

Developing a Change Management Model for Managing Information Systems Initiated Organisational Change: A Case of the Banking Sector in Zimbabwe.

Samuel Musungwini, Louis Mondo

Midlands State University, Zimbabwe

mondolouis2015@gmail.com, musungwinis5@gmail.com

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Abstract: Literature studies indicate a high rate of failure in information systems projects, particularly those that have great impact on the organisational systems and structures. Therefore, the purpose of this study was to establish the methods and skills that can be applied to successfully manage information systems initiated organisational change in the banking sector in Zimbabwe. The study employed a qualitative research design where IT professionals and representatives of business divisions from Steward Bank, First Banking Corporation and Commercial Bank of Zimbabwe participated in the study. The in-depth interviews were conducted to find answers to the research questions. The research finds the greatest challenge to the success of information systems projects in the area of change management. There is lack of change management skills and knowledge amongst information systems professionals on how to manage the process of introducing information systems in organisations. Most challenges to the success of information systems projects were found to be related to human or behavioural factors and the organisational cultures. The research established that managing the change in people is very much more important and difficult than managing the technical aspects of information systems projects. Therefore, information technology professionals should be acquainted with the soft skills and methods needed for managing change projects which are embodied in change management. The research presented change management techniques and critical success factors that can be applied to increase the success of information systems projects in the banking sector in Zimbabwe.

Key words: Change Management, Information Systems, Organisational Change, Framework, Banking Sector, IT projects

1 Introduction

Information systems introduce changes at many levels within the organisation. Clark and McLoughlin (cited in Salminen 2000) wrote a lot of literature on how information systems bring changes to the organisation. Similarly, Cameron and Green (2004) wrote a whole chapter on information systems-based process change in their book entitled; "organisational change management". Information systems had revolutionised business processes and the transfer of information. They have made business more efficient by facilitating a seamless access of information (Al-Mashari et al., 2003). Information systems enable sharing of information and gave rise to new forms of working such as home working, and new forms of organisations (Manwani, 2008). Information systems reshape the organisational process and not vice versa (Mukherji, 2002).

Information efficiencies relates to time and cost savings generated through the use of information systems. Dewett and Jones (2000) identified five outcomes that organisations can derive from information efficiencies and information synergies which are as follows; "IT links and enables employees, IT codifies the knowledge base, IT increases boundary spanning, IT promotes efficiency, and IT promotes innovation". According to Nickerson (2001), information systems enable better services to customers and employees. Shang and Seddon (2000 cited in Al-Mashari et al 2003) classified the benefits of information systems into the following categories; managerial, operational, strategic, organisational and IT infrastructure. Organisations are investing huge sums of money in IS projects expecting to get positive benefits and business turn around (Hallikainen, 2003). However, most organisations are failing to get a favourable Return on Investment (RoI) and to derive maximum business value from IS investments (Cameron and Green, 2004).

1.1 Problem statement

The background study shows that IT projects are still facing a high rate of failure because the importance of change management is not yet fully incorporated in information systems projects. Most information systems projects have technical successes but still face organisational failures due to the behavioural challenges and organisational cultures towards the introduction of new information systems. There is lack of change management methods and skills amongst IT professionals on how to deal with various organisational challenges that negatively impact on the success of information systems-initiated change. Wognum et al (2004) attributed 90% of information systems failures to behavioural challenges and organisational cultures towards information systems. Therefore, the greatest challenge in the implementation of information systems in organisations is in the area of change management. There is lack of specific literature on change management skills and methods that IT professionals can employ to increase the success of information systems projects. Similarly, there is lack of specific critical success factors for the successful implementation of information systems in the banking sector.

1.2 Research objectives

The core objective of the research is to identify ways in which the concept of change management can be applied to increase the success of information systems initiated organisational change in the banking sector. The other objectives are to recommend specific critical success factors which must be given extra attention to increase the success of information systems projects in the banking sector, and to develop a change management framework for managing information systems initiated organisational change.

1.3 Purpose of the study

The purpose of the research is to establish critical success factors which must be given extra attention to increase the success of information systems projects in the banking sector, and ultimately develop a change management model for managing information systems initiated organisational change.

2 Literature review

2.1 Change Management

According to Austin and Curie (2003), change refers to an object that changed, for example, the introduction of a new system. When change is affected to an organisation, it affects the processes and systems within an organisation. It also affects job content and organisational structures (Mukherji, 2002; Al-Mashari et al., 2003). Closely connected to change is the concept of change management. It is "an approach to transitioning individuals, teams, and organizations to a desired future state" (Kotter, 2011). From the above definitions, it is clear that change is all about going to a future activity and state of events while change management is about techniques, processes or tools that can be used to positively influence that change. Information systems initiatives are change projects because they come with a lot of changes, some of which makes employees resist them (Cameron and Green, 2004).

2.2 Change Management Models

There are notable researches that have been done in order to come up with change management models that change managers can follow when embarking on change projects. Kotter (1995) did a research using a case of 100 top performing companies in order to study on how they achieve their change efforts. He synthesised an 8-step model that could help companies have a planned and successful change (see fig 1). The eight cascaded steps are important and must be followed in order. Mistakes made in any of the steps will affect the rest of the steps and affect the change process. Hence, it is very critical to follow the steps in order.



Figure 1: 8 steps to change management, source: (Kotter, 1995)

The pioneering model is Lewin's three step model (Cameron and Green, 2004). The steps are as follows; unfreezing the old, followed by moving to the new and lastly refreezing the new behaviour or situation. In this approach the old behaviours need to be interrupted (unfreeze), the change needs to be made (change), and the new behaviours need to be cemented in place (refreeze) (Salminen 2000). Thinking about change in this way can help managers prepare for the three steps. However, the model has been criticised for lacking practical ways in which it can be operationalized but is good as a starting point when thinking about change (Cameron and Green, 2004).

Burke (cited in Hamlin et al., 2001) presented another exciting model. The model presents four dimensions for managing change as shown in figure 2 below.

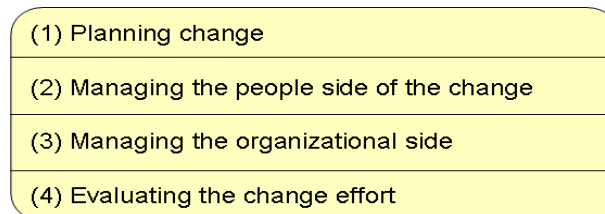


Figure 2: Burke's four critical dimensions when managing Change, source: (Hamlin et al., 2001).

The model has however been criticised for assuming that managers already have sufficient knowledge of managing change whereas evidence of projects failure rates in organisations shows that such knowledge is lacking in most of the organisations (Hamlin et al., 2001). However, the model agrees with other models for the need to manage change as a whole, that is, including the people, the system and the organisation (Hamlin et al., 2001). The model also highlights the need to evaluate change efforts.

1.4.3 Change Management in IS Projects

The discussion of general information systems project issues and their relationship to change management is necessary for the purpose of this study. In information systems projects, change management is needed from the planning phase, development phase to the post implementation phase. According to Miles (2007) "IT-based change involves people doing different things in different ways with different inputs and different outputs". Markus (2004) coined a term "technochange" to refer to technologically induced change.

3 Research framework

The literature review showed several various issues which determine the success of information systems initiated organisational change. The studies reviewed that almost 90% of the issues which impede the success of information systems are inextricably related to human attitudes and the organisational cultures towards information systems. Hence, there is need to find ways in which the concept of change management can be operationalized in information systems in order to increase the success of information systems projects. The literature studies revealed the following areas of information systems projects implementation which need the application of change management skills; Project Organisation, Cooperation with Consultants, Project Organization, Relationship to Business Divisions, Management and Customer Commitment, and Information Systems Evaluation (see fig. 3).

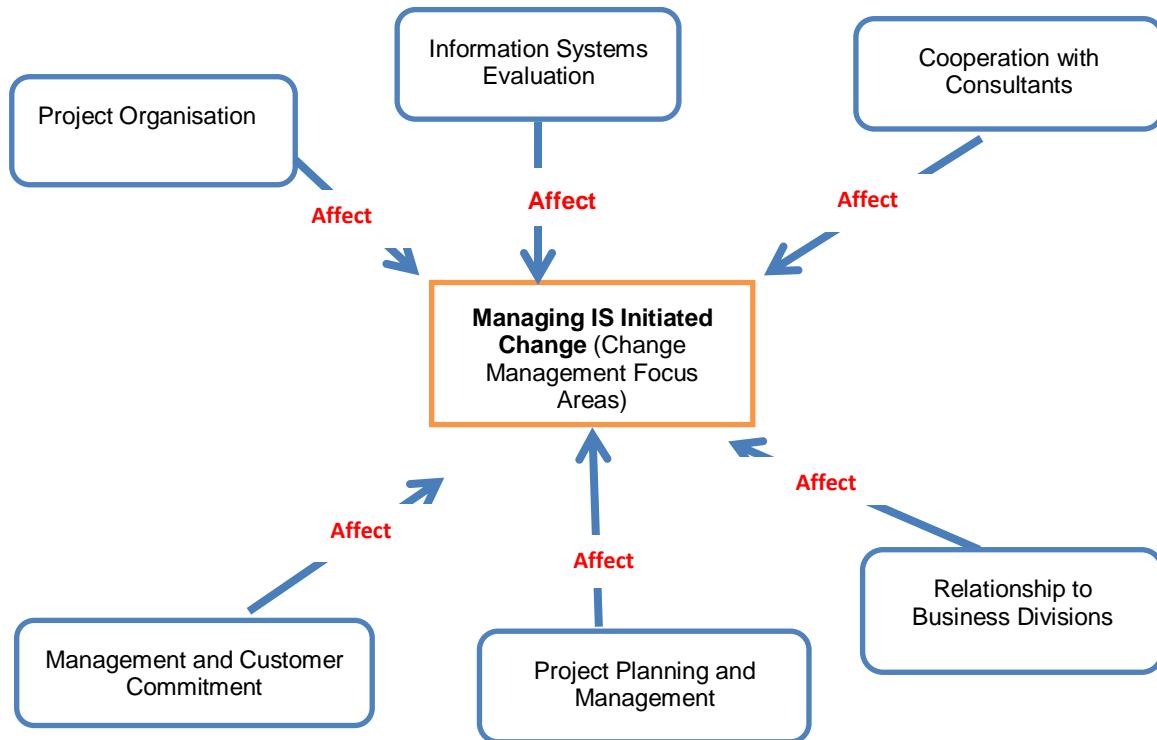


Figure 3: The Research Framework, source: (author, 2017)

4 Research methodology

The research followed a qualitative method since it was an inductive research. Qualitative research deals with objective reasoning behind a certain phenomenon. Qualitative researchers are concerned with getting a deep understanding of how people explain their circumstances (Merriam, 2009). The research employed the case study approach. Case studies are the common qualitative methods in researches in the field of information systems (Myers, 1997). Three vibrant banks in Zimbabwe were chosen in order to come up with answers to the research questions. The chosen banks are very competitive in introducing better banking services through ICT. These include the First Banking Corporation, Commercial Bank of Zimbabwe and Steward Bank.

Interviews were used a primary basis for data collection. Secondary data sources were also used in the research. These include articles and books that forms part of past literature which has been published (Myers, 1997). The primary and secondary sources of data complemented each other. In the event of failure to conduct face to face interviews, other methods such as questionnaires structured accordingly, and phone interviews were used.

In order to get most out of the research, the researchers designed semi-structured interview questions. Blumberg et al (2005) pointed out semi structured interviews as the best type of interview for case studies. The semi structured interview starts with specific questions yet allows the respondents to use their discretion in answering the questions (Blumberg et al., 2005). This gave the interviewees flexibility to add further questions which they think address the phenomenon under study.

This allowed the researchers to use the interviewees' responses to further refine the research questions.

The sample size consisted of eighteen (18) people. The interviews were approximately 30 to 40 minutes in duration for each participant. The duration varied due to many parameters such the interviewees' available time and intellectual resourcefulness on the subject matter. Interviews per participant were repeated until a saturation point is reached or enough information had been obtained. Some interviewees were followed up by phone calls for further clarification on information provided. The researchers interviewed people with experience and knowledge of the implementation challenges associated with information systems projects. This avoided the risk of not achieving the objective of the research which happens in a situation where interviewees lack enough understanding of the phenomenon under study.

5 Findings

5.1 Critical Success Factors for Information Systems Implementation in the Banking Sector

Each interviewee was asked to give three success factors whose importance is very critical for the success of information systems projects in the banking industry. Their responses are summarised in table 1 below. All the respondents made it clear through their responses that information systems projects have a lot of challenges and as a result most of them fail even before they even get started. The respondents pointed out that most of these information system projects are very distinct from each other and each new project may require somehow new approaches.

Table 1: Key success challenges in IS projects according to interviewees, source: (author)

Critical Success Factors mentioned (3 factors per interview)	Number of Interviewees
Management Commitment and Support	15
Organisational change management and support	12
Training	11
Mature and well-functioning system and other systems at go live	8
Existence of clear targets and business benefits	5
Enough resources in the project	5
Involving the users early in the project	5
Project Management	5
Skilled project personnel	5

5.2 Project Planning and Management

Most interviewees revealed that project management practices are lacking within the IT organisation after being explicitly asked about project management. Project management was mainly introduced in the banking industry through consultancy and from thereon, the knowledge about it is being assimilated slowly in this sector. In addition to the advantages such as better delivery of projects in terms of better budget, human resources and time estimation, project management was commented for creating operating procedures that force the organisation to work in a standardised and consistent way. In other words, it equips the IT professionals with knowledge and tools for making projects successful. The participants believed project management practices give the IT personnel within the organisation the knowledge of how IS projects are executed. This also makes it easy to adhere with best practices in the IT industry and to share lessons.

The interviewees pointed out that the most important thing is to be able to communicate the lessons learned during project execution to all the relevant personnel. Most of the personnel that participated in these projects are consultants who go with their knowledge. Only little knowledge is left in the heads

of few people in the organisation who had the opportunity to work with the consultants. The interviewees attested that there is no formal way of cascading what has been learned to all relevant people in the project. The knowledge and experience gathered from previous projects is only left with project managers. This knowledge is important to other information system personnel so that they can improve the quality of next projects by learning to avoid previous mistakes. The interviewees said the lessons learned must be properly documented and written down so that they can be formally transferred to other IS personnel.

One respondent highlighted the need for transparent internal working processes within the information technology department in general. The respondent thinks that there is no immediate responsiveness to execute IT projects because there is no predefined team which is responsible for that. Another respondent said there is need to share knowledge included in big contracts with important partners because those contracts include what they really need to know to execute their jobs, for example, the support contract.

One of the participants who had championed most of the ICT projects attested that their organisation has not fully integrated project management practices into their projects. The respondent said most of the work is done with consultants who have their own project managers who then work closely with the company's ad hoc project managers. This implies that there is no designated person to manage information systems projects within the company. Since different projects are managed by different people, it means there is no common approach or framework to project management. The participant went on further to say that soon they will set up a Project Management Office (PMO) which will have a dedicated team assigned for project management.

Project planning is another important phase which can make a project pass or fail. The interviewees pointed out several issues concerning planning and the rationale is; if proper planning is done, chances of project success will improve greatly. However, planning is only as good as the implementation of the project. Poor planning has resulted in one of the medium sized projects failing in one of the banks. This created a project with unrealistic budget and schedule. This resulted on concentrating all efforts on delivering a system rather than delivering a system that meets the needs of the business. The interviewees revealed that application selection was done without any broad-based consultation with the stakeholders and that resulted in the poor choice of the application program. A better formal way of application selection is needed, said one of the respondents.

One of the business representatives said it is important to find out how the new system will change the job content and processes at the onset of the project. The respondent said an analysis of how the new system will affect the job content provides the organisation with time to ensure that people would be trained for their new job roles before the new system is operationalized. People's way of working should be given a high priority. The project management team should make it clear for all stakeholders to understand what moving to the new system entails for them. The analysis can be done using interviews and workshops. This analysis can be done separately with each group of stakeholders as there are different plans for each business unit.

It has been mentioned that it is important to fix the project tollgates and each of the tollgate must be done thoroughly before moving to the next. The planning phase must consider the project tollgates as a critical factor. Project tollgates have been mentioned as being important when it comes for the system to be deployed. One IT professional said fixing project tollgates enables project managers to ensure that all things are in place (servers, licenses etc.) before the system is deployed. The handover of the new system to the systems support department has been mentioned as critical for project success. One interviewee said the technical go live must precede the business go live to ensure that there is the smooth transition of the system into the working environment.

5.3 Information Systems Evaluation

IT professionals pointed out that an information system is a strategic tool for the whole organisation. They said information systems can fail as long all the business divisions are not giving their support. Both IT professionals and business representatives pointed out that information systems evaluation is easy as long as the entire organisation set the objectives for the introduction of a new information system. The other respondent pointed out that IS projects are not difficult to evaluate as long all departments take part in prioritising and evaluating the RoI from IT investments. One particular instance that was referred to is the Master Card EMV system in one of the banks. It was evaluated by a way of quantifying the project's Rate of Return (ROR) in a period of 3 months. All key departments which including Finance and Accounting, Marketing and IT decided on the fee to be charged for each transaction and how many cards to print so that in period of about 3 months the bank would have

break even. Therefore, information systems initiatives are not supposed to be taken as IT projects but organisational projects and deserve support from all functional areas of the organisation.

5.4 Project Organisation

The quality of personnel involved in information system projects is very critical for project success. One respondent said the success of information systems projects is dependent upon the skills and experience of the project team. The other respondents said it is impossible to have all project team members with experience. They said what is important is the delegation of tasks and communication as some of the skills needed for the project can be outsourced. It is a pre-requisite that every project stakeholder to be acquainted with the project aims. The project stakeholders' spirit is important for project success. Some of the interviews made it clear that the IT department do not yet possess enough knowledge to execute information projects without outsourcing. They pointed out that knowledge can only be gathered through experience and this is an art acquired over time rather than training.

The most important individual who has the power for making projects successful is the project manager. The interviewees pointed out that the project manager has the responsibility of putting the project team in their undersigned tasks and must make sure that those people have knowledge about their tasks. The project manager should make sure that all the resources needed for the project to be completed are in place. The project manager must definitely have experience in similar projects. However, the interviewees also stated that most project managers are much separated from the rest of the project team due to poor communication with the team.

5.5 Mutual Partnership with Consultants

Banks hire consultants for most of the big information systems projects but the cooperation with consultants or partner organisations has not been that easy. There is a common view among the respondents that a consultant cannot fully understand the organisation's business processes and the user requirements unless they are explicitly defined. Defining the user requirements so that a consultant understands them was mentioned as the biggest challenge. One respondent said most of the consultants do much of the work on their own premises and in this case, they need to be closely supervised.

One respondent who was a project manager in one of the IS projects said there is need to define some check points or specific measurable milestones in the contract template. This makes it easy to monitor if the consultant is making progress or not. The respondent further pointed out that most of the outsourced projects do not deliver the right product because there is no follow up. One of the respondents said their bank has the policy of engaging the best consultant, so the best must also be demanded from the consultant. One point of view is that benchmarking should be used in selecting the best partner. One of the respondents also suggested using different consultants for different stages of the project.

5.6 Relationship to Business Divisions

Both IT and business representatives expressed that there is need for an understanding between business divisions and IT department. It is essential that IT understands the expectations of business divisions for the successful implementation of projects. The research observed a gap between IT and business divisions in understanding the main problem to be solved and what is expected out of information systems initiatives. Most of the respondents from the business divisions said IT is not knowledgeable about the core business of the company. One business representative said most IT personnel do not even know why the business exists. The respondent went on further to say that IT does not suffer direct pressure from the market; therefore, it is not concerned about the business operations so that they become better. Another business representative said IT should drop the technical jargon that complicates its relationship to business divisions. It must rather offer practical solutions that will increase the use of applications in the organisations by being practically focused on how to deliver useful applications needed by the business divisions.

The need for IT to work closely with business divisions was mentioned as an important factor for the success of information systems projects. One of the interviewees who represented the IT department used the analogy of supplier and customer to describe the relationship between IT and business divisions. The main challenge mentioned is that business divisions forget that they are the customers. Therefore, they must explicitly specify what they want the IT department to offer since IT is the supplier and they are the customers. The respondent also mentioned that the relationship between

business and IT is kind of a forced relationship as they always have divergent views on what is important to prioritise when it comes to selecting business applications.

5.7 Management and Customer Commitment

The commitment from the customer was pointed out to be an important factor in information systems projects. One respondent said the customer, that is, the organisation, must be committed and be in a position to adopt the new system after deployment. One project manager felt that some of the projects failed, not because of system quality but because the organisation was not committed during the process of systems development. As a result, the organisation was not ready to take over the new system at roll out. One of the IT professionals stated that the customer must clearly define the expectations and be committed to them. Also, the importance of committing enough financial resources that matches the expectations of the customer was mentioned as a critical factor. The other respondent mentioned the rift that exists between the IT organisation and the business divisions. The respondent stated that the IT organisation has the notion that the business divisions should just decide on what they want. Similarly, the business divisions believe the IT organisation does not articulate the business needs of the company. One IT representative pointed out that it is difficult to find people from the business divisions who can articulate business requirements and be able to explain them clearly so that the IT organisation can also articulate them.

The commitment of management was also cited by most of the interviewees as critical factor to project success. The interviewees said that management support is needed from all levels, that is, from top managers, middle managers, line managers and team leaders. One interviewee also pointed out that the senior management' attitudes towards the system have a direct impact on the users. Another respondent also stated that if the information system creates additional tasks, it is important that management increase rewards for those additional and new tasks brought by the implementation of the information system. One business representative paid particular attention to Theory X of McGregor which says employees are naturally lazy. Therefore, they need a directive action for them to accept new information systems. Most of the system users said line managers are very important for project success since they are the ones that allocate human resources needed for a project. They have the authority to allow or deny system users time to attend training related to the functioning of the new information system as most of the training takes place during working hours.

6 The proposed change management model

The change management concept is now gradually being assimilated in the banking sector. Some respondents said change management is a good change lever as enunciated in change management books however little has been done to integrate it into systems development. One respondent said the area of change management is one area which has not been given enough attention in information system projects. Another respondent said it is necessary to assign a person responsible for change management so as to make sure that system users will conform and be comfortable with the changes. Another respondent said that change management is about having a good relationship with people. The respondent pointed out that information systems professionals must conduct face to face meetings with information systems users which make it easy both to find the attitudes of people towards the new system and to find a simple way of handling those attitudes.

Change management is a broad topic and it takes different approaches. Therefore, it is important for one to customize it in relation to the intended stakeholders. Many approaches can be used in influencing each group of stakeholders. One interviewee suggested motivation as a way of dealing with change resistance from employees who are likely to be laid off due to the implementation of the new system. The interviewee mentioned motivating the employees that having knowledge in using the new system will make them marketable as the new system is widely used in many organisations world-wide dissolves their fear of losing jobs. Some of the interviewees pointed out that change management is always a constant factor when a new information system is implemented since it will always bring changes to the already existing business processes. However, the respondents said it is critical for the end users to clearly understand the benefits of the new system as this will reduce the amount of resistance.

Two thirds of the respondents mentioned end user training as an integral part of change management. The respondents mentioned that the personnel involved in training end users occupies a vital position in the company as their perception towards the new system directly shapes the behaviour and attitudes of end users towards the system. The line managers are also considered to be very important as they have the power to let the end users attend the training. One respondent pointed out

that training remains important as long as the system is operating. Moreover, culture and language are important factors that need to be taken account of when designing and carrying out the training.

The purpose of the training is to get the users shift their thinking from “as is” situation to the “to be” situation. As mentioned in the literature review; human transition is an essential component of change as the change process is correlated to how the people involved in the change process thinks. The training must get the users to clearly understand the benefits that come with the new system. The respondents stated training as an informal way of communication. One respondent stated that 20% of the success in IS projects is attributed to informal communication whilst the 80% can be attributed to planning, good project management practises and system development. Hence, some of the respondents mentioned that application training must be carried out before process training. Some of the respondents suggested working processes should be given a higher priority than the technical application considerations. The respondents further underscored that management must make the purpose of the training very clear and must clearly express to the users that this is the new way of working without giving end users several options. This is directive way of making sure users will not have the option to choose the status quo.

With the help of one of the interviewees who were involved in several successful projects, the research has the notion that if the four areas shown in figure 4 below are followed, change efforts will be easy and successful. The first step is to let the users understand the changes that will occur and to get them devoted to the change process through creating a strong and shared vision. The second phase is that of having good change management leaders who act as role models or change agents. These leaders must demonstrate to the rest of the users the new way of doing business by the manner they behave in relation to how they quickly adapt to the new changes. The third step is to empower employees with the knowledge they need to be in line with the new system’s way of operation.

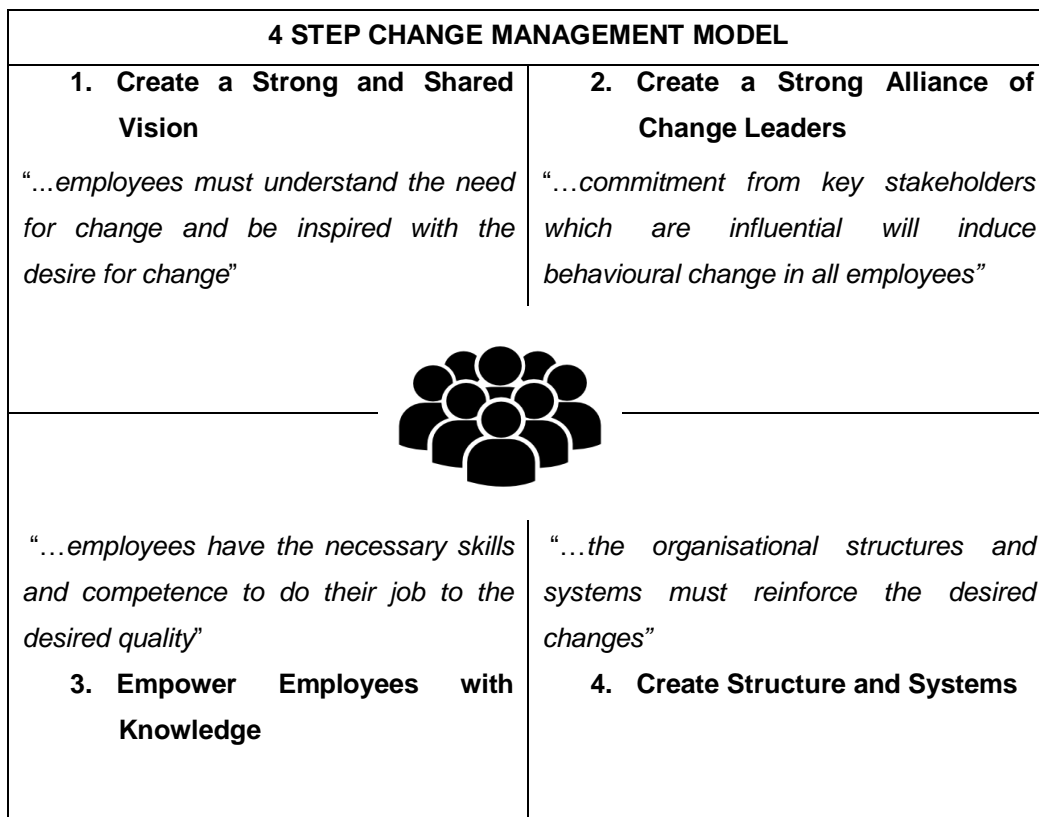


Figure 4: Organizational change management model, source: (author, 2015)

The fourth step is to create structures and systems aligned to the new system’s processes. The step requires employees to have the knowledge of their job role and how the change efforts will alter or completely change them. The employees must understand the “to be” situation or where they will be positioned in the future state of things to dissolve their fear of becoming irrelevant after the implementation of the information systems. One business representative said that it is always difficult

to achieve change when employees who are the change agents do not know where they are going or what the future holds for them.

6.1 Discussion

The results of empirical and theoretical findings brought to surface the challenges involved in the implementation of information systems initiated organisational change. The most important findings that are of interest in addressing the research questions are discussed from which conclusions can be deduced. The findings are of great value in contributing to how IS projects can be successfully implemented.

i. Most of the challenges in information systems projects are caused by behavioural issues

The research has found that most of the failures in information systems projects are caused by the negative attitude of employees towards information systems initiatives. Employees fear the change because of uncertain future state of things caused by the implementation of new information systems. Similarly, behavioural challenges make employees stick to their old ways of working. The change management model (see in figure 3) synthesised from this research can be used by information systems professionals when implementing new information systems in organisations.

ii. There is lack of change management skills amongst information systems professionals

The research noted that change management is a concept that is foreign to most information systems professionals. Most of the information systems professionals who were interviewed lacked a concrete understanding of the concept of change management. Information systems projects in banks are being treated as merely IT projects whereas this research revealed that IT projects are essentially business projects and must be accorded enough support and commitment. They initiate changes to business processes and makes it possible for organisations to achieve their strategic objectives. Therefore, IT project management must incorporate change management to avoid organisational cultures and behavioural challenges that impede the successful implementation of information systems.

iii. Prioritisation and setting of objectives for information systems projects is not being done by all departments

This research noted that the prioritisation and setting of objectives for implementing an information system are not being done by all key departments or stakeholders. The objectives for implementing information systems are varied. Some companies install information systems for strategic turn around. In the strategic mode, the company greatly relies on information systems for operational reliability and business service transformations. Other companies use information systems but can perform their critical business operations without a great need of information systems. So, in both the cases, the objective of having a new information system is not being agreed by all key departments and measured at different stages of the system development life cycle. This leads to the next conclusion:

iv. Organisations are not quantitatively evaluating information systems projects against set objectives

There are many parameters that can be used to evaluate information systems investments. However, whether those parameters are tangible or intangible, they must be quantifiable. All key departments must decide and agree upon the methods of evaluating information systems investments. This is not being done in the banking sector leading to challenges when it comes to assessing the success of IS projects. External consultants or auditors can help with the evaluation process to remove bias in the evaluation process.

v. There is no close link between business units and IT department

The study noted that the relationship between the information department and the business divisions is not always smooth. The relationship between the two organisations at the operational level needs to be improved. However, at the managerial level there is a good relationship between the two organisations. There is lack of constant communication at inter-departmental level. Operational level IT staff do not have enough understanding of the role of IT department in relation to the business objectives. Likewise, operational staff from business divisions does not have enough appreciation of the importance of the information technology department to the business operations. This gap creates an impediment to change as change needs the support of all employees.

vi. There is no effective communication between business units and IT department

Communication is happening in the banking sector amongst departments. However, the quality and effectiveness of communication is poor and lacks important things employees need to know. The

business side argues that most IT professionals use technical jargon which serves only to confuse them. On the other hand, the IT organisation says there is lack of business people with enough understanding of business processes. Thus, the business side cannot fully articulate their business requirements to the information technology department. Again, the IT department does not prioritize its budget or application selection in collaboration with other key departments. This greatly diminishes the relationship between the IT department and other departments. Other departments must know how the IT budget is being expended.

vii. IT Project management practises are known but are not always being implemented within the banking sector

The IT department personnel have knowledge about project management but lacks experience and will power to apply them in practice. There is no designated Project Management Office (PMO) that oversees the delivery of information systems projects in the banking sector. Most projects within the banking industry are managed by external consultants and this causes lack of internal project experience within the IT department except for the few top-level IT staff who gets the privilege of interacting with the consultants. There are no methods of sharing project experience with junior IT staff. Most of the costs paid to consultants are due to the lack of internal project management within the banking sector. Similarly, the IT organisation within the banking sector does not fully understand what they expect from the consultant leading to changing contract agreements and hence increase in total costs of ownership of the project.

viii. There is lack of transitional management during the change period

There is confusion about the future state of things during the change process. Employees get the feeling that they are no longer relevant to the organisation during the period of change. The research established that a transitional management team must exist during this period. This gives employees a sense of belonging and a portal to report their suggestions about what they wish to see in the new system.

ix. There is lack of information systems support and commitment from low level management

This research founded that management support is usually well functioning at the top level. However, for change efforts to be fruitful there is need for management support from all levels of management within the organisation including middle managers, line managers and supervisors. This research noted that low level managers have a crucial role in determining the success of the system. They are the ones who give system users time to attend system training since trainings usually take place during normal working hours. Therefore, low level managers must be involved early in the process of systems development so that they support the new system. This results in the commitment to use the new system at its inception from low level managers and that has a “pull effect” towards their subordinates.

x. IT professionals are not managing the human transition needed to make successful technological changes

This research had founded that IT professionals often get obsessed with managing the technology and forget to manage human transition. Managing human transition had proved to be the difficult part in any change process since dealing with complex organisational cultures and effecting behavioural change in employees during the change process is not any easy task.

xi. There is no technical relationship between the banks and the consultants

Most of the costs involved in implementing information systems projects go to consultancy services. This is fuelled by the lack of cooperation between the external consultant and the organisation. The consultant usually lacks enough understanding of the organisation's business processes and ultimately gives a solution that is not in line with the organisation's expectations. The banks are lacking enough knowledge on how to manage the consultant so that project meets the organisation's expectations. The banks must explicitly know what they expect from the consultant. These calls for banks to develop a strong internal project management team which technical know-how on how to manage contractors.

6.2 Limitations of the study

Change management is wide topic and consists of many various sub topics. This study does not give an exclusive research on how to deal with every change management issue prevalent in information systems projects. The research highlighted areas of change management IT professional can focus on, but it did not give concrete methods on how to deal with all of them. Only a few critical change

management issues in information systems have been looked into in more detail. Future researchers may carry out a detailed research in any of many areas mentioned which need change management and give a deep understanding on the methods and techniques that can be used to deal with various human and organisational factors that impede the success of information systems-initiated business change.

6.3 Acknowledgements

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7 Conclusion

The objectives of this research were to find change management areas and specific critical areas that are key to the successful implementation information systems organisational change in the banking sector. Both empirical findings and literature studies show that information system projects face a lot of challenges during development and after deployment. Therefore, the question is not whether there are challenges in information system projects but rather, how to solve the problems. The findings from all the three banks point to the lack of change management skills in IT professionals. Hence, there is need to combine IT project management with change management to effectively manage the human and organisational side of change. Information systems professionals must learn to manage human transition in a change process. It is also important to treat IT projects as business projects to get the involvement of all stakeholders. Similarly, the objectives of introducing a new information system must be established from the onset. This will help in the evaluation of the change effort as IT investments like any investments must be evaluated for a possible Return on Investment.

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