



A Proposed Framework for Implementing Cloud ERP System in a Developing Country Local Government: A Case of Uganda

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ABSTRACT

Increased demand for efficiency and effectiveness in service delivery has made the implementation of information systems and the demand for access to real time information no longer a requirement unique to private sector or large public sector entities. Local government entities like municipalities are also challenged to provide services with similar efficiency and effectiveness. Successful implementation of an ERP system depend on a number of factors, the framework adopted when implementing the ERP is one of the factors that is critical. Implementing ERP system in local governments in developing countries should also take into account the fact that developing countries lack sufficient technological infrastructure, ERP implementing skills, adequate funds, and have unique political influences unlike developed countries. Cloud ERP provides a platform where local governments in developing countries could successfully implement ERP within prevailing constraints. An exploratory methodology involving focus groups was used to understand the information systems context of municipalities in a developing country, Uganda. Existing ERP implementing frameworks were reviewed, and a conceptual framework to successfully implement a cloud ERP system in a developing country local government is proposed. The understanding of ERP implementing framework/methodology will enable decision makers and ERP vendors reduce on total or partial failure rate of ERP implementation in developing country local governments. Existing ERP implementing frameworks are private sector based, developed countries oriented, based on universal best practice, and vendor specific. The contribution of this research is to the knowledge of implementing ERP in the context of public sector in a developing country

Key words: ERP, Cloud ERP, ERP implementing framework, Local government ERP, ERP implementation

INTRODUCTION

Enterprise Resource Planning (ERP) is a software solution that assimilates business functions and data into a single system that is shared within the business (Rajeshwar, 2015). According to Matos & Alves, (2011) enterprise systems are packed software solution that have become popular in private sectors where organizations are aligning information systems with business strategy through elimination of fragmented information sources; replacing legacy information systems with Enterprise resource planning (ERP) software that cut across functional areas. Enterprise systems originated from manufacturing industry and later extended to private sector broadly. Enterprise Resource Planning software solutions are also known as Standardized Business Software Applications (Keller and Meinhardt, 1994). According to Carutasu & Carutasu(2016), ERP is multifunctional software package and extends to the entire enterprise with the same database for the entire company. Enterprise Resource Planning (ERP) systems are, generally, characterized by their complexity and wide footprint in the enterprise with regards to scope,



Ramburnet, al. (2016). Though ERP use is widely accepted in developed countries, Shaul&Tauber (2013), the market of ERP systems in developing countries is still in early stages, Hawari&Heeks (2010).

Increased demand for efficiency and effectiveness in service delivery has made the implementation of information systems and the demand for access to real time information no longer a requirement unique to private sector or large public sector entities, it is also a critical requirement for local government entities like municipalities. However, there are many substantial challenges faced by local government entities and information systems implementers, for example, municipal entities in a country are many and scattered geographically, there are insufficient technological infrastructure within these entities, highly constrained by requirements to comply with government regulations, they lack adequate funds and technical IT skills. Software providers and implementers have to address the above issues to successfully develop and deploy information systems that fit local government entities.

Municipalities are lower local government public sector entities that provide government services to local communities and businesses. Their structure consist of cells, the lowest unit, ward and division. Municipalities are entities designated to provide broadly three services: planning, garbage management and provision of social services. In many developing countries, local government entities are characterized by acute lack of adequate IT infrastructure, limited computer skills, insufficient data collection, storage and accessing mechanism, and inadequate IT budget.

To successfully implement an Information system that deliver value to the recipient organization, like a municipal entity, requires a clearly defined framework to guide the implementation process within limits of contextual constraints. Partial or total failure of information system implementation doesn't necessarily result from software design. The failure could be caused by solution – organization misfits that are contextually unique to a particular organization, Hawari&Heeks (2010).

Cloud computing is a network based service model that enable on demand network access to a shared pool of configurable computing resources; a model that provides special services over the internet; this service could be server, storage, or software (Bahssas et al., 2015). Many ERP vendors have moved to cloud computing platform, where ERP solutions are hosted. Cloud ERP is hosting an ERP system over the cloud, where hosting is done through two models IaaS (Infrastructure as a service) and SaaS (Software as a Service) (Lenart, 2011). According to Bahssas et al. (2015) cloud ERP has many advantages which are less staff, Mobility, easy expandable, cost reduction, and fewer expenses. Cloud technology under Software as a Service (SaaS) model is gaining popularity in private sector SMEs promising, low deployment costs, low price with pay-as-use, a considerably reduced time-to-deployment (Carutasu & Carutasu, 2016; Weng& Hung (2014). Local governments in developing countries could benefit from SaaS, however, a successful deployment require a comprehensive contextualized implementing framework to ensure compliance to local government regulations and unique constraints. Cloud ERP SaaS module will enable local governments to get access to a pool of cloud ERP software



service through internet connection rather than each local government implement own ERP system.

Objective

The paper is intended to provide a conceptual framework for a successful implementation of a cloud based ERP systems in local government, a municipality used as a case, in a developing country. This will help local government decision makers and ERP vendor when considering to implement ERP system in local government administration. The paper attempts to answer the question; what framework is appropriate to successfully implement a cloud ERP system in a developing country's local government?

STRUCTURE OF THE PAPER

The following section explains the methodology used to collected data for this paper; the next explores existing ERP system implementing frameworks/methodologies; then findings are discussed; and lastly a proposed framework for implementing cloud ERP in local government in a developing country is explained.

METHODOLOGY

The papers draws data from both primary and secondary sources following exploratory approach. A qualitative approach was used to understand municipality information systems, data/information standards and needs, business processes and relevant service delivery regulations. A review of reports, forms, etc. was done to understand the data and information requirements and challenges in the functions of municipality administration. A critical literature review was carried out to explore work done on implementation of information systems in local government with a focus on ERP systems in developing countries. Primary data was obtained from interviews with staff in three local government municipalities; to get an in depth understanding of the types of information systems within municipality administration, how they are implemented and managed; understand local government business processes and regulations constraining them. Three group discussions were conducted in three municipalities, and each group discussion involved 5 local government participants. Focus group discussions were focused on understanding: the functions of a municipality, key municipality business processes, framework for implementing information systems, data collection and management processes, level of awareness and acceptance of third party managed internet based enterprise systems.

DATA COLLECTION METHOD

To obtain data from multiple participants, focus groups method was adopted for being economical, fast, and efficient (Krueger & Casey, 2000). For exploratory and verification purposes, emergent-systematic focus group design was adopted; three sessions were conducted, and participants purposively selected using purposive sampling techniques. Focus groups consisted of 7 participates, a number within the range of Morgan, (1997) and Baumgartner, Strong, & Hensley, (2002) recommendation, and each session lasted 1 hour 20 minutes averagely.

The focus group method was intended for an in-depth understanding of information systems and business processes in municipalities rather than behavior, opinions and attitudes of employees



towards municipality information systems. Hence, interactions among focus group participants and between participants and individuals were not measure as recommended by Myers (2006) or Onwuegbuzieet. al. (2009). Understanding of municipality information systems, processes, and ERP implementation framework/methodology will equip decision makers and ERP vendors to reduce on total or partial failure rate of ERP implementation, result from implementing framework/methodology.

RELATED WORK

This section provides a discussion on existing framework/methodologies used when implementing ERP systems. The discussion cover articles ranging from 1983 to 2015, exploring approaches, frameworks, and methodologies adopted to implement ERP systems in various organizations.

ERP IMPLEMENTING FRAMEWORKS

Literature on ERP implementation methodologies/frameworks is very sparse, available literature on ERP system implementing frameworks is vendor prescribed and generic. Research of ERP system focus on CSFs identified from development countries. Literature on ERP implementation on public-sector is relatively sparse more so from developing countries (Matos &Alves, 2011).ERP is realized in public sector organizations that are constituted to operate like corporate organizations. There is a need to understand the maturity level of business processes in public sectors in developing countries. Hasibuan&Dantes (2012), suggested an impact of 42.20% weight of business process reengineering on the priority key success factor of ERP implementation cycle.

Govindaraju (2012) suggest an organizational perspective framework for implementing ES; focusing on two stages in ES implementation process including project stage and post project stage. Further recommend that enterprise system implementation effectiveness need to be analyzed at two levels: short term implementation effectiveness, related to the outcome of the project stage, and the long-term implementation effectiveness, related to the outcome of the post-project stage. This framework is generic, and doesn't specifically highlight the critical factors that should be considered at each stage, and how variations in businesscharacteristics or business environments impact on the whole ES implementation process.

Dantes&Hasibuan (2011) proposed an ERP implementing conceptual framework considering two dimensions; ERP implementation process having five stages: project preparation, technology selection, project formulation, implementation and post-implementation. Somers and Nelson (2004) identified six stages of ERP implementation process: initiation, adoption, adaptation, acceptance, routinization, and infusion.

Ahituv (2002) developed a generic hybrid ERP implementation methodology combining three structured approaches: Structured Development Life Cycle (SDLC), Prototyping and application package model. He contend that the uniqueness of ERP system renders any of the three models inadequate to be adopted solely in implementation of ERP system. Implementation of ERP system touches the core process of the business. Hence, adoption of a hybrid methodology



universally is likely to result into unexpected failure due to cultural, organizational and political influences experienced in environments that are characteristically different.

Maditiniset *al.*, (2011) argue that most of ERP failures are not caused by the ERP software but the complexity and massive changes caused by ERP in an organization This is line with Helo *et al.* (2008), stating that the major impediments to successful ERP implementations are not technologically related issues such as compatibility, technological complexity, and standardization, but most are organization and human related issues including as resistance to change, organizational culture and business processes. These challenges could be dealt with by using a well contextualized framework appropriate. Universality adoption of implementing frameworks overlook organizational culture, behavior, and change management impact on ERP implementation failure.

Huang *et al.* (2004) listed the top ten risks that cause ERP implementation failures, which are related to implementing framework. ERP implementation involves more than changing an organization's software; it involves repositioning the organization and transforming its business operations, processes and practices (Rajeshwar, 2015).

LIMITATION OF EXISTING FRAMEWORKS/METHODOLOGIES

Unlike the private sector where top management make decisions independently, in public sector decisions are highly influenced politically and highly constrained by government legislations. The critical success factors identified in the private sector don't translate directly into the public sector more so in developing countries. Motivating factors for implementing ERP implementation literature use concepts of framework, methodology and model interchangeably. Implementation of ERP system is based on assumption of best practices being universal; a major source of misfit of ERP and client organization business processes. There is a need to recognize the variation in characteristic business process among organizations, be it private or public, and developed economies or developing economies. Klaus *et al.* (2000) states that the transferability of ERP best practices on a global scale might be limited due to every country specific requirements relating to every fundamental processes.

Existing frameworks are private sector based and focus on what should be done at a particular stage with no consideration of variations in different domains. Characteristic variations between private sector and local government significantly impact on the way ERP implementing activities are carried out. ERP implementation in local governments in developing countries should also take into account the fact that developing countries have limited resources unlike the developed countries. Hence, ERP systems implementation process should be administered differently as suggested by Addo-Tenkorang & Helo (2011). Sommer (2011) state that public administration has characteristics including: cultural, political, and organizational factors that negatively influence successful ERP implementation in local government administration.

Most ERP vendors propose frameworks specific to their ERP solution to simplify the implementation process. Some of the major vendor specific frameworks include: Accelerated SAP (ASAP) by SAP, Application Implementation Method (AIM) by Oracle, Direct Path by PeopleSoft and Dynamic Enterprise Modeler by BAAN (Benders, Batenburg & Van der Blonk,



2006). Vendor specific frameworks coerce client organizations to compromise their core business processes for the sake of conforming to the vendor's prescribed implementing framework; a concept of isomorphism, DiMaggio and Powell (1983).

Implementing Enterprise Information Systems in local governments in developing countries requires a consideration of unique characteristics related to economic, skills and political challenges. EIS significantly impact of business processes, hence, local government business processes, which are highly constrained; politically and financially require specific ERP implementation considerations to ensure a cost effective and successful implementation of ERP system in developing countries.

FINDINGS

i. Context and functions

Municipalities are instituted by Act of parliament to execute functions of local government within district territory. Functions of a municipality are broadly categorized in three: economic and physical planning for local communities, provided social services to citizenry, and environment sanitary through garbage management. These are clearly stipulated in various government Acts, which are referenced from Local government Act 2017. Municipalities consist of lower administrative units; divisions which are equivalent of sub-county, ward equivalent of a parish, and cell equivalent of village.

ii. Major stakeholders

Central government is one of the major stakeholders, funding 70% of the budget to support decentralized activities. Local citizenry and business community are primary stakeholders who benefit directly from municipality functions. Development partners, both local and international, participate directly or indirectly in various development project.

iii. Municipality business processes

There was no documentation of day to day business processes, though guideline on the activities within the mandate of the municipality are outlined in various Acts. However, key business processes could be identified from the description of major activities. Key business processes include: residents registration, property registration, business

iv. Implementing information Systems

Municipalities don't have IT/IS office or an IT/IS personnel, and have never engaged in implementation of an information system, and are not familiar of any information implementation framework or methodology. Information Technology implementation are carried out by contractor from central government. A focal person is designated to liaise with the outside support on behalf of local information technology users.

v. Critical data requirements and challenges

Execution of municipality functions requires up-to-date data on: residents to deploy government programs effectively, licensable business to correct revenues as mandated by the central government, properties for physical planning and tax collection. Though there is mechanism to collect business data for the purpose of revenue, however most data is obtained from external bodies; incomplete and outdated, hence, unreliable.



vi. **Cloud based solutions**

Most of municipality leaders are aware of IT/IS trends, benefits and challenges. Though there is an acute lack of IT/IS resources there is a high sense of appreciation of transformation of service delivery by implementing IT/IS solutions. Though, there is a willingness to attempt deployment of IT/IS solutions that are third party managed like cloud based ERP, readiness and preparation in terms of resources, skills, and policies are lacking.

It is fair and reasonable to conclude that, generally municipalities in Uganda lack IT/IS function with a dedicated IT/IS department, and have no appropriation of IT/IS budget specific to the development of IT/IS infrastructure, resources and skills. IT/IS activities are coordinated by a focal point person. Though all involved municipalities have internet connectivity, they lack Local Area Network (LAN) and access to any electronic information systems rather than Integrated Financial Management Information Systems (IFMIS), managed at central government level. Also, there is no knowledge of Business Process Management concept, which is critical to successfully implement enterprise systems. The municipality context in a developing country like Uganda, require a specific framework of attributes to successfully implement ERP system.

CONCEPTUAL FRAMEWORK FOR IMPLEMENTING CLOUD ERP

Bitsini (2015) states that the continued growth of ERP adoption in developing countries is accompanied by high failure rates. This is attributed to the complexity of ERP system and misalignment based on ERP inbuilt best practices (Bitsini, 2015). However, a methodology adopted to implement an information system may also result in information system failure. Little work is done to understand ERP implementation framework/methodology in context of local government in developing countries. Most research categorize implementation of enterprise system in three broad phases, and little is explained about the specific activities that should be done to ensure a successful implementation. An exploratory research from the three local government administration at different levels in a developing country show that ERP is a new technology being adopted in a technologically, financially and skills constrained environment.

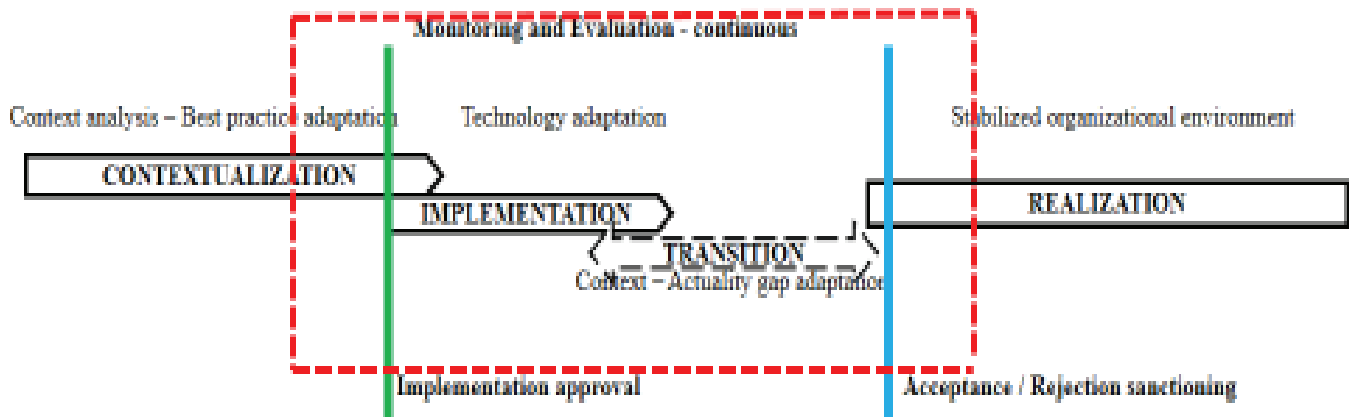
A conceptual framework that captures the unique characteristics is proposed to include a transitive phase after implementation and before a post implementation phase is actualized. It was recognized that to complete an implementation of a full enterprise system, will all relevant modules, in local government administration could take decades. Due to lack of resources in developing countries, ERP is implemented module by module. Most local government units that have attempted to adopt ERP have implemented only financial module, hence, realization of full benefits are yet to be achieved, and some run the ERP with unresolved errors. In this situation it is difficult to establish a clear cut between implementation and post implementation phases. Failure to recognize this result in budgets that significantly reduce or totally cut off financial resources after implementation. This is a common experience in developing countries where most ERP implementation are donor funded.

A transitional phase need to be consider to allow the stabilization of users' environment; behavior, cultural and skill acquisition. Adoption of ERP lead to a paradigm shift from



functional-silo environment to a process – customer centric orientation. This transition phase is critical the stabilization of the organizational and individual culture, and external forces that result from interfaces of various stakeholders. The transition phase is characterized by forward and backward activities as the organization and individuals struggle to strike an equilibrium of change caused by: processes alignment, policy reviews, new skills demands, budget reallocations, new roles and responsibilities.

A CONCEPTUAL FRAMEWORK FOR IMPLEMENTING A HOSTED ERP IN LOCAL GOVERNMENT IN A DEVELOPING COUNTRY



CONTEXT	TECH FIT	BUSINESS FIT	IMPACT
Understanding the context	Technology:	Technology – Organization	Benefits realization
KPI metrix		Assess progress on KPI	KPI measurement (regular)
Resources Mobilization	Connectivity	Fit analysis and design	Process alignment
Policy review	Upgarde	Technology adjustment	Organizational impact assessment
Change management design	Change management	Change management enhancement	Cost – benefit analysis
Understanding domain best practice		Processes alignment	Process alignment
Process alignment			
Skills development	Skills development	Skills enhancement	
Stakeholders chartering			

Contextualization phase

The public sectors organizational complexity and structure make ERP implementation more challenging than in private sectors, Dwivedi et al. (2014). Most of the actives in this phase are focused on understanding and preparing enabling environment through policy reviews to support process alignment. Regulations in public sector require a very laborious process to change them. Political influences and interests, resources and skills availability significantly affect activities,



listed in the conceptual framework, during the pre-implementation phase. Unlike the private sector where decisions are with a focus on maximizing returns, public sector decisions are highly influenced by political and registrations that are embedded in bureaucratic structures. Lack prior experience and skills in business process analysis and modeling and enterprise systems technology, also significantly affect the planning process and negatively influence the decisions made. Findings revealed that most of public sector information systems fail because of: top down imposing pressures, political ambitions, financial challenges, unskilled staff and low motivation among the teams at operational levels of administrative structures.

Secondary, using external consultants who are not familiar with day to day challenges in local environment result into presumed challenges and solutions. Understanding local government context is very important; local government domains vary based on the political environment and government models. Hence, domain best practices could not be considered universal. Preparation for implementing an enterprise systems require a well-defined strategy for acquiring adequate financial and non-financial resources to avoid interruptions along the implementation process. In developing economies where donor funding is the major source of financing such huge projects, prior negotiations for long term financing to sustain activities have to be planned well.

Business reengineering, which is fundamental to implementing ERP system, /8 involve overhaul of organizational structures, management systems, job descriptions, skill development, training and the use of ERP (Rajeshwar, 2015). Local government entities are required to comply with a number legislations, hence, a framework specific to local government context is critical to effectively manage structural changes for a successful implementation of ERP system. Managing changes in the way an organization work, job profile, decision making capabilities, and processes integration, which are caused by implementing ERP is complex and if not done properly can lead to ERP failure (Rajeshwar, 2015).

Implementation phase

The complexity of ERP system, and the impact ERP implementation make to business processes, characterize the traditional in-house ERP implementation phase with enormous technological activities including: Hardware and Software installations and configurations; realignment of business processes; attitude and culture change activities; user training. A lot of the resources and commitments are required during this phase. Findings revealed that implementation of information systems similar to ERP systems is a new experience; secondary local government budgets are grossly inadequate to fund enterprise systems implementation. Adopting a cloud ERP system lessen the demand for in-house technological skills; significantly reduce Information Technology resources acquisition budget; distraction caused by the presence external consultants is minimized. Finding indicate that the concept of business process management is not well embraced in developing countries more so in public sector. According to Soja (2012), Infrastructure are significant barriers to ES adoption success.

Implementing ERP system in an organization without prior business process improvement work, lead to a distorted approach that focus on organization – ERP fit rather that ERP – Organization fit approach. Scarcity of BPM research in public sector, more so in developing countries make the implementation of ERP systems very complicated; only 7% of BPM research covering public



sector, Houy et al (2010). It is important that local government units in a developing country embark on business process analysis and improvement prior to the ERP implementation phase. In view of this the end of the implementation phase shouldn't be considered as the end of the implementation process, rather, a stage at which critical evaluation of the ERP and Organization Fit should begin. This will enable relevant stakeholders to identify critical technological misfits or errors; review of change management strategy is examined, and tactical enhancement, if need be, are initiated. ERP system implementation is different from traditional information systems implementation. Traditional information systems implementations don't have the constructs: technological, managerial, operational, strategic, and organizational identified by Al-Mashari et al., (2003).

Transition phase

Findings show that donor funded projects in developing countries are executed within terms and conditions of the donors origin. Local terms and conditions of remunerations and services delivery are usually below the donor's conditions. When donor funding stop, usually at the end of implementation phase, it is difficult to sustain activities at the same level of standards. Lowering standards lead to loss of skilled personnel, causing a failure to realize the intended benefits. A transitive phase will help the local government unit to adjust to local situations; allow a gradual culture change, extend the monitoring and evaluation activities to enable the implementing organization access the success of the implementation.

ERP implementation success shouldn't be measure only in terms of completing the implementing project in time scheduled and budgeted resources; a critical measure of the smooth transition to operationalization of the new system, and achievement of intended business objectives need to be emphasized. Hence, a transition phase is critical to ensure the organization – technology fit.

A blue line on the conceptual framework indicate the point of certainty of the outcome of the implementation in relation to objectives achievement or worst situation where management has to decide to discard the project. It is quite challenging to determine the sustainability, just the point of completion of implementation phase, of a big donor funded project like ERP system in public sector. Constraints in local government administration adversely impact on the sustainability of projects. A well-defined and planned period, transition phase, will provide an opportunity for backward and forward assessment of the ERP system adaptation journey.

The transitioning phase allows stakeholders to assess the progress on the key performance indicator defined in the contextualization phase. Focusing of the compliance testing enable the stakeholders to ascertain the ERP fit into the business processes. To ensure a smooth adaption of the enterprise systems in public sector requires that the enterprise system comply with political, legislation and economic requirements that were identified in the contextualization phase. Data should be corrected on implementation activities to enable the planning of implementation of other modules. All errors need to be corrected during this phase before the contracted technical team disengage from the implementation project.

Realization



In public sector the measure of ERP implementation success has to be against benefits realization in relation to key performance indicators based on efficiency in service delivery, rather than ROI as in private sector. Motivations for service delivery public sector are different from the private sector, hence, ERP system implementation success in public sector has to be measured differently. Periodic KPI measurements have to be executed in this phase to collect data required for decision making for further: policy reviews, capacity development, process realignment and enterprise systems upgrade. The realization phase shouldn't be looked at as plan to a finishing line but a structured approach to continuous KPI measurement to ensure a continuous improvement in service delivery. KPI measurement has to be carried out at departmental level by the department personnel to ensure benefit realization in all departments.

Monitoring and Evaluation

ERP systems are complex systems whose implementation has wide impacts on a recipient organization. It is important that the ERP adoption process in local governments is monitored throughout all stages to ensure that: compliance to regulations is adhered to; adoption activities are progressing on schedule and detect indicators of success or failure; identify factors that account for the progress or constrain progress of activities; measure responses and reactions to adoption activities. The trends in effects and impact of the adoption of ERP system are analyzed to: minimize the risk of adoption partial or total failure; determine the degree of the milestones; reformulate strategies to keep the adoption process on track. Implementation of ERP systems in public sectors in most of developing countries is donor funded, hence, there is a great reliance on donor guidelines. Continuous evaluation of the adoption process helps to identify and resolve non-technical issues, like further resources commitment, that may affect the implementation and sustainability of the ERP system. Implementation of ERP system in developing countries requires continuous monitoring and evaluation; risks and constraints to a successful implementation are highly prevalent in developing countries.

Though local governments at municipality level are familiar with Integrated Financial Management Information System (IFMIS), ERP is a new concept to them. Local governments have gone through a number of reforms to improve efficiency in public service delivery. However, at municipality level, Business Process Management concept is not known, and the municipalities participated in the research had never engaged in process analysis and design activity. In view of this, implementation of ERP in local governments needs to imbedded monitoring and evaluation activities within ERP implementation process; implementation of ERP system leads to massive process changes. This could be effectively achieved when an Action Research model is adopted, where the core focus is continuously on planning, action and reflection as depicted in Figure 1. This is also important to ensure that the ERP implementation adheres to compliances required by various public sector regulations, impact of political influences are managed, changing requirements are anticipated, and possible failure factors are mitigated at every stage of ERP implementing process. Success of ERP systems depends on when it is measured and that success at one point in time may only be loosely related to success at another point in time (Markus et al., 2000).



Figure 1. Source: A step by step guide to monitoring and evaluation (2014)

CONCLUSION

This paper presents exploratory focus group findings from local government municipality context in relation to information systems, organized in themes: context and function, major stakeholders, municipality business processes, implementing information systems, critical data requirements and challenges, and cloud based solutions. The paper also discusses existing frameworks/methodologies adopted to implement ERP systems, and unveils limitation of existing frameworks, which include: vendor specificity, private sector oriented, universality of best practices, and lack of consideration of developed country context. On the basis of the research findings, a conceptual framework for implementing a cloud ERP system in lower local government in a developing country is proposed, prescribing contextualization, implementation, transitive, and realization phases, with continuous monitoring and evaluation mechanism. From academic perspective, this paper contributes to ERP implementation literature, and benefits both ERP systems academicians and practitioners interested in information systems in local governments in a developing country. This study also forms a basis for further ERP research in context of a developing country local government, like validation of proposed framework, appropriate cloud ERP architecture, etc. From practical perspective, this research will be beneficial to local government decision makers and ERP implementers by providing them a comprehensive understanding of the critical need to adopt a local government contextualized framework to mitigate failure factors leading to partial or total failure of ERP system implementation, a consequence unbearable in development country context with highly constrained resources. The results can be generalized to small organizations in developing country context.

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