involved at every stage of change to allow room for recommendations from them. Change management initiatives should be designed to suit the nature of work done by each and every staff who is to adopt it. Enough support and motivation should also be given to staff at all times.

To ensure that technological infrastructure supports implementation of Procure to Pay Systems in the government ministries in Kenya. The government ministries should aim at ensuring that there is sufficient technological infrastructure in terms of information communication technology to support new systems. This can be put into practice by ensuring that there are enough computer systems in place and reliable internet connectivity at all times. Procure to Pay software should be installed to all the computers with regular support provided to enable good use of the software system.

To ensure that organizational re-engineering supports implementation of Procure to Pay Systems in the government ministries in Kenya. The management of the government ministries should do re-organization of procurement procedures to suit new systems so as to allow effectiveness and efficiency whenever they are introduced. This can be done by ensuring that all the functions are well covered in terms of staffing, new procurement procedures are introduced to suit the system and the level of controls is adjusted to suit the system. The government ministries in the central government should also employ professional trained IT staff to continuously train the staff on emerging issues on the Procure to Pay system.

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