Assessment of Business Process Reengineering Implementation and Result within Ethiopian Ministry of Health and Gambella Regional Health Bureau Contexts

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DEDICATION

I dedicate this thesis:

To my beloved father: My dad was assassinated when I was only 40 days old while struggling courageously for freedom of speech and democracy. Dad your strength and courage has been my engine and motivation to do something good for the society. Though, dad your death and background made us to live into different countries, me and my brothers are still strong.

Brother Simon Zewdie where ever you are just keeping on walking toward your goals, one day there will be a time for our families to reunite again. Always dream to see you besides me.

Hoping peace, prosperity and unity for both Ethiopian and Eritrean people, I dedicate this thesis to my father, and to the two sisterly people.
Acknowledgment

God you have been with me to pave the way and carry me to my goals. Thank you!

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<td>AHPDPD</td>
<td>Agrarian Health Promotion and Disease Prevention Directorate</td>
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<td>ARS</td>
<td>Agricultural Service Reform</td>
</tr>
<tr>
<td>BPR</td>
<td>Business Process Reengineering</td>
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<tr>
<td>CSA</td>
<td>Central Statistical Authority</td>
</tr>
<tr>
<td>FMOH</td>
<td>Federal Ministry of Health</td>
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<td>GPNRSHE</td>
<td>Gambella People National Regional State Health Bureau</td>
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<td>HHRSPQRCP</td>
<td>Health and Health Related Service and Product Quality Regulatory Core Process</td>
</tr>
<tr>
<td>HPDPDCP</td>
<td>Health Promotion and Disease Prevention Core Process</td>
</tr>
<tr>
<td>HMIS</td>
<td>Health Management Information System</td>
</tr>
<tr>
<td>M&amp;E</td>
<td>Monitoring and Evaluation</td>
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<tr>
<td>PBM SIG</td>
<td>Performance Based Management Special Interest Group</td>
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<td>PHIMCP</td>
<td>Public Health Emergency Management Core Process</td>
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<td>PHPDPD</td>
<td>Pastoralist Health Promotion and Disease Prevention Directorate</td>
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<td>PRCD</td>
<td>Public Relation and Communication Directorate</td>
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<td>UHPDPD</td>
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Abstract

For many years, the tight bureaucratic and task centered approaches of civil service institutions of Ethiopia led to fragmentation, overlap and duplications of efforts than being responsive, flexible and customer focus. To this end, Business Process Reengineering (BPR) has been considered as a government sector technique to help organizations fundamentally rethink how they do their work in order to dramatically improve customer service, cut operational costs, become responsive, flexible and customer focus.

BPR has great potential for increasing productivity through reduced process time and cost, improved quality, and greater customer satisfaction, but it often requires a fundamental organizational change. Despite the numerous advantages of BPR in terms of responsiveness, flexibility and customer focus, its implementation is perceived to be a difficult task and also many unsuccessful experiences have been reported in the literature.

In fact, there are very few survey researches that attempt to highlight the kinds of activities that the organizations should pursue to ensure a reasonable transition to the new process; manage the human and technical issues surrounding implementation of the new process; and assess the results of its reengineering efforts. But these researchers saw the issues from private cooperative organizational perspectives and contexts. Besides, most of the discussions and findings were stretched up to showing that successful BPR implementations process are mainly associated with the organizations capability in managing changes. The researches paid no attention to other factors, like the issues of enabler, tools and techniques which can be utilized to build momentum. Hence, the present research investigated the factors associated with successful implementations of BPR projects in the contexts of public institutions. Based on a case study conducted in Ethiopian Ministry of Health and Gambella Regional Health Bureau; this research attempted to provide guidelines and best practices in public service providing institutions that will help them to achieve dramatic performance gains while implementing BPR projects.

A cross sectional, qualitative and quantitative study was conducted taking 90 respondents and 20 interviewees as study subjects. Data were collected from June 1 to July 31 2010. A structured questionnaire was filled by 90 respondents where 43.3 % of them from Gambella
Peoples’ National Regional State Health Bureau and 56.7% of them were from Ethiopian Federal Ministry of Health.

The questionnaire was employed to collect data on change management and factors associated with the attainment of performance goals whereas in-depth interviews were utilized to substantiate the findings of questionnaire and investigate the use of information technology as enabler. The in-depth interviews included planners, core process owners and directors.

Cross tabulation results imply that there is significant associations between attainment of performance goals and availability of written comprehensive plan for pilot test, refinement and implementation of change management plan, availability of communication strategy, placement of performance measures, motivation to take new roles and responsibilities, Use of information technology as enabler and pilot testing to evaluate new process.

Hence, the findings of this research suggest that reengineering project implementation is complex, involving many factors. To succeed, it is essential that change be managed and that balanced attention be paid to all identified factors, including those that are more contextual (e.g., management support and technological competence), performance management, availability of comprehensive implementation plan, communication strategies, refinement and implementation of change management plan, use of pilot testing to evaluate new process, motivation to take new roles and responsibilities and usage information technology as enabler.

**Key Words:** Assessment of BPR Implementation, Business Process, BPR Implementation in Ethiopia, Civil Service Institutions of Ethiopia
1. Introduction

1.1. Background of the Study

In the organizational design approach the problems that afflict modern organization are not task problems, they are process problems. The reason organizations are slow to deliver results is not that people are performing their individual tasks slowly and inefficiently, but they are slow because of some holdup in performing tasks that need not be done at all to achieve the desired results. At the same time task oriented organizations encounter organizing delays in getting the work from one person who does one task to the other person who does the next task (Hammer, 2001). Organizations are inflexible not because individuals are locked into fixed ways of operating, but because no one has an understanding of how individual tasks combine to create a result; an understanding absolutely necessary for changing how results are created. In short problems lie not in the performance of individual tasks, activities, and the units of work, but in their process, how the units fit together into a whole. For decades organization had been beating the hell out of tasks problems but had not aid glove on the process problems (Hammer, 1996).

Different governmental organizations used principles of separation to meet public demands for accountability and honesty. However, such separation led to fragmentation, overlap, and duplication of efforts rather than being responsive, flexible and customer focus. The fragmentation and traditional bureaucratic organization tied the hands of bright and committed civil servants and reduced the quality and effectiveness of government programmes (Hammer and Champy, 1993).

As the geopolitical realities, the pace of technological change is extremely fast or customers have become much more sophisticated and demanding; much more knowledgeable about their own needs; and are exerting ever greater pressure on service providers. To this end, different public agencies have been exerting efforts to pursue strategies that enable them to deliver seamless services to customer with lower costs and in possibly justifiable time span (Lindon, 1994). Business Process Reengineering (BPR) has been considered as a government sector technique to help organizations fundamentally rethink how they do their work in order to dramatically improve customer service, cut operational costs, and become responsive (Ministry of Health BPR document, 2007).
This currently popular term in many Ethiopian public organizations, defined by Hammer and Champy, as “the fundamental rethinking and radical redesign of business processes to achieve dramatic improvement in critical, contemporary measures of performance” (Hammer and Champy, 1993).

However, despite the significant growth of the BPR concept, not all organizations embarking on BPR projects do achieve dramatic results they seek. As the BPR failures mostly attributed to failure to either implement properly or acquire the benefits of BPR, the assessment of BPR implementation becomes the top agendas of companies undergoing BPR. Implementation is the most difficult phase of the reengineering project. At the implementation phase, ideas are turned into actions, and the organizations’ natural resistance to change must be overcome (Alter, 1994).

Successful implementation of BPR projects benefited the organization by increasing its productivity through reduced process time and cost, improved quality, and greater customer satisfaction. Hence the implementation process must be checked against several success/failure factors like setting comprehensive implementation plan, addressing change management issues and measuring the attainment of desired results so as to ensure successful implementation, as well as to avoid implementation pitfalls (Cooper and Markus, 1995; Hammer and Stanton, 1995; Carr and Johanson, 1995).

Though all public institutions in Ethiopia are embarked in BPR projects, there have been lacks of researches that can guide successful BPR implementations. Hence this research spotlighted assessments of kinds of activities that should be performed so as to ensure a reasonable transition to the new process and management of human and technical issues surrounding implementation of the new process. The research depicted the strength, weakness and the gaps in implementing the business process reengineering projects in contexts of Federal Ministry of Health (FMOH) and Gambella Peoples’ National Regional State Health Bureau (GPNRSBH).
1.2. Statement of the Problem

All the public organizations of the federal democratic republic of Ethiopia embarked in Business Process Reengineering (BPR) projects as groundwork to underpin result based performance management system and provision of seamless services to the public (Ministry of Health BPR document, 2007). These public organizations have been striving to emulate the best practices of cooperate organizations. However, some distinguishing features which are peculiar to public organizations in given setting have been constraining their efforts of emulation.

Previous researchers have investigated the principles of business process reengineering and how organizations approach this process from private organizations contexts. But only few researches tried to spotlight the issues associated with BPR implementations (Majed Al-Mashari, et al.; 2001). Though there have been few survey researches that attempted to highlight the factors associated with BPR implementations (Majed, Al-Mashari, et al., 2001; Kohli, R. and Hoadley, E., 1997; ProSci, 1997; Braganza, A. and Myers, A., 1996; Hewitt, F. and Yeon, K., 1996), these researches also saw the issues surrounding BPR implementations from cooperative business organizations and western world perspectives and contexts. In this regards, Adeyemi and Aremu depicted how BPR can help private financial institutions in achieve breakthrough performance in Nigeria (Adeyemi, Sidikat and Aremu, Mukaila Ayanda; 2008). Majed, Al-Mashari and other researchers also surveyed the international experiences in implementing BPR effectively (Majed, Al-Mashari, et al., 2001).

The previous researches mainly focused on how firms approach the BPR in terms of depicting and understanding a legacy system, benchmarking the best practices, and designing a new system from private business organizations’ contexts. Many researches focused on assessing the organizations’ decisions to pursue reengineering, new process development, whether the organization need to be involved in reengineering process and the reengineering process appropriately managed. On the other hand, ideas are turned into actions at the implementation phase; hence researches need to focus on implementations issues of BPR.

Generally, implementation efforts have been considered as critical success factors of BPR projects by many writers (GAO, 1997; Lindon, 1998; Mohsen Attaran & Glenn G.Wood, 1999; Smith, M., 2003; Northrop Grumman BPR Team Report, 2005). Hence, this research
work spotlights the kinds of activities that the organizations should pursue to ensure a reasonable transition to new process; manage the human and technical issues surrounding implementation processes.

Other than aforementioned activities, the assessment of BPR implementations need to embrace issues of performance monitoring as performance monitoring is also essential to ensure smooth transition to the new system (Zairi and Sinclair, 1995). The organizations have no way of knowing if the new process has produced the desired results (in terms of responsiveness to complaints, office arrangements, customers’ reception, service quality, timeliness, cost, one-stop-shopping, etc.) unless it has meaningful performance measures. Good performance measures generally include a mix of outcome, output, and efficiency measures. Outcome measures assess whether the process has actually achieved the intended results. Output measures examine the products and/or services produced by the process, such as the number of claims processed. Efficiency measures evaluate such things as the cost of the process and the time it takes to deliver the output of the process (a product or service) to the customer. Ongoing performance measurement provides the feedback which is so critical for continual improvement and future successes (GAO, 1997; Lindon, 1998; Mohsen Attaran & Glenn G.Wood, 1999; Smith, M., 2003; Northrop Grumman BPR Team Report, 2005).

The present thesis applied cross-sectional survey and combined both quantitative and qualitative methods. The thesis empirically explored the problems of implementing reengineering projects and how the severity of these problems related to BPR project success. To this end, this research aimed at:

- Introduce a guidelines and best experiences that facilitate the implementation of Business Process Re-engineering (BPR) in the Ethiopian Civil Service Organizations
- Present how the role of IT has influenced the organizations’ BPR implementation projects and
- Easy the familiarization for practitioners and trainers of the civil service reform with the theoretical foundations and strategies of BPR implementations
Within the view of the above objectives, this paper discusses the theoretical background and the practice of BPR with the purpose of answering the following major questions.

- Are the organizations following a comprehensive implementation plan?
- Are organizations’ executives addressing change management issues?
- Is the new process achieving the desired results?
- What are the factors associated with attainment of performance goals?
- What role has IT played in the organizations’ BPR programs?

1.3. Significance of the Research

The study allows policy makers, firstly, to consider and revise the current approach of reengineering implementation processes of public service providers; and, secondly, this study motivate higher education institutions so that the institutions can support and guides the effort of change in the country.

1.4. Scope of the Research

The study restricted in the implementation and result phases of the redesigning process. Hence the research did not include the assessment of the organizations’ initiatives to start the redesign or how the new processes has been developed and it was also delimited within the contexts of offices of Federal Ministry of Health and Gambella Regional Health Bureaus. It did not cover how BPR projects have been implemented at health facility level because of the limited time and resources for such study.
2. Literature Review

2.1. Systematic Literature Review

As a systematic literature review is helpful in identifying, assessing and interpreting all available research evidence with the purpose of providing the answers for specific research questions, the writer preferred this method as the main literature review method so as to substantiate and support the findings of the research (Kitchenham, B., Mendes, E., Travassos, G.H., 2007). Besides, systematic literature reviews also chosen because it provides an unbiased approach to identify the primary studies and to comprehensively aggregate the published literature. The systematic literature review targeted in finding mainly survey research works that deal with BPR implementations assessment and success or failure factors of BPR implementations. To this end, literature covering the period from the late 1980s to 2009, which inculcates survey method as their research methodology and that deals with BPR implementations, change management in BPR implementation, and success or failure factors in BPR implementations were selected. Book published on the topic, and articles published in the leading business, information technology and the more popular business magazines as well as journals were included in the review. The review first discussed the theories of BPR and then reviews the literature under the following headings: Comprehensive BPR implementation plan, communication strategies of BPR implementations, Change management, motivation to take new roles and responsibilities, performance measure, and use of information technology as enabler. This heading also used as key words to make electronic searches. In general, a comprehensive search for an integrative review identifies the maximum number of eligible literatures using the specific objectives and BPR implementations strategies. The systematic literature review conducted in such way that first literature review plan prepared and based on the plan literature review conducted then the literature review used to substantiate and support the results of the findings of the research.
2.1.1. Addressing Research Questions

To minimizing the probability of researcher bias the researcher prepare a systematic literature review plan consisting of search strategy, study selection criteria, quality assessment criteria, data extraction, and data synthesis strategy. To this end, within the view of addressing the general objectives, this paper reviewed systematically research literature in order to discuss the theoretical background and the practice of BPR implementations with the purpose of answering the following major questions.

- Are the organizations following a comprehensive implementation plan?
- Are organizations’ executives addressing change management issues?
- Is the new process achieving the desired results?
- What are the factors associated with attainment of performance goals?
- What role has IT played in the organizations’ BPR programs?

2.1.2. Search Strategy

Search strategy aids in answering the research questions effectively. The search strategy for this research is based on the following steps:

**Key Words**

Following are the keywords extracted from the Research questions:

- BPR
- Implementation team
- Comprehensive
- Plan
- Workforce deployment
- Use of pilot test
- Change management
- Enabler
- Success factor
- Failure factors
- Performance monitoring
Adding possible synonyms or relevant terms to above keywords:

- BPR (Business Process Reengineering)
- Comprehensive BPR implementation plan
- Workforce deployment for BPR implementation
- Use of pilot test for BPR implementation
- Change management in BPR implementation
- Use of IT as Enabler in BPR implementation
- Success factor of BPR implementation
- Failure factors of BPR implementation
- Performance monitoring when implementing BPR

Similarly the writer also used independent and dependent variables to search related literatures and define the variables.

**Dependent Variable**

- Attainment of Planned Performance Goals

**Independent Variables**

- Availability of Written Comprehensive Plan for Pilot Test
- Refinement and Implementation of Change Management Plan
- Availability of Communication Strategy
- Placement of Performance Measures
- Motivation to Take New Roles and Responsibilities
- Use of Pilot Testing to Evaluate New Process

**Search String**

The articles will be selected based on the full-Text search criteria. Following is the search string developed from the keywords mentioned above.

- ((“BPR” OR “comprehensive implementation plan” OR “change management” OR “workforce deployment” OR “pilot test” OR “Use of IT as Enabler” OR “Success factors” OR “Failure factors” "performance monitor") AND Successful BPR implementation project)
2.1.4. Resources

Following electronic sources of relevance for business process reengineering subjects and research methodology subjects are searched:

- BTH:s bibliotekskatalog
- ACM digital Library
- Cambridge university press
- Oxford university press
- Elsevier Science Direct
- Emerald Journal Database
- J-Stage
- JSTORE
- MIT press
- PubMed Central
- Sage
- Springer Link

2.1.5. Study Selection Criteria

The study selection criteria are used to identify the research articles appropriate for the research scope. The articles were selected on the basis of title, abstract, introduction and conclusion that matches best with the aforementioned research questions. The inclusion of the articles will be done by using tollgate method (Afzal, Torkar, & Feldt, 2009), in which the articles will be selected by using keywords, synonyms, alternate words, and revised keywords mentioned above. This method consists of different stages starting from stage one to four described in the table below.
2.1.6. Inclusion criteria and Exclusion criteria

Inclusion criteria that will used to select the research articles are described in the table below.

<table>
<thead>
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<th>Stage of the Research</th>
<th>Selection Criteria</th>
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<tbody>
<tr>
<td>1 Title and abstract</td>
<td>Focuses on the key words used for search string (BPR, Availability of Written Comprehensive Plan for Pilot Test, Refinement and Implementation of Change Management Plan, Availability of Communication Strategy, Motivation to Take New Roles and Responsibilities, Use of Pilot Testing to Evaluate New Process, Workforce deployment, Use It as Enabler , Success factor, Failure factors , Placement of Performance Measures, Balanced Scorecard, Attainment of Planned Performance Goals</td>
</tr>
<tr>
<td>2 Introduction and conclusion</td>
<td>Contains empirical background</td>
</tr>
<tr>
<td></td>
<td>Mainly focus on concepts related to BPR implementations in context of public institutions, use of information technology as enabler when implementing BPR projects</td>
</tr>
<tr>
<td>3 Full text</td>
<td>Presence of empirical data in the paper</td>
</tr>
<tr>
<td></td>
<td>Main focus on success factors, failure factors, Use of information technology in successfully implementing BPR projects.</td>
</tr>
<tr>
<td></td>
<td>Use of models showing factors affecting BPR implementations</td>
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<tr>
<td></td>
<td>Empirical BPR implementation survey researches</td>
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The articles which were clearly out of the scope and didn’t relate to the research questions were excluded from the review. Some articles were also excluded by reading the whole texts and based on their methodological approaches and contexts of the research works.

2.1.7. Data Extraction Strategy

Author of this study used the Microsoft word (MS-Word) to extract the data from the different survey researches that deal with BPR implementations. Data extraction strategy will be used to collect all the relevant information required to address the research questions and data synthesis. The research that inculcated clearly defined general and specific objectives depicted its methodology, related factors affecting BPR implementations, success in BPR implementations, use of information technology as enabler, with empirical findings, with validity were used to select and analyze literatures. Factors such as change management, communication strategies, and motivation take new roles and responsibilities; performance monitoring and use of information technology as enabler were analyzed to substantiate the findings of the research.

2.2. BPR Theory

2.2.1. Why BPR

BPR has become a popular tool to deal with rapid technological and business change in today’s competitive environment. Literature is full with examples of how BPR has helped firms contain costs and achieve breakthrough performance in a variety of parameters like delivery times, customer service, and quality (Michael Hammer, 1996). Companies that have successfully implemented reengineering have reported general benefits of higher productivity, greater cost efficiency in delivering goods or services, reduced business cycles, and overall improved profits (Harvey, D., 1995; Carr, D., 1993). In order for different agencies to be successful in business process reengineering projects, the agencies should work hard to ensure a reasonable transition to the new process. This includes managing the human and technical issues surrounding implementation of the new process and assessing the results of agencies’ reengineering efforts. Besides, organizations also need to focus on ongoing performance measurement and feedback to continually improve the new process once it is in place (Lowenthal, J., 1994). Similarly, Carr indicated that organizations need to effectively manage change so as to be successful in BPR implementation projects (Carr, 1993).
2.2.2. Implementation Plan

Aligning BPR strategy with corporate strategy that guides the alteration of tasks and flows into integrated processes, and variance in how tasks are performed and the flow of material, people, and information (Hammer, 1996), is necessary to be effective in the transition to process orientation. Hence, it is essential to align cooperate strategy with BPR strategy (Jackson, 1997). Detail implementation plan also is a corner stone of the successful BPR implementation. How new processes are tested, employees are redeployed, offices are arranged, resources are decided and the communication plan, change management strategies, controlling and monitoring as well as implementation arrangements are the main components of BPR implementation plan (Hammer and Champy, 19993). Effective BPR implementation planning that spells out the work that needs to be done, with time frames, milestones, decision points, and resource allocations; is essential for smooth transition from task orientation to process orientation (GOA, 1997; Jackson, 1997).

In relation to implementation plan, Zairi and Sinclair asserted that training and workforce deployment, specifying timetables for all actions, assigning individuals responsible for overseeing and performing the tasks are important elements of BPR implementation plan (Zairi and Sinclair, 1995; GOA, 1997).

The planning part also includes setting appropriate cross-functional team. Organizations’ executives and cross functional transition team should develop a detailed implementation plan that lays out the road to the new process. This cross-functional BPR teams are a critical components of successful BPR implementation (Towers, 1994; Dawe, 1996). Teams should be made up of people from both inside and outside the organization and also need to have experience in variety of techniques (Hammer and Champy, 1993). Effective communications, effective team leadership, adequate knowledge in process mapping, motivation, empowerment and proper organizations are the pillar for the success of the team (Carr, 1993).

The other issues to be covered here is pilot testing. Pilot testing which provides a method of refining the process and building support are particularly important for tuning a BPR implementation project to full successful implementation of the new process across the organizations (Jackson, 1997; Hammer and Stanton, 1995).
2.2.3. Change Management

Change management, which involves all human- and social-related changes and cultural adjustment techniques needed by management to facilitate the insertion of newly-designed processes and structures into working practice and to deal effectively with resistance (Carr, 1993; GAO, 1997). Change management is considered by many researchers to be an essential success factor in BPR implementation projects (Cooper and Markus, 1995; Hammer and Stanton, 1995; Benjamin and Levinson, 1993; Carr and Johanson, 1995; Harvey, D., 1995). Evaluating impact of the changes on all individuals, the organization and stakeholders and defining changes related to reward systems, responsibilities, work policies, processes and procedures, skills development and training, culture, motivation, communication and non-behavior risks are very important to succeed in BPR implementation project (Kliem, 1996). The greatest challenges of implementing BPR lie not in managing technical or operational aspects but in managing human dimensions of change. Thus change management includes revision of reward systems, communication, empowerment, people involvement, training and education, creating a culture for change, and stimulating receptivity of the organization to change. Experts in the area advice organizations to focus on planning and accountability for change management so as to manage the transition to process orientation. Especially during the implementation executives in organization implementing BPR must be in the forefront in dealing with the social, psychological, and political resistance to change (Carr, 1993; GAO, 1997; Davenport and Nohria, 1994).

Organization should be able to set effective communication strategies between stakeholders so as to ensure there is common understanding among stakeholders (Davenport, 1993; Hammer and Stanton, 1995; Carr and Johansson, 1995). There should be clear explanation from executives how the organization achieve its goals by finding better ways of doing work. The executives need to reiterate the performance problems, customer dissatisfactions, budgetary pressures that had been facing the organization before the BPR conception.

The existing reward systems can no longer be appropriate for the new work environment and system. Coupled with encouraging staffs to question current assumptions, it is essential to announce the new staff motivation mechanism set by organization (Hammer and Champy, 1993; Harvey, 1995; Davenport and Nohria, 1994).
The organization's culture will gradually change as staff come to share their perceptions of the new situation, collectively subscribe to new norms, expectations, and responsibilities and new reward systems (GOA, 1997, Davenport, T. and Stoddard, D., 1994). The new reward and incentive must encourage harmony among employees and it should be clearly based on performance measures. Setting air and widespread reward system and new job titles, are some of the factors that facilitate the smooth implementation of BPR (Towers, 1994; The Trouble with Reengineering, 1995).

It is also crucial to promote a culture of self-management and collaborative and interactive team works. Employees should be motivated to set their own goals and monitor their own performance as well as identifying problems hindering the smooth implementation of BPR projects. Hence encouraging and empowering individuals are critical to successfully implement process oriented projects (Cooper and Markus, 1995). Effective one-to-one and one-to-many interactions are necessary to induce organizational changes effectively (Jackson, 1994). In additions to this, creative and understanding leadership that can clearly communicate to a wide range of employees, motivate and involve them, is important in dealing with organizational resistance (Hammer and Champy, 1993).

Active involvement of staffs in BPR implementation is necessary for the success of the project (Dawe, 1996). All people that are involving in the implementation should not be discouraged. At the beginning errors and mistakes should be tolerated as the implementation commenced. BPR supports teamwork and integration of labor, cooperation, co-ordination, and interactions; interpersonal skills, IT skills, performance monitoring, process analysis and planning knowledge are very important dimension of training required to succeed in the implementation processes (Cooper and Markus, 1995; Towers, 1994). Similarly, Bruss and Roos indicated the importance of educating people how IT related innovation important for competitive advantages and used as enabler to succeed in the project (Bruss and Roos, 1993; Davenport, T. 1993).
2.2.4. Performance Management

Performance management applies to organizations as well as individuals and includes recurring activities to establish organizational goals, monitor progress toward the goals, and make adjustments to achieve those goals more effectively and efficiently. This performance management helps organization to measure its performance. Setting performance measures are necessary to indicate the levels of achievements (Zairi and Sinclair, 1995). There have been different types of performance measurements techniques. Among these self-assessment, capability maturity model, statistical process control, work flow based monitoring and balanced scorecard approaches can be mentioned. Balanced scorecard approaches use a number of financial and non-financial indicators on a regular basis which has a framework with four perspectives. These are; the financial, the customer, the internal business, and the learning and growth perspective. This performance measuring and monitoring tool is used for the purpose of strategic performance reporting; to link strategy with performance measures; to present different perspectives (Kaplan R S & Norton D P, 1996). Determining if the new process is achieving the desired results using performance measurement and continuously improving the new process is vital for the success of BPR projects.
2.2.5. Use of Information Technology as Enabler

Information technology is currently facilitating people, whose work must be coordinated towards a common enterprise goals work together using computer system as enabler and facilitator of the communication between the collaborating agents (Igor Hawryszkiewycz, 2004). Currently it is obvious that there is not omniscient and omnipotent agent; therefore, there is a great need of cooperative works so as to reap benefits like technical skills, knowledge sharing, cooperative research and product developments as well as other competitive advantages (Schmidt, K., 1991). In this regard, the current advancement in information and communication technology ease the seamless integration and knowledge sharing in addition to value creation through collaborative arrangements such as business networks, clusters and alliances. The trends towards globalization, networking, mass customization and digitalization lead companies toward e-collaboration (Tatsiopoulos, I.P., et al., 2002). When it comes to business process reengineering, the use of information technology as enabler considered by Davenport and many writers as important factor to succeed in BPR project (Davenport, 1993; Carr and Johansson, 1995). As to Davenport (1993) most process innovations are enabled by a combination of IT, information and organizational/human resource changes. It is also argued by many writers that Modern software tools assist BPR implementation efforts by improving productivity, completing projects more quickly, assisting production of higher quality results, eliminating non value-adding tasks and enhancing performance monitoring and evaluation as well as effective communication and timely information provision (Carr and Johansson, 1995; Klein, 1994).
3. Objectives of the Study

3.1. General Objectives

The general objectives of the research are:

- Highlight the kinds of activities that the public organizations should pursue to ensure reasonable transitions to the new process and introduce guidelines and best experiences that facilitate the implementation of Business Process Re-engineering (BPR) in the Ethiopian Civil Service Organizations
- Present how the role of IT has influenced the organizations’ BPR implementation projects and
- Ease the familiarization for practitioners and trainers of the civil service reform with the theoretical foundations and strategies of BPR implementations

3.2. Specific Objectives

The specific objectives are to:

- Assess availability of clear comprehensive written pilot test plan
- Investigate whether the organizations’ executives addressing change management issues
- Investigate if the new process is achieving the desired results and its associated factors
- Identify the role IT has played in the organizations’ BPR implementation projects
4. Questionnaire and Interview

4.1. Study Setting

Federal Democratic Republic of Ethiopia, it is the second-most populous nation in Africa with over 73,918,505 million people of these, 37,296,657 (50.5%) were males and 36,621,848 (49.5%) were females and the tenth-largest by area with its 1,100,000 km² (CSA, 2007). The capital is Addis Ababa. Ethiopia is bordered by Djibouti and Somalia to the east, Kenya to the south, Sudan to the west, and Eritrea to the north. This research was conducted within the Ethiopian Federal Ministry of Health and Gambella People’s National Regional State Health Bureau Contexts.

The Federal Ministry of Health established to protect and promote health of society and also enable the public at large to get curative and protective health services. To this end, websites of Ethiopian Federal Ministry of Health dictated that Federal Democratic Republic of Ethiopia has embarked on a country-wide reform aimed at bringing effectiveness and efficiency in the execution of business practices to achieve dramatic improvement in critical and contemporary measures of performance such as cost, quality, service and speed. It is also stated that the Federal Ministry of Health (FMOH) and its agencies have made strong commitment to re-design work process and fully decentralize the health care services, health professionals, health facilities as well as health related product regulatory systems.

Similarly, Gambella People’s National Region State Health Bureau is established to protect and promote health of society of the region. Gambella National Regional State, one of the nine regions of Federal Democratic Republic of Ethiopia, is situated in the south-western part of Ethiopia. The region is bordered by Benishangul Gumuz and Oromiya regions to the North, the Southern Nations, Nationalities and Peoples’ Regional State (SNNPRS) and South Sudan Republic to the South, Oromiya and SNNPRS to the east and the South Sudan Republic to the west.

According to 2007 census projection from government of Federal Democratic Republic of Ethiopia, Central Statistical Agency, the population of Gambella estimated 306,916. The total area of the region is area of 25,802.01 square kilometers (CSA, 2007). The capital city of the region, Gambella is 777 kilometers from Addis Ababa which is the capital city of Ethiopia.
Gambella is rich with its various ethnic compositions. The major ethnic groups include the Anyuaa, Nuer, Mejengir, Opio, Komo and people from Amhara, Tigray, Oromiya and the Southern Nations, Nationalities and Peoples Region (SNNPR).

The region has also embarked on a region-wide reform aimed at bringing effectiveness and efficiency in the execution of business practices to achieve dramatic improvement in critical and contemporary measures of performance such as cost, quality, service and speed. Since 2009, the regional state initiated BPR project as a foundation for strengthening result based performance management system in the civil services of the region.

4.2. Study Design

Given that this research deals with assessment and as supported by Majed, Al-Mashari, et al. (2001), Zairi, M. and Sinclair, D. (1995), and Eisenhardt, K. (1989), this type of inquiry favors the use of an explanatory structured survey questionnaires (Majed, Al-Mashari, et al., 2001). Considering the some of the aperture in using simply the quantitative survey and in order to substantiate the results from structured questionnaires, in-depth interviews were used. A cross sectional, qualitative and quantitative study was conducted taking 90 respondents and 20 interviewees as study subjects. A structured questionnaire was filled by 90 respondents where 43.3 % of them from Gambella Peoples’ National Regional State Health Bureau and 56.7% of them were from Ethiopian Federal Ministry of Health. The questionnaire (See Annex I) was employed to collect data on availability of written comprehensive plan pilot test and communication strategy, refinement and implementation of change management plan, placement of performance measures, encouragement to take new roles and responsibilities as well as use of pilot testing to evaluate new process. In-depth interviews were utilized to substantiate the findings of the questionnaire and investigate the use of information technology as enabler. The in-depth interviews included planners, core process owners as well as directors.
4.3. Study Population

Study population: were staffs working in the offices of FMOH and GPNRSHB. Study subjects: were people who are working in those organizations and who have direct or indirect contribution to BPR related activities.

4.4. Sampling Procedures

4.4.1. Study Subjects

As the study population was people working in FMOH and GPNRSHB, the people who were included in the study as study subjects were (For more detailed information see table 1 in section 2):

- Core Process Owner
- Directors
- Planning teams
- Officers
- Experts
- Parts of BPR implementation team
- Supportive Staffs

4.4.2. Sample Size Calculation

Many statistical books discuss methods for estimating study size. And there are several software programmes available to help with sample size calculations, for example, Epi-Info and nQuery (Bland M., 1995; CDC & WHO, 1997; Tatiana V. Macfarlane, 2003). Hence, the sample size was calculated using Epi-Info Software. The total population of staffs working at both FMOH and GPNRSHB main office were around 450. Since there was no research works on BPR implementation assessment in Federal Ministry of Health and Gambella Region Health Bureau contexts before this, expected frequency considered to be 50% considered. Taking the population size 450, the expected frequency 50% and the worst acceptable frequency of 34% as well as confidence level 99.9% then we can get the sample size value of 84. But to make it more representative sample size of 120 taken out of which questionnaires filled by 90 of them were taken into considerations for analysis.
4.5. Data Collection Instruments

Different data collection techniques were used to collect the required data for the research. Mainly the quantitative study was supported using structured and semi-structured questionnaire whereas the qualitative study was supported with in-depth interviews.

4.5.1. Questionnaire

The questionnaire (See Annex I) embraced questions that help to assess existing implementation procedures of BPR along with the results obtained from the processes. The questionnaire raised questions to subjects about the activities that the organizations pursued to ensure a reasonable transition to the new process; how they managed the human and technical issues surrounding implementation of the new process; and how the results of its reengineering effort were assessed. The questions were addressed personally to the subjects. More information about the results from answers can be found in chapter five (Result and discussion part).

4.5.2. In-depth Interviews

Interviews were used to support the results obtained from the questionnaires. They provided more explanation to situations as the factors affecting the implementation and the associated results of BPR. In-depth interview was conducted face to face and recorded and transcribed for the purpose of analysis. The interviews were continued until saturation points. More information about the results from answers can be found in chapter five (Result and discussion part).

4.6. Data Entry and Analysis

The data from the questioners were entered in to SPSS version 13 by the principal investigator to be analyzed. The assessment of BPR implementation and the results were described using tables, graphs and frequencies. Moreover, the effect of possible factors on the implementation process was analyzed using cross tabulation of dependent and independent variables. $X^2$ (Chi-Square) values, and p-values were calculated and using CI=95%, the associations between variables indicated. The result from this analysis was taken as a hint to the in-depth interview and further
analysis was done to explore the reason why these factors have existed and are influential. Thematic analysis was done to the qualitative part of the study.

4.7. Data Quality Assurance

Data quality was assured using different techniques such as:

- Training was given to data collectors about the contents of the questionnaire and frequent supervisions were done. Data collectors also assisted the respondents in case of difficulties.
- Problems encountered at the time of data collection were reported immediately and appropriate actions taken.
- Properly designed questionnaires and in-depth interview guides were prepared; and pretest was done prior to the study and corrections also made. The questionnaires were checked for missing values and inconsistency. Questionnaires that were found to have lots of missing values and inconsistencies were excluded from the study and considered as non-respondent.
- The data entry and cleaning was made by the principal investigator. Double entries were made for at least 15% of the total data. Interviews were be conducted by the principal investigator to avoid any misunderstanding.

4.8. Dependent and Independent Variables

To measure the phenomena being studied the researcher defines variables. Two types of variables were used: dependent variables and independent variables (Rodger, Marion, 2004). A dependent variable (Attainment of performance goals) was the phenomenon studied. Independent variables were those variables that affect and change the attainment of performance goals. The following dependent and independent variables were identified to conduct the investigation and answer the research questions.

**Dependent Variable**

- Attainment of Planned Performance Goals

**Independent Variables**

- Availability of Written Comprehensive Plan for Pilot Test
- Refinement and Implementation of Change Management Plan
4.9. Operational Definitions and Measurements

Before showing whether there is association between the dependent variable i.e. attainment of performance goals, and other independent variables; it is necessary first to establish the operational procedures that specify how the measurement will be made and at the same time define what the researcher means by the specified variables (Vandervert, L., 1988). The following operational definitions indicate the precise concrete or physical steps that define the independent variables and dependent variables that can be used to show factors associated with successful BPR implementations.

**Availability of Written Comprehensive Plan for Pilot Test:** Comprehensive written plan for pilot test consists of the following components (GAO, 1997; Lindon, 1998).

- Preparation of a written plan for pilot test
- Identification of all tasks to be implemented in the process
- Setting of time frames of implementation
- Quantification of resources required for the implementation
- Suitability of written implementation plan of the office to the nature of the process and the work and structure of the office
- Assignment of roles and responsibilities for implementation to the individuals who will do the work of the new process
- Provision of means of collecting and sharing implementation problems and solutions
- Provision of a means of monitoring during implementation

**Refinement and Implementation of Change Management Plan:** As to Hammer and other writers, change management plan expected to comprise the following summarize variables (Cooper and Markus, 1995; Hammer and Stone, 1995; Car and Johansson; 1995).

- Refinement office’s plan for facilitating needed cultural changes across the office
• Alignment of change management tasks with the project and implementation timetables
• Assignment of responsibilities to specific individuals for carrying out change management tasks
• Periodic assessments of employee needs, concerns, and reactions

**Availability of Communicating Strategy:** is the sum of following variables and institutions were labeled as having proper communication strategy when they have all the following components (Janson, 1992; Davenport, 1993; Zairi and Sinclair, 1995; Hammer and Stanton, 1995):

• Emphasis of senior executives to major changes
• Addressing common objections to change
• Explaining why change is necessary, workable and beneficial
• Beginning communication effort at early phases in the process (once customer service issues and performance improvement goals have been identified)
• Sharing vision and information with their subordinates
• Availability of open communication between supervisors and their subordinates
• Use of subordinate’s idea by managers constructively

**Use of Pilot Testing to Evaluate New Process:** Pilot test is essential before going to full implementation of BPR projects (GAO, 1997; Lindon, 1998). The following parameters were used as component of measuring pilot test to evaluate new process (GAO, 1997; Lindon, 1998).

• Ensuring testing unit fully understands the pilot
• Ensuring employees are sufficiently trained and understand their role
• Development of performance measures and data gathering procedures by transition team
• Performance measures reflect project goals
• Identification of any corrective actions
• Gathering of customers’ and stakeholders’ feedback about the pilot test
• Gathering of employees’ feedback about the pilot test
• Pilot testing the revised process design with satisfactory results before proceeding to full implementation
Motivation to Take New Roles and Responsibilities: When implementing BPR projects, it is essential to motivate employees to take new roles and responsibilities. BPR implementation must be executed by people within the organization, hence motivating and encouraging employees is one of critical success factor (Maul et al., 1995; Campbell and Kleiner, 2001). To this end, the following variables can be used to measure the organizations’ roles in motivating and encouraging employees to take new roles and responsibilities (Campbell and Kleiner, 2001; GOA, 1997).

- Provision of training to office’s staff, managers, and executives to prepare them for the new roles and responsibilities
- Inclusion of managers in making any needed changes to the office's managerial structure
- Reorientation of performance appraisal and reward process to the implementation of the new process
- Reorientation of performance appraisal and reward process to the fulfillment of performance improvement goals
- Involvement of managers in defining the office's policies and procedures

Placement of Performance Measure: GAO (1997) indicated that the following variables determine the placement of performance measure.

- Identification of the necessary data for routinely assessing the performance of the reengineered process on a long-term bases
- Performance measures include a mixture of outcome, output, and efficiency measures
- Linking of office's strategic goals
- Integration of performance measures into the office wide performance measurement system

Attainment of Performance Goals: the following five components are considered as components of attainment of performance goals (Kaplan, Robert S., Norton, David P., 1993; GAO, 1997; Lindon, 1998; Quality Health Partners, 2005)

- Customer satisfaction
- Attainment of performance goals and expected return on investment
- Response time/Reduction of waiting time
- Increment of competitiveness by improving quality
- Reduction of costs
- Inducing a set of attitudes, beliefs and cultural norms needed to be built in the organizations

4.10. Ethical Considerations

The study was conducted after the proposal was approved by Blekinge Institute of Technology advisor and permission was obtained before going to the research work. Permissions were obtained from both FMOH and GPNRSHB after submitting letter that express the research ethics, how and why the investigation is conducted from Blekinge institute of technology. Data collection consent was obtained from the respective both institutions. All the study participants were briefed on the purpose and benefit of the study and consent was obtained orally in advance from each participants.

At the same time the data collector told the respondents the ethical prerequisites for questionnaire and an in-depth interview; the aim of the questionnaire, and in-depth interview, where and how the writer is going to present the results. And the data collectors clearly expressed the emphasis given to bring up the rules to maintain the respondents’ anonymity. Participants were assured that any information concerning them would never be used by any individual or institution in any way identifying their personal identity. In this regards, the investigator left out anything that put anonymity of the study subject under question mark. After explaining the ethical issues and get an informed consent from the respondent the data collectors were collected the data (Rodger Marion 2004). In this manner the questionnaire and in-depth interviews were conducted.

4.11. Dissemination of Results

The final result will be disseminated to both Regional Health Bureau and Federal Ministry of Health so that it can be used to improve the existing implementation of BPR projects. The research can also be used for policy assessment, generation and for initiation and reference to further research.
5. Results and Discussions

This chapter will present the results of the data collected from both structure questionnaire (See Annex I) and in-depth interview (See Annex II). This analysis is organized around the descriptive research questions, frequency tables and cross tab results. After presenting the results of the data collected, discussions were made based literatures that approached similar methodology and more or less similar contexts. Implementations plans overviewed in terms of spelling out the work that needs to be done, with time frames, milestones, decision points, and resource allocations. Change management in terms for social, psychological and political resistance was gauged and literature supporting the findings also inculcated. In additions, the results of data collected on performance measures also discussed with support of literatures. In finally the associations between attainment of planned performance goals and other independent variables were shown using cross tabulation results and literatures which could support the findings were also discussed.

5.1. General Background Information of the Respondents

Table 1 revealed the compositions and working experience of the respondents who were included in the study. 56.7% of the respondents were included in the study from Federal Ministry of Health and 43.3% of the respondents were from Gambella Peoples’ National Regional State Health Bureau. Most of the respondents, i.e., 32.22% were experts and 22.2% of the respondents were senior planning staffs; mangers and core process owners were also included in the study.

With regards to service year, the majority of the respondents (25.56%) have services year between one to two years, 18.88% of them have seven to ten and 15.56% of them have above ten years whereas 10% of the respondents have 3 to 4 and the same number of respondents 4 to 5 years. Only 4.4% of them have less than one service year.
When we observe the educational background of the respondents, 70% of them were first degree holders, 21.11% were master degree holders and only 6.66% of them were diploma holders. Similarly it was found out that, 11.11% of the respondents were from reform directorate, and the same percent of respondents were from Health and Health Related Service and Product Quality Regulatory Core Process. 10% of them were from Public Relation and Communication Directorate and similar numbers of respondents were from Pastoralist Health Promotion and Disease Prevention Directorate and Health Management Information System and M & E core process. 7.78% of the respondents were included from Urban Health Promotion and Disease Prevention Directorate as well as Agrarian Health Promotion and Disease Prevention directorate. Moreover, the number of respondents who were included in the study from Public Health Emergency Management Core Process, and Health Promotion and Disease Prevention Core Process were 17.78% and 14.4% respectively.
### Table -1: General Background Information of the Respondents, Ethiopia, 2010

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Institutions of the Respondents</strong></td>
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<tr>
<td>FMOH</td>
<td>51</td>
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<tr>
<td>GPNRSHB</td>
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<td><strong>Position of the Respondent:</strong></td>
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<td></td>
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<tr>
<td>Managers</td>
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<tr>
<td>Core Process Owner</td>
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<td>7.77</td>
</tr>
<tr>
<td>Expert</td>
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<td>32.22</td>
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<tr>
<td>Senior Planning Staff</td>
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<tr>
<td>Part of Implementation Team</td>
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<td>5.55</td>
</tr>
<tr>
<td>Staff directly affected by BPR implementation</td>
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</tr>
<tr>
<td>Officer</td>
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<td><strong>Total</strong></td>
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<tr>
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<td><strong>Total</strong></td>
<td>88</td>
<td>97.77</td>
</tr>
</tbody>
</table>


5.2. Availability of Written Comprehensive Plan for Pilot Testing

Questions on preparation of a written plan for pilot testing and whether all tasks are identified in the process to be implemented was posed to all participants. 86(95.6%) of the respondents indicated that written plan for pilot testing is prepared and the same number of respondents also indicated that all tasks are identified in the process to be implemented whereas only 3(3.3) indicated in contrary to these conclusions.

In relation to implementation plan, Lindon pointed out that the implementation plan should set time frames of implementation, assigns roles and responsibilities to the individuals who take part in implementing the new process. Besides, resources also need to be quantified and included in the implementation plan (Hammer and Champy, 1993; Lindon, 1998; John Jeston & Johan Nelis). In this manner, questions related to implementation plan schedule and resource allocations were posed to all respondents and 56, 53, and 51 of the respondents denoted that the time frame of implementation set, resources required for the implementation is quantified and the implementation plan assigned roles and responsibilities for implementation to the individuals who handle the work of the new process respectively. Natasha La Rock (2003) also argued that effective planning and use of project management techniques when implementing BPR projects are some of the essential factors that affect our success in BPR implementations.

On the other hand, 55.6%, 56.7%, and similar percent of respondents specified that the new implementation plan provide a means for collecting implementation problems and solutions, sharing implementation problems as well as solutions respectively while 4.1% and 40.0% of the total number of the respondents opposed the former.

Likewise 51(56.7%) of the respondents noted that the new implementation plan created means of monitoring during implementation whereas 39(43.3%) of the respondents believe that the new implementation plan didn’t create means for monitoring during implementation. In this respect, Northrop Grumman BPR Team Report (2005) affirmed that Implementation plan of pilot test ought to provide a means for collecting implementation problems and solutions, for sharing implementation problems and solutions as well as it is expected to create a means for monitoring during implementation process.
As to Hammer and Champy, BPR implementations comprehensive pilot test plan need to address issues of how new processes are tested, employees are redeployed, offices are arranged, resources are allocated, communication facilitated, change managed and monitored as well as implementation arrangements (Hammer and Champy, 1993 ). In evaluating BPR in health care, Luck and Peabody (2000) conclude that implementation plan is one of key success factors for BPR project and also stated that people/staff, culture, structure, communications and information related issues must be addressed within the overall constraints of the public sectors.

Table-2: Availability of Written Comprehensive Plan for Pilot Test, Ethiopia, 2010

<table>
<thead>
<tr>
<th>Variables</th>
<th>Yes n (%)</th>
<th>No n (%)</th>
<th>Not Sure n (%)</th>
<th>Total n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has the office prepared a written plan for pilot testing?</td>
<td>86(95.6)</td>
<td>3(3.3)</td>
<td>-</td>
<td>89</td>
</tr>
<tr>
<td>Are all tasks identified in the process to be implemented?</td>
<td>86(95.6)</td>
<td>3(3.3)</td>
<td>-</td>
<td>89</td>
</tr>
<tr>
<td>Are the time frames of implementation set?</td>
<td>56(62.2)</td>
<td>33(36.7)</td>
<td>-</td>
<td>89</td>
</tr>
<tr>
<td>Are sources required for the implementation quantified?</td>
<td>53(58.9)</td>
<td>37(41.1)</td>
<td>-</td>
<td>90</td>
</tr>
<tr>
<td>Does the new implementation plan assigns roles and responsibilities to the individuals who will do the work of the new process?</td>
<td>51(56.7)</td>
<td>32(35.6)</td>
<td>1(1.1)</td>
<td>87</td>
</tr>
<tr>
<td>Does the new implementation plan provide a means for collecting implementation problems?</td>
<td>50(56.7)</td>
<td>37(41.1)</td>
<td>-</td>
<td>87</td>
</tr>
<tr>
<td>Does the new implementation plan provide a means for collecting implementation solutions?</td>
<td>51(56.7)</td>
<td>36(40.0)</td>
<td>-</td>
<td>87</td>
</tr>
<tr>
<td>Does the new implementation plan provide a means for sharing implementation problems?</td>
<td>50(55.6)</td>
<td>39(43.3)</td>
<td>-</td>
<td>89</td>
</tr>
<tr>
<td>Does the new implementation plan provide a means for sharing implementation solutions?</td>
<td>51(56.7)</td>
<td>39(43.3)</td>
<td>-</td>
<td>90</td>
</tr>
<tr>
<td>Does the new implementation plan create a means of monitoring during implementation?</td>
<td>51(56.7)</td>
<td>39(43.3)</td>
<td>-</td>
<td>90</td>
</tr>
</tbody>
</table>
When it comes to suitability of the implementation plan to nature of the work, process and the structure of the organization, as it indicated in figure two, 7(7.8%) and 48(53.3%) indicated strong agreement and agreement respectively. While 8(8.9%) and 27(30%) denoted disagreement and strong disagreement respectively. In this respect, although Lindon (1998) in his workbook for seamless government stated that written implementation plan of the office need to be aligned with the nature of the work, process and the structure of the organization; there were pronounced number of people that indicated implementation plan of the organization didn’t go with the nature of the work, process and structure of the organization. So the office has a slit in aligning the implementation plan, work, process and structure of the office (Lindon, 1998; Dawng Smith, 19996).

The above findings imply that at regional level significant number of respondents indicated that the organization doesn’t have a comprehensive pilot test plan that spells out the work that needs to be done, with time frames, milestones, decision points, and resource allocations. Similarly, the findings also implied that there is a gap in performing activities like specifying training and work force need, and means of collecting and sharing implementation problems and solutions.
In relation to the implementation plan, it has been learned that significant number of respondents at regional level indicated that the implementation plan of the office didn’t align with the nature of the work, process and the structure of the organization.

5.3. Establishment of Transition Team

To questions related to establishment of transition team, 51(56.7%) of the respondents indicated the establishment of a transition team to guide the reengineering effort whereas 31(34.4%) of the respondents denied the establishment of transition team to guide the reengineering efforts. Similarly, respondents who strongly agreed and agreed that the transition team has made necessary arrangements with the Office's administrative to transit smoothly from the old process to the new are; 6(6.7%) and 45(50.0%) respectively whereas 10(11.1%) strongly disagree and 29(32.2%) disagree.

As it can be observed from the frequency distribution, the number of people who denied the establishment of transition team especially at regional level is almost 39. But so many writers argued that organizations need to establish transition team that can guide the transition process of the reengineering projects (Lindon, 1998). Likewise, Gahu affirmed that transition teams guide implementations of BPR project and make arrangement with the office’s administration to move smoothly from old process to the new one. The fact that an implementation team consisting of different disciplines with different remits had been set up, meant that the group is endeavoring to work towards the successful BPR implementation. In this respect, besides having potentials of integrated multidiscipline knowledge and skills; establishing the team in this way helps to devise planning schemes showing a realistic timeframe for the full implementation of BPR projects (Gahu et al., 1993).

5.4. Workforce Training and Redeployment

As it is indicated in table three; 51 of the respondents specified that the transition team identified the new tasks, roles, and responsibilities, reporting relationships and training
needs required by the new process. In the same way 49 and 50 of the respondents indicated that the transition team identified how many employees, and those employees that would be affected by redeployment and reductions-in-force during the implementation phase of the new process, and the transition team identified how many employees and which employees need retraining respectively.

Although 75 of the respondents pointed out that the Office developed training programs, only 53 of them indicated that the transition team met with other governmental agencies and private businesses to learn about the successful ways to plan workforce redeployment, retraining, and reductions. On the other hand, the other 37-39 of the respondents specified that the office didn’t develop training programs, and meet with other governmental and none governmental organization to learn about the successful ways to plan workforce redeployment, retraining, and reductions. In this regards, Ghuu pointed out that the transition team needs to identify the new tasks, roles, responsibilities, reporting relationships and training needs required by the new process (Ghuu et al., 1993).

Similarly, according Carr and Johansson, it is necessary to identify how many employees, and which employees, would be affected by redeployment during the implementation phase of the new process. They also pointed out that training program which inculcates training gaps and schedule should be prepared and transition team need to scale up the best practices in other governmental agencies and private businesses so as to learn about the successful ways to plan and implement workforce redeployment, retraining, and reductions during business process reengineering implementation (Carr and Johansson, 1995; GAO, 1997). Many researchers consider training and education to be an important component of successful BPR implementation (Towers, 1994; Berrington and Oblich, 1995; Zairi and Sinclair, 1995; Worsley, 1994). Organizations that undertake re-engineering projects may have to increase their training budget by 30-50 percent (Towers, 1994).

As reengineering requires combining many job categories into one and trends toward generalist instead of specialist is increasing, it needs extensive cross training. Skills and abilities such as problem solving, communication, teamwork, and customer orientation become increasingly critical success factors. Hence, training in these critical areas is imperative. Proper training prepares employees for their new roles and helps support the new values and behaviors that underlie the reengineering philosophy (Mohsen Attaran & Glenn G.Wood, 1999).
In addition, Mabin et al. (2001) discussed the importance of training and development in change management to make people well equipped with all sorts of knowledge and skills, which reduce the fear of uncertainty. It is also important to educate people in IT-related innovations for competitive advantage, the potential of IT in reshaping the business and the leadership of empowered organizations (Bruss and Roos, 1993).

Table-3: Workforce Training and Redeployment, Ethiopia, 2010

<table>
<thead>
<tr>
<th>Variables</th>
<th>Yes  n (%)</th>
<th>No n (%)</th>
<th>Not Sure n (%)</th>
<th>Total n (105)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has the transition team identified the new tasks, roles, and responsibilities?</td>
<td>51(56.7)</td>
<td>38(42.2)</td>
<td>-</td>
<td>89</td>
</tr>
<tr>
<td>Has the transition team identified the reporting relationships?</td>
<td>51(56.7)</td>
<td>37(41.1)</td>
<td>2(2.2)</td>
<td>90</td>
</tr>
<tr>
<td>Has the transition team identified the training needs required by the new process?</td>
<td>51(56.7)</td>
<td>39(43.3)</td>
<td>-</td>
<td>90</td>
</tr>
<tr>
<td>Has the transition team identified how many employees, and which employees would be affected by redeployment during the implementation phase of the new process?</td>
<td>49(54.4)</td>
<td>39(43.3)</td>
<td>1(1.1)</td>
<td>90</td>
</tr>
<tr>
<td>Has the transition team identified how many employees and which employees need retraining?</td>
<td>50(55.6)</td>
<td>39(43.3)</td>
<td>1(1.1)</td>
<td>90</td>
</tr>
<tr>
<td>Has the transition team identified how many employees and which employees will be affected by reductions-in-force?</td>
<td>49(54.4)</td>
<td>39(43.3)</td>
<td>2(2.2)</td>
<td>90</td>
</tr>
<tr>
<td>Has the office developed training programs?</td>
<td>75(83.3)</td>
<td>14(15.6)</td>
<td>-</td>
<td>89</td>
</tr>
<tr>
<td>Has the transition team met with other governmental agencies and private businesses to learn about the successful ways to plan workforce redeployment, retraining, and reductions?</td>
<td>53(58.9)</td>
<td>19(21.1)</td>
<td>17(18.9)</td>
<td>89</td>
</tr>
</tbody>
</table>

Training and redeploying the workforce is often a major challenge and generally requires substantial preparation time. When a process is redesigned and new information systems are introduced, many of the tasks are radically changed or redistributed. Some positions may be eliminated or cut back, while others are created or modified. Workers may need to handle a
broader range of responsibilities, rely less on direct supervision, and develop new skills. To this end, as it is observed from the frequency table, the transition team at federal level already addressed workforce training and redeployment issues effectively whereas much has to be done in this aspect at regional state level.

5.5. Use of Pilot Testing to Evaluate New Process

As it is indicated in table 4, 59 and 53 of the respondents noted that transition team ensured that the testing unit fully understands the pilot test, and employees are sufficiently trained and understand their roles respectively. On the contrary, 26 of the respondents expressed that transition team have not been ensuring that the testing unit fully understands the pilot test, and 35 of the respondents also indicated that employees are not sufficiently trained and understand their roles. 50 of the respondents pointed out that the transition team has developed performance measures and data gathering procedures in line with project goals whereas 39 of them opposed the former.

Similarly 50 of the respondents expressed that the Office gathered customers’ and stakeholders’ feedback about the pilot test and any corrective actions required during the courses of implementations. In the same way 61 of the respondents indicated that the Office gathered employees’ feedback about the pilot test and 52 of them also pointed that the revised process design had been pilot tested with satisfactory results before proceeding to full implementation. Whereas 32 to 38 of respondents indicated that the office didn’t gather Customers’ and stakeholders’ feedback about the pilot test and corrective actions required during the courses of implementations. And also the same number of respondents asserted that the revised process design had not been pilot tested with satisfactory results before proceeding to full implementation.

In this respect, Rodney McAdam & Martina Corrigan (2001) clearly elaborated that firstly it is necessary to have clear pictures about the pilot test. In so doing, employees need to be trained and understand their roles and responsibilities. The writer also stated that setting performance measures which reflects project goals and data collection procedures is very vital to monitor our progress against the set goals. Similarly Hammer and Champy(1993) emphasized that based on the feedbacks of employees and other stakeholders, corrective actions should be taken so that the revised process design can be tested with satisfactory results before proceeding to full implementation (GAO, 1997; Lindon, 1998; McAdam, R. and Donaghy, J.,1999).
On the other hand, Davenport and other writers underscored that teamwork creates a learning environment in which team members are encouraged to share knowledge and expertise with empowered team members. Teamwork enhances the quality of work (Davenport, 1993; Rodney McAdam & Martina Corrigan, 2001) and reduces resistance to change and allows for different perspectives to change. Hence, it is important to have transition team cohesively working on the pilot test.

**Table-4: Use of Pilot Testing to Evaluate New Process, Ethiopia, 2010**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Yes n (%)</th>
<th>No n (%)</th>
<th>Not Sure n (%)</th>
<th>Total n (105)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has the transition team ensured that the testing unit fully understands the pilot?</td>
<td>59(65.6)</td>
<td>26(28.9)</td>
<td>2(2.2)</td>
<td>87</td>
</tr>
<tr>
<td>Has transition team ensured employees are sufficiently trained and understand their roles</td>
<td>53(58.89%)</td>
<td>35(38.89%)</td>
<td>-</td>
<td>88</td>
</tr>
<tr>
<td>Has transition team developed performance measures and data gathering procedures to be used during the pilot?</td>
<td>50(55.6%)</td>
<td>39(43.3%)</td>
<td>-</td>
<td>89</td>
</tr>
<tr>
<td>Do the performance measures reflect project goals?</td>
<td>50(55.6)</td>
<td>40(44.4)</td>
<td>-</td>
<td>90</td>
</tr>
<tr>
<td>Has the transition team identified any corrective actions required?</td>
<td>51(56.7)</td>
<td>35(38.9)</td>
<td>2(2.2)</td>
<td>88</td>
</tr>
<tr>
<td>Has the office gathered customers’ and stakeholders’ feedback about the pilot test?</td>
<td>51(56.7)</td>
<td>32(35.6)</td>
<td>1(1.1)</td>
<td>87</td>
</tr>
<tr>
<td>Has the office gathered employees’ feedback about the pilot test?</td>
<td>61(67.8)</td>
<td>27(30.0)</td>
<td>-</td>
<td>90</td>
</tr>
<tr>
<td>Has the revised process design been pilot tested with satisfactory results before proceeding to full implementation?</td>
<td>52(57.8)</td>
<td>38(42.2)</td>
<td>-</td>
<td>90</td>
</tr>
</tbody>
</table>
The number of respondents who confirmed that the transition team has carefully measured performance of the pilot test is about 51 and those who denied are 39. In this regards, many writers underscored the essence of meticulously measuring the performance of pilot test (Hammer and Champy, 1993; Lindon, 1994; GOA, 1997). But as it is observed from the figure 2, particularly at the regional state level, the organizations were not measuring meticulously the performance of the pilot test. Similarly, Michael Armstrong & Angela Baron (1998) signified that organizations need to have effective way of collecting and analyzing information on performance level and progress toward achieving set goals and measure their performance continuously.

From the above frequency distributions and pie charts, it can be observed that the team at federal level used pilot testing as an effective and necessary tool for moving the organizations successfully to full implementation. On the other hand, the garnered data indicated that at the regional level the implementations process were not preceded by pilot test that allows the organization to evaluate the soundness of the proposed process in actual practice, identify and correct problems with the new design, and refine performance measures.
5.6. Change Management

5.6.1. Refinement and Implementation of Change Management Plan

All respondents were questioned if change management plan is aligned with the project implementation timetables and whether the plan assign responsibilities to specific individuals for carrying out change management tasks and almost 56.7% of the respondents replied positively. On contrary, 20% of the respondents indicated that the change management plan is not aligned with project and implementation timetables and 41.1% of them replied that the change management plan didn’t assign responsibilities to specific individuals for carrying out change management tasks.

On the other hand, the majority of respondents (61.1%) noted that the office refined its plan for facilitating needed cultural changes across the Office and 56.7% also indicated that the plan includes periodic assessments of employee needs, concerns, and reactions. Unlike these, 43.3% and 38.9% of the respondents indicated that the office didn’t refine its plan for needed cultural changes and the plan doesn’t include periodic assessments of employee needs, concerns and reactions.

Brightman (2000) defined change management as “. . . the process of continually renewing an organization’s direction, structure, and capabilities to serve the ever-changing needs of external and internal customers.” The author also argued that change management is about managing (either well or poorly) the impact of some particular environment and/or organizational change on these core activators of workplace performance. Organization should know very well about how to manage the impact of change in the organization (Prosci, 2003). Management should have the “art” of dealing with people in its particular environment so as to be successful in BPR implementation. Effective change management should consider soft issues around the human, and would avoid resistance to change among employees (Cooper and Markus, 1995; Hammer and Stanton, 1995; Mumford, 1999; Moran and Brightman, 2000; Mabin et al., 2001).
Lindon (1994) in his practical guide to reengineering the public sector explained that change management plan need to be aligned with the BPR implementation time tables and individuals who should carry out the change management plan tasks should be assigned in due process of the reengineering project implementation. Similarly, Hammer and Stone (1995) affirmed that organizations need to refine their change management plan to induce cultural changes. Besides, it is also necessary to prepare change management plan that enable periodic an assessment of employees needs concerns and reactions so as to be successful in BPR implementation (Cooper and Markus, 1995; Maull et al., 1995; Campbell and Kleiner, 2001).

**Table-5: Refinement and Implementation of change Management Plan, Ethiopia, 2010**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Yes n (%)</th>
<th>No n (%)</th>
<th>Not Sure n (%)</th>
<th>Total n (105)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has the office refined its plan for facilitating needed cultural changes across the office?</td>
<td>55(95.6)</td>
<td>35(3.3)</td>
<td>-</td>
<td>89</td>
</tr>
<tr>
<td>Does the change management plan align the change management tasks with the project and implementation timetables?</td>
<td>50(55.6)</td>
<td>18(20)</td>
<td>17(18.9)</td>
<td>85</td>
</tr>
<tr>
<td>Does the change management plan assign responsibilities to specific individuals for carrying out change management tasks?</td>
<td>51(56.7)</td>
<td>37(41.1)</td>
<td>2(2.2)</td>
<td>90</td>
</tr>
<tr>
<td>Does the plan provide for periodic assessments of employee needs, concerns, and reactions?</td>
<td>51(56.7)</td>
<td>39(43.3)</td>
<td>-</td>
<td>90</td>
</tr>
</tbody>
</table>

It has been learned that the change management plan should include provisions for helping employees to overcome concerns about the new ways of doing business. To this end, periodic assessments of employee needs, concerns, and reactions are vital to help employees adopt with the new system. In this regards, pronounced number of respondents indicated that the organization at regional has slit in facilitating needed cultural change across the organization, alignment of the change management tasks with the project and implementation timetables and assignments of change management responsibilities to specific individuals for carrying out change management tasks.
5.6.2. Availability of Communication Strategy

The majority of the respondents (56.7%) indicated that senior executives have clearly emphasized that major improvements are imperative. The same number of respondents also agreed that the communications effort directly addressed the common objections to changes; managers share vision and information with their subordinates; and executives called attention to the efforts, contributions, and innovations of employees during the reengineering project.

In contrary to this, nearly 43.3% of the respondents indicated that managers do not share vision and information to their subordinates. Besides, equivalent number of respondents also affirmed that managers do not give attention to the efforts, contributions and innovations of employees during the reengineering process. Similarly, 4.4% of the respondents noted that senior executives have not clearly emphasized that major improvements are imperative and 38.9% of them implied that the communication efforts did not directly address the common objectives of changes. 38.9% of the respondents were not sure whether the senior executives give due emphasis to major improvements.

On the other hand, 66.7% of the respondents retreated that there is an open communication between supervisors and subordinates and 57.8% of them implied that managers constructively use their subordinates’ ideas. In line with this, 36 % stated that there is no open communication and 14% of the respondents noted that managers don’t constructively use subordinates’ ideas. Likewise, 55.6% of the respondents indicated that executives widely shared the credit to success with everyone. 54.4% of the respondents implied that communication effort explained why change is beneficial and this effort begun early in the process and 45% of the respondents denied this stand. When respondents were asked whether the communication effort explained why change is necessary and workable; 7.8% of them gave positive response, 47.8% of the respondents indicated that they don’t know whereas 43.3% replied otherwise.

One of the factors affecting success in BPR implementation is the communication strategy of the organization. To this end, Lindon(1998) stated that change requires marketing since good works don’t necessary sell them-selves. Hence, senior executives need to emphasize on major improvements and communicate it to all staffs (GAO, 1997). An open communications and transparency between managers and subordinates is essential in
having a common understanding. This communication effort ought to address common objectives of change (GAO, 1997; Mohsen Attaran & Glenn G. Wood, 1999). This communication effort should address why changes are necessary, workable and beneficial. Besides, executives need to share credit of success with everyone in the organization and give due attentions as well as recognition to the efforts, contributions and innovations of employees (Carr and Johansson, 1995; McAdam, R. and Donaghy, J., 1999). To this end, GAO underscored that the communication efforts should commence at early phases of BPR and mangers need to use feedbacks of staffs constructively to take some corrective actions and achieve the organization’s goals (GAO, 1997).

Effective communication is considered a major key to successful BPR-related change efforts (Davenport, 1993; Jackson, 1997; Zairi and Sinclair, 1995; Hammer and Stanton, 1995; Carr and Johansson, 1995; Arendt et al., 1995; Dawe, 1996). Communication is needed throughout the change process at all levels and for all audiences (Davenport, 1993a), even with those not involved directly in the re-engineering project (Dixon et al., 1994). Effective communication between stakeholders inside and outside the organization is necessary to market a BPR programme (Talwar, 1993; Hinterhuber, 1995) and to ensure patience and understanding of the structural and cultural changes needed (Berrington et al., 1995) as well as the organization’s competitive situation (Cooper and Markus, 1995). Communication should take place frequently (Davenport, 1993, Carr, 1993; Janson, 1992) and in both directions between those in charge of the change initiatives and those affected by them (Davenport, 1993a; Jackson, 1997; Grugle, 1994; Talwar, 1993). Communication should be open, honest, and clear (Davenport, 1993; Janson, 1992), especially when discussing sensitive issues related to change such as personnel reductions (Davenport, 1993).
Table-6: Availability of Communication Strategy, Ethiopia, 2010

<table>
<thead>
<tr>
<th>Variables</th>
<th>Yes n (%)</th>
<th>No n (%)</th>
<th>Not Sure n (%)</th>
<th>Total n(105)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior executives have clearly emphasized that major improvements are imperative</td>
<td>51(56.7)</td>
<td>4(4.4)</td>
<td>35(38.9)</td>
<td>90</td>
</tr>
<tr>
<td>Has the communications effort directly addressed the common objections to change?</td>
<td>51(56.7)</td>
<td>35(38.9)</td>
<td>4(4.4)</td>
<td>90</td>
</tr>
<tr>
<td>Has the communication effort explained why change is necessary?</td>
<td>7(7.8)</td>
<td>39(43.3)</td>
<td>43(47.8)</td>
<td>89</td>
</tr>
<tr>
<td>Has the communication effort explained why change is workable?</td>
<td>7(7.8)</td>
<td>39(43.3)</td>
<td>43(47.8)</td>
<td>89</td>
</tr>
<tr>
<td>Has the communication effort explained why change is beneficial?</td>
<td>49(54.4)</td>
<td>41(45.6)</td>
<td>-</td>
<td>90</td>
</tr>
<tr>
<td>Was the communications effort begun early in the process?</td>
<td>49(54.4)</td>
<td>41(45.6)</td>
<td>-</td>
<td>90</td>
</tr>
<tr>
<td>Do managers share vision and information with their subordinates?</td>
<td>51(56.7)</td>
<td>39(43.3)</td>
<td>-</td>
<td>90</td>
</tr>
<tr>
<td>Is there open communication between supervisors and their subordinates?</td>
<td>60(66.7)</td>
<td>14(15.6)</td>
<td>16(17.8)</td>
<td>90</td>
</tr>
<tr>
<td>Do managers constructively use their subordinates’ idea?</td>
<td>52(57.8)</td>
<td>36(40.0)</td>
<td>2(2.2)</td>
<td>90</td>
</tr>
<tr>
<td>Have executives called attention to the efforts, contributions, and innovations of employees during the reengineering project?</td>
<td>51(56.7)</td>
<td>39(43.3)</td>
<td>-</td>
<td>90</td>
</tr>
<tr>
<td>Have executives widely shared the credit for success with everyone?</td>
<td>50(55.6)</td>
<td>39(43.3)</td>
<td>-</td>
<td>89</td>
</tr>
</tbody>
</table>
Communication is part of any well-run change management initiative, however in this particular case, emphasis is on communication to and from employees and overseer to ensure smooth transition to a new process oriented system. When change is initiated through projects, a good communication strategy is at the heart of any successful change management process. It is important that an effective communication strategy is defined about the reasons, the benefits, the plans and proposed effects of that change. In this regards, beginning the communication process at early phase; executives are expected to emphasize that major improvements are imperative, why changes are necessary, workable and beneficial. This communication strategy should be maintained throughout the duration of the change management programme.

As it can be learned from the frequency distribution table the trend in preparing and implementing a good communication strategy at federal level seems to be good. Whereas at the regional level, executives and managers must establish new working relationships with employees, placing more emphasis on their role as facilitators, teachers, or coaches, and less as directors and controllers. Full participatory approaches and continuous communications between mangers and subordinates and attentively giving credits to the efforts, contributions, and innovations of employees during implementation project are also issues need to be addressed at the regional level.
5.6.3. Motivations to Take New Roles and Responsibilities

Majority of the respondents (84 of them) indicated that executives have included managers in making any needed changes to the Office's managerial structure. 49 of the respondents implied that the Office has reoriented its performance appraisal and reward process to the fulfillment of performance improvement goals. And same number of respondents asserted that managers have taken part in defining the Office's policies and procedures for using Office performance indicators to assess managerial and staff performance. Similarly 53 of the respondents noted that office has reoriented its performance appraisal and reward process to the implementation of the new process and 58 of them replied that the office provided training to office’s staffs, managers, and executives to prepare them for the new roles and responsibilities called for by the new process.

According to performance measurement and coordination team (1998), participatory approaches are needed in making changes to organizational structures. Moreover, participation is a pillar when defining organizational wide recognized policies and procedures that can be used to monitor performance (Performance Measurement and Coordination Team, 1998; Kaplan R S & Norton D P, 2001; Will Artley, 2001). To this end, Balanced Scorecard White Paper underscored performance appraisal and reward should be reoriented to the implementation of the new process. Hence, organizations ought to provide training needed for establishment of effective performance appraisal system (Balanced Scorecard White Paper, 1998).

As BPR results in decisions being pushed down to lower levels, empowerment of both individuals and teams becomes a critical factor for successful BPR efforts (Thomas, 1994; Cooper and Markus, 1995; Bashein et al., 1994; Hinterhuber, 1995; Dawe, 1996) since it establishes a culture in which staff at all levels feel more responsible and accountable (Rohm, 1992/93) and it promotes a self-management and collaborative teamwork culture (Mumford, 1995). Empowerment entails that staff are given the chance to participate in the redesign process (Bashein et al., 1994). When empowered, employees are able to set their goals and monitor their own performance as well as identify and solve problems that affect their work, thus they are supporting the BPR efforts.
In re-engineering, all people must be openly and actively involved (Berrington and Oblich, 1995; Jackson, 1997; Bashein et al., 1994; Hinterhuber, 1995; Bruss and Roos, 1993; Arendt et al., 1995) and should be consulted at all stages on the process. All staffs like line managers (Harrison and Pratt, 1993), process owners (Furey, 1993), those involved in IS and human resources (Bashein et al., 1994), and workers (Janson, 1992) should be motivated to participate in BPR implementation projects. People should not be discouraged while committing errors in their effort to implement the project.

The culture of experimentation is an essential part of a successfully re-engineered organization and, therefore, people involved or affected by BPR must be prepared to endure errors and mistakes while re-engineering is taking place.

**Table-7: Encouragement of Employees to Take New Roles and Responsibilities, Ethiopia, 2010**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Yes</th>
<th>No (%)</th>
<th>Not Sure (%)</th>
<th>Total n (105)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has the office provided training to its staff, managers, and executives to prepare them for the new roles and responsibilities called for by the new process?</td>
<td>58(64.4)</td>
<td>32(35.6)</td>
<td>-</td>
<td>90</td>
</tr>
<tr>
<td>Have executives included managers in making any needed changes to the office's managerial structure?</td>
<td>84(93.6)</td>
<td>2(2.2)</td>
<td>4(4.4)</td>
<td>89</td>
</tr>
<tr>
<td>Has the office reoriented its performance appraisal and reward process to the implementation of the new process?</td>
<td>53(58.9)</td>
<td>37(41.1)</td>
<td>-</td>
<td>90</td>
</tr>
<tr>
<td>Has the office reoriented its performance appraisal and reward process to the fulfillment of performance improvement goals?</td>
<td>49(54.4)</td>
<td>41(45.6)</td>
<td>-</td>
<td>90</td>
</tr>
<tr>
<td>Have executives involved managers in defining the office's policies and procedures for using office performance indicators to assess managerial and staff performance?</td>
<td>49(54.4)</td>
<td>41(45.6)</td>
<td>-</td>
<td>90</td>
</tr>
</tbody>
</table>
Most of the respondents (50) supported the idea that executives and managers have negotiated new, clear understandings about how authority and responsibility for the new process is allocated whereas 35 of them denied this fact. In this regards, Lindon (1998) indicated that mangers should discuss and create common understanding as to how authority and responsibility for the new process is going to be allocated. In addition to this, Will Artley (2001) accentuated that managers and executives should pursue participatory approaches when allocating authorities and responsibilities.

Table 7 provides major roles that to be played in order to motivate employees to take new responsibilities. As a result of reengineering, staff often have a broader range of responsibilities and are empowered to make decisions and take actions with less direct supervision than before.

Besides the need create inclusive and participatory environment, reorientation of performance appraisal and reward system also necessary to hit the target. To this end, pronounced number of respondents also indicated that organizations have gap in reorienting performance appraisal and reward process to the fulfillment of performance improvement goals and to the implementation of new process. Lack of sufficient training and reward system at regional level can also hinder the organizations capability in implementing the BPR project.
5.7. Performance Monitoring (Result Related Issues)

5.7.1. Performance Measure in Place

Questions related to placement of performance measure were posed to all respondents. 51 of the respondents replied that the transition team identified the necessary data for routinely assessing the performance of the reengineered process on a long-term basis, the performance measures are linked to the Office's strategic goals and the performance measures integrated into the Office wide performance measurement system. Similarly 41 of the respondents indicated that the performance measures included a mixture of outcome, output, and efficiency measures. On contrary, 39 of the respondents replied differently.

Many writers strongly argued that performance measure should be placed and progress of implementation of BPR project should be monitored against set stretched objectives (Hagel, 1993; Guha et al., 1993; Feltes and Karuppan, 1995).

All high performing organizations, whether public or private must be interested in developing and deploying effective performance measurement and performance management systems, since it is only through such systems that they can remain high-performing organizations. Some measures include several aspects of performance. There are different measures deployed to monitor performance. Outcome (An assessment of the results of a program compared to its intended purpose), output, impact, and input measures can be used to monitor performance of organizations and employees (Hagel, 1993; Kaplan, Robert S., Norton, David P., 1993; Quality Health Partners, 2005).

Moreover, customer-related measures which consists complaints, customer satisfaction levels, timeliness/response time, adherence to schedule and responsiveness are also some of the parameters that can be used to measure services delivered to customers. The other measure that should also be considered is effectiveness and efficiency measure (Kaplan, Robert S., Norton, David P., 1993). This argument also supported by Will Artley and others. Performance measures need to include mixture of outcome, output and efficiently measures. These measures need to be linked with organizations strategic goals and should be integrated into organization wide performance measurement system (Zairi and Sinclair, 1995; Will Artley, 2001).
Hagel and other researchers argued that it is one of critical success factors, to set BPR implementation goals for performance (Hagel, 1993; Guha et al., 1993; Feltes and Karuppan, 1995). Zair and other writers also underlined the importance of identifying and setting performance measures in indicating the level of achievements (Zairi and Sinclair, 1995; Guha et al., 1993; Gould, 1993).

Performance measurement systems succeed when organization’s strategy and performance measures are in alignment and when senior managers convey the organization’s mission, vision, values, and strategic directions to employees and external stakeholders. The performance measures give life to the mission, vision, and strategy by providing a focus that lets each employee know they contribute to the success of the company and its stakeholders’ measurable expectations.

Table 8: Placement of Performance Measure, Ethiopia, 2010

<table>
<thead>
<tr>
<th>Variables</th>
<th>Yes n (%)</th>
<th>No n (%)</th>
<th>Not Sure n (%)</th>
<th>Total n(105)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did the transition team identify the necessary data for routinely assessing the performance of the reengineered process on a long-term basis?</td>
<td>51 (56.7)</td>
<td>39 (43.3)</td>
<td>-</td>
<td>90</td>
</tr>
<tr>
<td>Do the performance measures include a mixture of outcome, output, and efficiency measures?</td>
<td>41 (45.6)</td>
<td>39 (43.3)</td>
<td>10 (11.1)</td>
<td>90</td>
</tr>
<tr>
<td>Are the performance measures linked to the office’s strategic goals?</td>
<td>51 (56.7)</td>
<td>39 (43.3)</td>
<td>-</td>
<td>90</td>
</tr>
<tr>
<td>Are the performance measures integrated into the office wide performance measurement system?</td>
<td>51 (56.7)</td>
<td>39 (43.3)</td>
<td>-</td>
<td>90</td>
</tr>
</tbody>
</table>
Organizations have no way of knowing if the new process has produced the desired results unless it has meaningful performance measures. Good performance measures generally include a mix of outcome, output, and efficiency measures. In this regards, the above finding indicated that significant number of respondents especially at the regional level pointed out that their origination has been lagging behind in quantifying performance level in terms of speed, cost, quality, quantity and level of customer satisfaction. Information related to performance progress need to be gathered and recorded. It has been also learned that the organizations still have been staggering in placing performance measure that inculcates a mix of outcome, output, and outcome and efficiency measures. Likewise, gleaned information implied that ongoing performance measurement doesn’t provide the feedback which is so critical for continual improvement and future successes.

5.7.2. Level of Achievement of New Process in Reaching Performance Goals

As indicated in table 9 below 56.7% of the respondents indicated that performance measures show that performance goals are being met and that the project is on track for achieving its expected return on investment, the organization increasing its own competitiveness by improving quality and reducing costs. And 54.4% of the respondents replied that office executives, managers, and staff are actually using the measurement data being gathered to assess the new process' performance.

Almost 43.3% of the respondents indicated that the performance measures don’t show that performance goals are being met and the project is on track for achieving its expected return on investment, the organization is not increasing its competitiveness by cutting costs and improving quality. And also the same number of respondents indicated that office executives, managers, and staff are not actually using the measurement data being gathered to assess the new process' performance.

Performance measures are expected to quantify the level of achievements of the organization. To this end, Kaplan, Robert S., Norton, David P.(1996) pointed out that managers and all staffs need to use measurement data being gathered to assess the new process performance as BPR implementation phases started. Moreover, Michael Hammer (1996) also emphasized that performance level should be quantified in terms of speed, cost, quality, quantity and level of customer satisfaction. Information related to performance progress need to be gathered and recorded. Level of progress of the organization’s
performance in terms of improving response time, quantity, customer satisfaction and reduction cycle time ought to be quantified and monitored (Kaplan, Robert S., Norton, David P., 1993; Quality Health Partners, 2005; Northrop Grumman BPR Team Report, 2005).

Table-9: Level of Achievement of New Process in Reaching Performance Goals, Ethiopia, 2010

<table>
<thead>
<tr>
<th>Variables</th>
<th>Yes n (%)</th>
<th>No n (%)</th>
<th>Not Sure n (%)</th>
<th>Total n(105)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are office executives, managers, and staff actually using the measurement data being gathered to assess the new process’ performance?</td>
<td>49(54.4)</td>
<td>41(45.6)</td>
<td>-</td>
<td>90</td>
</tr>
<tr>
<td>Do Performance measures show that performance goals are being met and that the project is on track for achieving its expected return on investment?</td>
<td>51(56.7)</td>
<td>39(43.3)</td>
<td>-</td>
<td>90</td>
</tr>
<tr>
<td>Is the organization increasing its own competitiveness by improving quality?</td>
<td>51(56.7)</td>
<td>36(43.3)</td>
<td>-</td>
<td>87</td>
</tr>
<tr>
<td>Is the organization increasing its own competitiveness by reducing costs?</td>
<td>51(56.7)</td>
<td>39(43.3)</td>
<td>-</td>
<td>90</td>
</tr>
<tr>
<td>Is the organization inducing a set of attitudes, beliefs and cultural norms needed to be built in the organizations</td>
<td>51(56.7)</td>
<td>39(43.3)</td>
<td>-</td>
<td>90</td>
</tr>
</tbody>
</table>

Furthermore, when respondents asked if the office encourage managers and staff to use performance data to find ways of further improving the new process, 49 of them replied ‘yes’ and 41 of them replied ‘no’. Considering periodic assessment, 51 of the respondents indicated that the office periodically assesses process performance goals in order to determine the potential for achieving higher levels of performance and 39 of them replied in contrary to this.

In this regards, many researchers signified the essence of encouraging staffs to use performance data. And also it is essential to assess performance level and work for higher level of performance so as to achieve what is expected from BPR projects (Hagel, 1993; Hammer and Champy, 1993; GAO, 1997).
As part of its business case for implementing the new process, the organizations should have established specific performance goals for the reengineered process. These goals should include a mixture of intermediate goals to be met at various stages during the implementation phase, as well as ultimate performance goals for the process after it has been fully implemented and institutionalized. The intermediate goals are particularly important because the organizations should be able to start showing a return on investment in the early stages of implementation. The gains achieved by the new process can erode unless the agency continually monitors its performance and makes further refinements. Managers should use performance information to continually improve work processes, identify performance gaps, and set additional improvement goals, as needed. The new process needs to be customer friendly and ensures customer satisfaction (in terms of responsiveness to complaints, office arrangements, customers’ reception, service quality, timeliness, cost, one-stop-shopping, etc.). In these aspects, the findings imply that there have been slits in using performance information to continually improve work processes, identifying performance gaps, and setting additional improvement goals, as needed especially at regional level. Likewise, gaps also observed in working for customer satisfactions in terms of responsiveness to complaints, office arrangements, customers’ reception, service quality, timeliness, cost, one-stop-shopping, etc at regional level.

5.7.3 Attainment of Performance Goals and Associated Factors

As it is indicated in table 10 below; a Pearson chi-square test was conducted to examine whether there was a relationship between attainment of performance goals and other independent variables. Given df=1, P-value is <0.05, 95% CI, the result shows that level of attainment of performance goals is significantly associated with availability of written comprehensive plan for pilot test ($X^2=90.00$, P-Value= 0.001 ), refinement and implementation of change management plan ($X^2=78.655$, P-Value= 0.001), availability of communication strategy ($X^2=82.253$, P-Value= 0.001), placement of performance measures ($X^2=82.253$, P-Value= 0.001), encouragement to take new roles and responsibilities ($X^2=78.655$, P-Value= 0.001), and use of pilot testing to evaluate new process ($X^2=90.00$, P-Value= 0.001). Similarly the interview result indicated that attainment of planned performance goal is associated with availability of written comprehensive plan for pilot test, refinement and implementation of change management plan, availability of communication strategy, performance measures, motivations of staffs
and the evaluations and monitoring of performance progress. One of the interviewees working at the ministry office said that “our performance success is associated with implementation plan, performance measure and monitoring as well as effectiveness and efficiency in inducing change management strategy in the organization.” Many writers underlined that performance success in BPR implementation is associated with availability of written comprehensive implementation plan, change management and communication strategy, performance measurement and monitoring system as well as motivation of employees and progressively deployment of evaluation system to monitor the progress of implementation (Hammer and Champy, 1993; GAO, 1997; Lindon, 1998).

Table 10: Cross-Tabulation Result of Attainment of Planned Performance Goals and Other Independent Variables, Ethiopia, 2010

<table>
<thead>
<tr>
<th>Variables</th>
<th>Yes n (%)</th>
<th>No n (%)</th>
<th>Chi-Square Value</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability of Written Comprehensive for Pilot Test</td>
<td>51(99)</td>
<td>1(1)</td>
<td>90.00</td>
<td>0.01</td>
</tr>
<tr>
<td>Refinement and Implementation of Change Management Plan</td>
<td>48(98)</td>
<td>1(2)</td>
<td>78.655</td>
<td>0.01</td>
</tr>
<tr>
<td>Availability of Communication Strategy</td>
<td>49(98)</td>
<td>1(2)</td>
<td>82.253</td>
<td>0.01</td>
</tr>
<tr>
<td>Placement of Performance Measures</td>
<td>49(98)</td>
<td>1(2)</td>
<td>82.253</td>
<td>0.01</td>
</tr>
<tr>
<td>Motivation to Take New Roles and Responsibilities</td>
<td>48(98)</td>
<td>1(2)</td>
<td>78.655</td>
<td>0.01</td>
</tr>
<tr>
<td>Use of Pilot Testing to Evaluate New Process</td>
<td>51(99)</td>
<td>1(1)</td>
<td>90.00</td>
<td>0.01</td>
</tr>
</tbody>
</table>

As it can be observed from the above table, cross tabulation results imply that there is significant associations between attainment of performance goals and availability of written comprehensive plan for pilot test, refinement and implementation of change management plan, availability of communication strategy, placement of performance measures, motivation to take new roles and responsibilities, Use of information technology as enabler and pilot testing to evaluate new process.
5.8. Use of Information Technology as Enabler

Most of the interviews don’t believe that currently information technology is playing a role of a much more integral part of the organization’s reengineering business process. They also spelled out that information technology have not yet been utilized in reducing cycle time, costs, improving efficiency and enhancing communications and collaborations. One respondents from regional health bureau stated that “ICT is not facilitating communication between people working in collaboration, and knowledge sharing and advancement.” The other interviewees from federal government indicated that “though ICT can create an opportunities of reducing costs, improving performance and quality of services as well as facilitating knowledge sharing and information exchange, our organization has not yet reap these opportunities”. In this regards, several researchers argue that effective use of modern software tools to assist in BPR efforts is crucial to BPR success (Klein, 1994; Kettinger et al., 1997; Carr and Johansson, 1995; El Sawy, 1997). Use of software tools contributes to BPR success by improving productivity (Klein, 1994), completing projects more quickly (Kettinger et al., 1997), and producing higher quality results (Klein, 1994). And also information technology can create an opportunities of reducing costs, improving performance and quality of services as well as facilitating knowledge sharing and information exchange (Davenport, T. and Short, J., 1990; Davenport, T., 1993; Igor Hawryszkiewycz, 2004).

Similarly, all interviewees were asked if IT managers and staffs were responsible for designing and implementing ICT strategy and IT managers and staffs were involved in BPR project managements. Most of the interviewees pointed out that IT managers and staffs have not yet given the opportunities of helping the organization in project management and ICT strategy development. In this regards, Henderson and other writers declared that information technology managers and staffs should be responsible for design and implementing the information and communication technology strategy and also they can assist in project management efforts (Handerson & Venkatraman, 1993; McDonal, 1993; Davenport, 1993).

On the other hand questions were posed to interviewees about the role of ICT in data collections, presenting accurate, timely, reliable and relevant information to decision makers and if the organization has been building IT infrastructure that supports the alignment of business strategy. Most of the respondents answered that the organization have
not yet built IT infrastructure that supports alignment of business strategy with IT strategy, increased IT competency, and used software tools to effectively and efficiently collect, manage, analyze, present and utilize data for decision making process.

All of interviewees pointed out that information technology have not yet playing a vital role to level of their expectations in providing timely, accurate, reliable and relevant information. Some of the interviewees that work both at federal and regional offices affirmed that data recording, preserving and storage has been some of the challenges recently that the organizations are facing in measuring performance. They also stated that because of problems related to information management and storage, the organizations are not able to monitor their progress against the stretched objectives specified in the reengineered processes. It was also specified that determining baseline values and using standard indicators of performance have been one of the challenges of the current BPR implementation projects.

In this respects, as to Carr and Johansson and other researchers, base lining visions and measuring process costs (Carr and Johansson, 1995), alignment of IT strategy with the organizations’ business strategy, building IT infrastructure that supports the alignment, measurement of information technology impacts, increasing IT competency, and effective use of software tools are critical for successful implementation of BPR projects (Venkatraman, 1993; Guha et al., 1993).

Software can be used in recording, storing, retrieving and transferring timely, relevant, accurate and reliable information. Effective software tools should have specific features, such as being usable by non-technical people (Klein, 1994), process visualization (El Sawy, 1997), providing interactive and graphical-based demonstrations of process phases (Davenport, 1993), and the ability to analyze processes (El Sawy, 1997).

Opportunity of using standard information transfer and knowledge sharing procedures required. Hence, the use of information technology as enabler considered by many researchers and practitioners as a critical success factor in successfully implementing BPR projects (Brancheau, et al., 1996; Malhotra, 1996; Venkatraman, 1993; Martinez, 1995).

The degree of alignment between the BPR strategy and the IT infrastructure strategy is indicated by including the identification of information resources needs in the BPR strategy,
deriving the IT infrastructure strategy from the business strategy, examining the IT infrastructure strategy against the BPR strategy, the active involvement of management in the process of IT infrastructure planning and IT managers in business planning, and by the degree of synchronization in formulating the two strategies (Reich and Benbasat, 1996).

The other issues that were discussed by most of the interviewees were the inability of the organizations to use information technology for facilitating knowledge sharing, helping the organizations in achieving the flexible organization structure, and supporting the core competencies of the organization. As to the interviewees, the contributions of IT in helping the organizations in coping with an increasingly complex and uncertain environment, facilitating alliances and other methods of cross organization coordination, collaborations and interactions were immiscible.

The interviewees also were not able to mention software and hardware that were procured in order to integrate information technology as enabler in the business process reengineering and they only stated that currently all generalist have computers and there is also internet connections in each of the PC at federal level. But the connections were simple dial up connection and employees were using it only to exchange some information like report and letters. Most of the interviewees also discussed that their organization not yet reaped the benefits from the advancement in information technologies and IT have not yet been used to effectively support the achievement of flexible organizational structures, improvement in core competency of the organization, faster service delivery, improvement of quality, value creation and customer satisfaction.

To this end, Laud and Theis stated that an effective IT function needs to be designed into a comprehensive and flexible structure that focuses on quality (Laud and Theis, 1997), value creation (Laud and Theis, 1997) and delivery (Ross, 1998b) and re-skilling of IT staff (Earl et al., 1997), motivation of employees (Laud and Theis, 1997), better strategic planning (Laud and Theis, 1997; Ross, 1998b), faster solution delivery (Roos, 1998), cheaper IT operations and support (Ross, 1998b), and satisfied customers (Ross, 1998b).

Today’s organizations rely on integrated information systems in order to be productive and efficient. This goal can only be effectively achieved through a system that facilitates information analysis, sharing, storage, dissemination, retrieval and analysis. IT plays an important role in BPR. Properly implementing IT can improve the competitive position of
organizations. But inappropriately implementing IT may create barriers to responding to the rapidly changing business environment. Further, simply picking IT packages cannot achieve successful BPR if it is simply used to speed up the process rather than reengineer it. IT can help to create a leaner, flatter and more responsive organization.

As to it discussed by most of the interviewees at both regional and federal levels; although information technology can create opportunities of reducing costs, improving performance and quality of services as well as facilitating knowledge sharing and information exchange, the organizations couldn’t reap these benefits till now. Similarly, the findings indicated that the inability of the organizations to use information technology for facilitating accurate, timely and relevant information sharing, helping the organizations in achieving the flexible organization structure, and supporting the core competencies of the organization.

5.9. Summary of Results and Discussions

When change is initiated through projects, a good communication strategy is at the heart of any successful change management process. Strategies of refining and implementing change management plan, deploying communication strategy, and setting and implementing appropriate performance appraisal system have yet to percolate through the organizational cultural norms. The implementation plans at regional level also have gaps in quantifying resources needed, setting time frames of implementation, assigning roles and responsibilities, indicating means of collecting and sharing implementation problems, and solutions. It is worth mentioning that there have been visible weakness in pilot testing and building up on own strength.

Organizations have no way of knowing if the new process has produced the desired results unless it has meaningful performance measures. Good performance measures generally include a mix of outcome, output, and efficiency measures. In this regards, the above finding indicated that significant number of respondents especially at the regional level pointed out that their origination lags behind in quantifying performance level in terms of speed, cost, quality, quantity and level of customer satisfaction.

Cross tabulation results imply that there is a significant association between attainment of performance goals and availability of written comprehensive plan for pilot test, refinement
and implementation of change management plan, availability of communication strategy, placement of performance measures, and motivation to take new roles and responsibilities.

IT plays an important role in BPR. Properly implementing IT can improve the competitive position of organizations. But inappropriately implementing IT may create barriers to responding to the rapidly changing business environment. Further, simply picking IT packages cannot achieve successful BPR if it is simply used to speed up the process rather than reengineer it. If Information technology has to play its enabling role, IT strategy needs to be aligned with organizations’ business strategies. At both regional and federal levels, there haven’t been evidences showing the alignment of IT strategies with business strategies. Moreover, information technology have not yet been used in such a way that it can play a vital role in information exchange, knowledge transfer, collaboration, information storage, preservation, dissemination and use. Likewise, evidences ascertained that the organizations have not yet reaping the benefits of information technology in reducing cycle and response times, improving quality of service, satisfying customers, productivity and efficiency. And at both federal and regional levels there have been limitations in using software for data collection, transfer, retrieval, storage and improving IT competency, effective use of IT and presenting timely, reliable, relevant and accurate information.
6. **Strength and Limitation of the Study**

6.1. **Strength of the Study**

The study is one of the first contributions in the area of assessment of business process reengineering implementations within federal ministry and regional state contexts in Ethiopia. Through the use of triangulation method in the form of in-depth interview and questionnaire, the internal validity of this research was increased. As multiple sources to support the findings, the findings of the questionnaire were cross checked against the findings of the interviews. The questionnaire was adopted from General Accounting Offices of United States’ BPR implementation guidelines (as presented in Chapter 7-9) and other related works of Hammer and Champy( chapter 13). In addition to the use of a standardized questionnaire, pretest has been done before data collection and the training and practical sessions (mock) for data collectors were among the activities performed to ensure the internal validity of the research.

On the other hand, other literature written on the subjects were investigated using the sub- components of BPR implementations guides. Researches which were conducted in African countries and those researches that were used both quantitative and qualitative approaches were selected to support the arguments of this research. The findings of most of the researches which were conducted in similar environmental contexts using similar methodology and study design were found out to be aligned with the findings of this research. This was the only possible way for the investigator to ensure the external validity of the research since the study was not intervention type.

6.2. **Limitations of the Study**

Since there has been limited time and resources the cross sectional study was selected by disregarding other study types like interventional study. The institutions included in the studies were only offices of Federal Ministry of Health and Gambella Regional State Health Bureau. Hence, the study not necessarily indicates the situation in the rest of the institutions that work on health system in Ethiopia. Besides as the sample size were not large, it was not possible to conduct logistic regression test and able to control the confounding factors. Moreover, if the findings of the research are supported by intervention and comparison, the study could have been so effective.
7. Conclusion and Recommendations

7.1. Conclusions

This chapter will present the conclusions and recommendations of the research. After reminding the general and specific objectives of the research, conclusions and recommendations are drawn based on the results and discussions. The general objectives of the research are:

1. Highlight the kinds of activities that the public organizations should pursue to ensure reasonable transitions to the new process and introduce guidelines and best experiences that facilitate the implementation of Business Process Re-engineering (BPR) in the Ethiopian Civil Service Organizations
2. Present how the role of IT has influenced the organizations’ BPR implementation projects and
3. Familiarize for practitioners and trainers of the civil service reform with the theoretical foundations and strategies of BPR implementations.

Whereas the specific objectives are:

a. Assess availability of clear comprehensive written pilot test plan
b. Investigate whether the organizations’ executives addressing change management issues
c. Investigate if the new process is achieving the desired results and its associated factors
d. Identify the role IT has played in the organizations’ BPR implementation projects

In relation to (1) highlighting the kinds of activities that the public organizations should pursue to ensure reasonable transitions to the new process and introduce guidelines and best experiences that facilitate the implementation of Business Process Re-engineering (BPR) in Ethiopia, the study has demonstrated the factors affecting BPR implementations and the best practices of the selected organizations. In relation to (2), indicating that IT can playing a vital role in reducing cycle and response times, improving quality of services and productivity, and satisfying customers; the study presented how information technology influence the implementations of BPR projects. Similarly, with regards to (3), the review of literature portrayed different theories and models in relation to BPR implementations and hence the research can play a vital role in familiarizing practitioners and trainers of civil
service reform of the country with theoretical foundations and strategies of BPR implementations.

In relation to (a) assessment of availability of clear comprehensive written pilot test plan and (b) investigation of whether the organizations’ executives addressing change management issues, the research demonstrated that the implementation plans at regional level have gaps in quantifying resources needed, setting time frames of implementation, assigning roles and responsibilities, indicating means of collecting and sharing implementation problems and solutions. Problems related to setting effective communication and change management strategies, implementing pilot tests and effective monitoring of pilot tests have been identified especially at regional level. On the other hand, the federal ministry of health found to perform well in this regards.

When we come to the factors associated with successfully BPR implementations and investigation of if the new process is achieving the desired results(c): the research demonstrated that there is a significant association between attainment of performance goals and availability of written comprehensive plan for pilot test, refinement and implementation of change management plan, availability of communication strategy, placement of performance measures, and motivation to take new roles and responsibilities. Similarly, the finding of the research indicated that significant number of respondents especially at the regional level pointed out that their organization lags behind in quantifying performance level in terms of speed, cost, quality, quantity and level of customer satisfaction and measuring their progress against set of stretched objectives.

With regards (d), identifying the roles IT played in the selected organizations: the research demonstrated the fissures in both the regional bureau and federal ministry of health in using information technology effectively facilitating information gathering, sharing, storage, dissemination, retrieval and analysis. Although information technology can create opportunities of reducing costs, cycle times, improving performance and quality of services, the organizations couldn’t reap these benefits till now. Similarly, the findings indicated that the inability of the organizations to use information technology for facilitating knowledge sharing, helping the organizations in achieving the flexible organization structure, and supporting the core competencies of the organization.
7.2. Recommendations

At Regional Level

- There need to develop a comprehensive plan for pilot testing which embraces all tasks, time frames, quantified resource needs, assignment of roles and responsibilities and means of collecting and sharing implementation problems, and solutions.
- Identifying new tasks, roles, responsibilities, reporting relationships, training needs, number of employees that would be affected by new processes, and scaling up the best practices of other governmental agencies and private businesses to learn about the successful ways to plan workforce redeployment, retraining, and reductions are essential in solving human resource problems.
- Effective capacity programmes and skilling development should be implemented (Especially competency based training delivery on change management, IT-related innovations for competitive advantage and performance measurements should be given due emphasis).
- Developing pilot test plan, setting performance measure, implementing the pilot test and monitoring the progresses as well as taking corrective actions based on feedbacks from employees and stakeholders are important.
- The offices also need to develop effective change management strategy and assign responsibilities to individuals that perform the change management tasks.
- Developing and deploying effective performance measurement which includes mixtures of outcome, output, impact, efficiency, effectiveness and customer satisfaction measures and performance management systems must be the part of BPR implementation projects. The staffs should be able to get the required skills and knowledge in line with this performance measures.
- The office need to align business strategy with information technology strategy and the information technology should play vital role as enabler to reduce cycle times, response time, and improve quality of service, customer satisfaction, productivity and efficiency. Besides, information technology should also design to play a vital role in information exchange, knowledge transfer, collaboration, information storage, preservation, dissemination and use. Use of software for data collection, transfer, retrieval, storage and improving IT competency, effective use of it and
presenting timely, reliable, relevant and accurate information should be given due attention in the process of BPR project implementation.

- Organizations need to induce a set of attitudes, beliefs and cultural norms needed to be built in the organizations and create a better work environment

- As attainment of performance goals is associated with availability of written comprehensive plan and communication strategy, refinement and implementation of change management plan, use of pilot testing to evaluate new process, and encouragement to take new roles and responsibilities; the organization need to give due attentions and work to solve its weakness in these areas.

**At Federal Ministry of Health Level**

- The office should pursue participatory approaches for setting measures that inculcates output, outcome, impact, customer satisfaction, efficiency and effectiveness.

- Alignment of business strategy with information technology strategy as well as developing information technology competency and use of the technology for reducing cycle times, response time, and improving quality of service, customer satisfaction, productivity and efficiency should be the focus of BPR implementation efforts.

- Information technology ought to be used in such a way that it can play a vital role in information exchange, knowledge transfer, collaboration, information storage, preservation, dissemination and use.

- Use of software for data collection, transfer, retrieval, storage and improving IT competency, effective use of it and presenting timely, reliable, relevant and accurate information need to be strengthened.

- The other issues that should be addressed in order to be successful in BPR implementation include having baseline data, monitoring the performance against stretched objectives and taking corrective actions.
Reference


34. Grugle, L. (1994). How effective communication can ensure your strategy and local objectives are met. In How to succeed at business process re-engineering, University of Bradford Management Centre, Bradford.


70. Mohsen Attaran & Glenn G. Wood (1999). How to succeed at reengineering. Management Decision, MCB University Press, ISSN 0025-1747


85. Rodger Marion (2004). The Whole Art of Deduction, Research Skills for New Scientists. The University of Texas Medical Branch, USA


Annex I

Structured Questionnaire

Structured questionnaire for Assessment of Business Process Reengineering Implementation and Results Within Ethiopian Federal Ministry of Health and Gambella Regional State Health Bureau

**Subject: information sheet**

My name is ____________________________ I am working with Samuel Zewdie who is currently Master Student doing field work for his master thesis. He is master student, studying through online distance programme at Blekinge Institute of Technology, Sweden.

The general objective of this research is to: assess implementation and results of Business Process Reengineering (BPR) based on a survey questionnaire and in-depth interview within the Ethiopian Federal Ministry of Health and Gambella People Regional Health Bureau.

The specific objectives are to:

- Assess availability of clear comprehensive written pilot test plan
- Investigate whether the Organization’s executives Addressing Change Management Issues?
- Investigate if the New Process is achieving the Desired Results and its associated factors
- Identify the role IT has played in the organization’s BPR program

You will be asked to fill a questionnaire that will help in investigating the issues. Your participation is very important to this research, but it is entirely voluntary. Your responses will be treated as confidential, and we will ensure that any statements or comments you make cannot be linked either to you as an individual or to your organization.

You will be facing no harm by participating and you are also not obliged to answer any question you don’t wish to answer. To fill the questionnaire 35- 40 minutes will be required. If you wish to comment feel free to use the contact address.

**Consent Form**

Considering the information you get from the general information sheet, we would be thankful if you spend some time with us in answering questions related to the issues. Are you comfortable to participate in this study?  □ If yes, continue to next page  □ If no, skip to other participant

**Contact**

Name: Samuel Zewde,  Tel: +251-911-436197  E-mail: samuel56z@yahoo.com
Assessment of BPR Implementation and Results

### Part One: Background Information

<table>
<thead>
<tr>
<th>No.</th>
<th>Questions</th>
<th>Answers</th>
<th>Remark</th>
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</thead>
<tbody>
<tr>
<td></td>
<td><strong>Code of questionnaire (To be filled by Data collector)</strong></td>
<td>----------------------------------------------------------------------------</td>
<td></td>
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<tr>
<td></td>
<td><strong>101</strong> Name of the Institution:</td>
<td>........................................................................................................</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>102</strong> Town</td>
<td>........................................................................................................</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>103</strong> Name of the process</td>
<td>........................................................................................................</td>
<td></td>
</tr>
</tbody>
</table>
|     | **105** Position of the respondent:                                     | 1. Managers  
2. Core process Owner  
3. Expert  
4. Senior Planning Staff  
5. Management of strategic unit  
6. Line Level planning Staff  
7. Supportive Staff  
8. Part of Implementation team  
9. Staff directly affected by BPR implementation  
10. Other Specify  
 ........................................................................................................|        |
|     | **106** Service year/s                                                  | 1. Less than one year  
2. 1 to 2  
3. 2 to 3  
4. 3 to 4  
5. 4 to 5  
6. 5 to 7  
7. 7 to 10  
8. Above ten years  
 ........................................................................................................|        |
|     | **107** Qualification                                                   | 1. PHD Degree  
2. Master degree  
3. First degree  
4. Diploma  
5. Certificate  
6. High school graduate  
 ........................................................................................................|        |

### Part Two: Comprehensive Implementation Plan

<table>
<thead>
<tr>
<th>No.</th>
<th>Questions</th>
<th>Answers</th>
<th>Remark</th>
</tr>
</thead>
</table>
|     | **Availability of Written plan for Pilot test**                         | 1. Yes  
2. No  
3. Not sure  
 ........................................................................................................|        |
|     | Has the Office prepared a written plan for pilot testing?               | 1. Yes  
2. No  
3. Not sure  
 ........................................................................................................|        |
<table>
<thead>
<tr>
<th></th>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
</table>
| 202 | Are all tasks identified in the process to be implemented?              | 1. Yes  
2. No  
3. Not sure |
| 203 | Does the Time frames of implementation is set?                          | 1. Yes  
2. No  
3. Not sure |
| 204 | Does sources required for the implementation is quantified?             | 1. Yes  
2. No  
3. Not sure |
| 205 | The written implementation plan of the Office suited to the nature of the process and the work and structure of the Office | 1. Strongly Agree  
2. Agree  
3. Disagree  
4. Strongly Disagree  
5. Not sure |
| 206 | Does the new implementation plan assigns roles and responsibilities for implementation to the individuals who will do the work of the new process? | 1. Yes  
2. No  
3. Not sure |
| 207 | Does the new implementation plan provide a means for collecting implementation problems? | 1. Yes  
2. No  
3. Not Sure |
| 208 | Does the new implementation plan provide a means for collecting implementation solutions? | 1. Yes  
2. No  
3. Not Sure |
| 209 | Does the new implementation plan provide a means for sharing implementation problems? | 1. Yes  
2. No  
3. Not Sure |
| 210 | Does the new implementation plan provide a means for sharing implementation solutions? | 1. Yes  
2. No  
3. Not Sure |
| 211 | Does the new implementation plan create a means of monitoring during implementation? | 1. Yes  
2. No  
3. Not Sure |
| 212 | Has a transition team been established to guide the reengineering effort? | 1. Yes  
2. No  
3. Not Sure |
213 Which of the following stakeholders are included in the team? (Multiple Choice possible)

1. project sponsor
2. The process owner, members of the reengineering team
3. key executives
4. Managers
5. Staff from the areas directly affected by the implementation of the new process
6. Other Specify

214 The transition team has made necessary arrangements with the Office's administrative offices to transition smoothly from the old process to the new

1. Strongly Agree
2. Agree
3. Disagree
4. Strongly Disagree
5. Not sure

215 Executives and managers who are affected by the process change actively promoting and facilitating the implementation of the new process

1. Strongly Agree
2. Agree
3. Disagree
4. Strongly Disagree
5. Not sure

<table>
<thead>
<tr>
<th>Workforce training and Redeployment</th>
</tr>
</thead>
<tbody>
<tr>
<td>216 Has the transition team identified the new tasks, roles, and responsibilities?</td>
</tr>
<tr>
<td>1. Yes</td>
</tr>
<tr>
<td>2. No</td>
</tr>
<tr>
<td>3. Not sure</td>
</tr>
</tbody>
</table>

| 217 Has the transition team identified the reporting relationships? |
| 1. Yes |
| 2. No |
| 3. Not sure |

| 218 Has the transition team identified the training needs required by the new process? |
| 1. Yes |
| 2. No |
| 3. Not sure |

| 219 Has the transition team identified how many employees, and which employees, would be affected by redeployment during the implementation phase of the new process? |
| 1. Yes |
| 2. No |
| 3. Not sure |

<p>| 220 Has the transition team identified how many employees and which employees need retraining? |
| 1. Yes |
| 2. No |
| 3. Not sure |</p>
<table>
<thead>
<tr>
<th>Question Number</th>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
</table>
| 221             | Has the transition team identified how many employees and which employees will be affected by reductions-in-force? | 1. Yes  
2. No  
3. Not sure |
| 222             | Has the Office developed training programs?                               | 1. Yes  
2. No  
3. Not sure |
| 223             | Has the transition team met with other governmental agencies and private businesses to learn about the successful ways to plan workforce redeployment, retraining, and reductions? | 1. Yes  
2. No  
3. Not sure |
| 224             | Use of Pilot Testing to Evaluate New Process                              | 1. Strongly Agree  
2. Agree  
3. Disagree  
4. Strongly Disagree  
5. Not sure |
| 225             | The transition team has selected a pilot testing strategy that is suited to the new process and considers the concerns of stakeholders | 1. Yes  
2. No  
3. Not sure |
| 226             | Has the transition team ensured that the testing unit fully understands the pilot? | 1. Yes  
2. No  
3. Not sure |
| 227             | The transition team has ensured employees are sufficiently trained and understand their roles | 1. Yes  
2. No  
3. Not sure |
| 228             | Has the transition team developed performance measures and data gathering procedures to be used during the pilot? | 1. Yes  
2. No  
3. Not sure |
| 229             | If your answer for question #227 is “Yes” then do the measures reflect project goals? | 1. Yes  
2. No  
3. Not sure |
| 230             | The transition team has carefully measured the performance of the pilot test? | 1. Strongly Agree  
2. Agree  
3. Disagree  
4. Strongly Disagree  
5. Not sure |
| 231             | Has the transition team identified any corrective actions required?       | 1. Yes  
2. No  
3. Not sure |
| 231 | Has the Office gathered customers’ and stakeholders’ feedback about the pilot test? | 1. Yes  
2. No  
3. Not sure |
| 232 | Has the Office gathered employees’ feedback about the pilot test? | 1. Yes  
2. No  
3. Not sure |
| 233 | Has the revised process design been pilot tested with satisfactory results before proceeding to full implementation? | 1. Yes  
2. No  
3. Not sure |

### Part II. Change Management

**Refine and implement change management plan**

| 301 | The Office has refined its plan for facilitating needed cultural changes across the Office? | 1. Yes  
2. No  
3. Not sure |
| 302 | The change management plan identifies specific change management tasks | 1. Strongly Agree  
2. Agree  
3. Disagree  
4. Strongly Disagree  
5. Not sure |
| 303 | Does the change management plan align the change management tasks with the project and implementation timetables? | 1. Yes  
2. No  
3. Not sure |
| 304 | Does the change management plan assign responsibilities to specific individuals for carrying out change management tasks? | 1. Yes  
2. No  
3. Not sure |
| 305 | Does the plan provide for periodic assessments of employee needs, concerns, and reactions? | 1. Yes  
2. No  
3. Not sure |

**Availability of Communication Strategy**

| 306 | Senior executives have clearly emphasized that major improvements are imperative | 1. Yes  
2. No  
3. Not sure |
| 307 | Has the communications effort directly addressed the common objections to change? | 1. Yes  
2. No  
3. Not sure |
| 308 | Has the communication effort explained why change is necessary? | 1. Yes  
2. No  
3. Not sure |
| 309 | Has the communication effort explained why change is workable? | 1. Yes  
2. No  
3. Not sure |
| 310 | Has the communication effort explained why change is beneficial? | 1. Yes  
2. No  
3. Not sure |
| 311 | Was the communications effort begun early in the process (once customer service issues and performance improvement goals have been identified)? | 1. Yes  
2. No  
3. Not sure |
| 312 | Do managers share vision and information with their subordinates? | 1. Yes  
2. No  
3. Not sure |
| 313 | Is there open communication between supervisors and their subordinates? | 1. Yes  
2. No  
3. Not sure |
| 314 | Do managers constructively use their subordinates’ idea? | 1. Yes  
2. No  
3. Not sure |
| 315 | Have executives called attention to the efforts, contributions, and innovations of employees during the reengineering project? | 1. Yes  
2. No  
3. Not sure |
| 316 | Have executives widely shared the credit for success with everyone? | 1. Yes  
2. No  
3. Not sure |
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Encouragement to Take New Roles and Responsibilities</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 317 | Has the Office provided training to its staff, managers, and executives to prepare them for the new roles and responsibilities called for by the new process? | 1. Yes  
2. No  
3. Not sure |
| 318 | Executives and managers have negotiated new, clear understandings about how authority and responsibility for the new process will be allocated | 1. Strongly Agree  
2. Agree  
3. Disagree  
4. Strongly Disagree  
5. Not sure |
| 319 | Have executives included managers in making any needed changes to the Office's managerial structure? | 1. Yes  
2. No  
3. Not sure |
| 320 | Has the Office reoriented its performance appraisal and reward process to the implementation of the new process? | 1. Yes  
2. No  
3. Not Sure |
| 321 | Has the Office reoriented its performance appraisal and reward process to the fulfillment of performance improvement goals? | 1. Yes  
2. No  
3. Not Sure |
| 322 | Have executives involved managers in defining the Office's policies and procedures for using Office performance indicators to assess managerial and staff performance? | 1. Yes  
2. No  
3. Not sure |
| 323 | Is the organization inducing a set of attitudes, beliefs and cultural norms needed to be built in the organizations | 1. Yes  
2. No  
3. Not sure |
<table>
<thead>
<tr>
<th>Part III. Performance Monitoring (Result Related Issues)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Performance Measure in Place</strong></td>
<td></td>
</tr>
</tbody>
</table>
| 401 Did the transition team identify the necessary     | 1. Yes  
| data for routinely assessing the performance of the    | 2. No  
| reengineered process on a long-term basis?             | 3. Not sure |
| 402 If our Answer is for question # 401 is “Yes”       | 1. Yes  
| then do the performance measures include a mixture of  | 2. No  
| outcome, output, and efficiency measures?              | 3. Not sure |
| 403 Are the performance measures linked to the         | 1. Yes  
| Office's strategic goals?                              | 2. No  
| 404 Are the performance measures integrated into       | 1. Yes  
| the Office wide performance measurement system?  
|  | 2. No |
| 3. Not sure | |
| **Is the New Process Achieving Its Planned Performance Goals?** | |
| 405 Are Office executives, managers, and staff actually | 1. Yes  
| using the measurement data being gathered to assess the | 2. No  
| new process' performance?                             | 3. Not sure |
| 406 Do Performance measures show that performance      | 1. Yes  
| goals are being met and that the project is on track    | 2. No  
| for achieving its expected return on investment?       | 3. Not sure |
| 407 Which responses best describes your organizations  | 1. Expectations exceeded delighted customers  
| ability to satisfy customers following the implementation of your business process reengineering program? | 2. Always meet expectations  
<p>| 3. Consistently meet expectations |</p>
<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which responses best describes your organizations ability to reduce</td>
<td>1. Expectations exceeded delighted customers</td>
</tr>
<tr>
<td>cycle time of service delivery (Lower waiting time) following the</td>
<td>2. Always meet expectations</td>
</tr>
<tr>
<td>implementation of your business process reengineering program?</td>
<td>3. Consistently meet expectations</td>
</tr>
<tr>
<td></td>
<td>4. Generally meet expectations</td>
</tr>
<tr>
<td></td>
<td>5. Sometimes meet expectations</td>
</tr>
<tr>
<td></td>
<td>6. Unable to meet expectations at all</td>
</tr>
<tr>
<td>Is the organization increasing its own competitiveness by Improving</td>
<td>1. Yes</td>
</tr>
<tr>
<td>Quality?</td>
<td>2. No</td>
</tr>
<tr>
<td></td>
<td>3. Not sure</td>
</tr>
<tr>
<td>Is the organization increasing its own competitiveness by reducing</td>
<td>1. Yes</td>
</tr>
<tr>
<td>costs?</td>
<td>2. No</td>
</tr>
<tr>
<td></td>
<td>3. Not sure</td>
</tr>
<tr>
<td>Is the Office Using Performance Information to Continually Improve the</td>
<td></td>
</tr>
<tr>
<td>New Process?</td>
<td></td>
</tr>
<tr>
<td>Does the Office encourage managers and staff to use performance data to</td>
<td>1. Yes</td>
</tr>
<tr>
<td>find ways of further improving the new process?</td>
<td>2. No</td>
</tr>
<tr>
<td></td>
<td>3. Not sure</td>
</tr>
<tr>
<td>Does the Office periodically assess process performance goals in order</td>
<td>1. Yes</td>
</tr>
<tr>
<td>to determine the potential for achieving higher levels of performance?</td>
<td>2. No</td>
</tr>
<tr>
<td></td>
<td>3. Not sure</td>
</tr>
</tbody>
</table>
Annex II

In-depth Interview Guideline

In-depth Interview Guideline to Assessment of Business Process Reengineering Implementation and Results within Ethiopian Federal Ministry of Health and Gambella Regional State Health Bureau

Subject: information sheet

My name is --------------------------------------------- -------- I am working with Samuel Zewdie who is currently Master Student doing field work for his master thesis. He is master student, studying through online distance programme at Blekinge Institute of Technology, Sweden.

The general objective of this research is to: assess implementation and results of Business Process Reengineering (BPR) based on a survey questionnaire and in-depth interview within the Ethiopian Federal Ministry of Health and Gambella People Regional Health Bureau.

The specific objectives are to:

- Assess the implementation and result of BPR.
- Investigate whether the Organization’s Executives Addressing Change Management Issues?
- Investigate if the New Process is achieving the Desired Results
- Identify the role IT has played in the organization’s BPR program

I am planning to make an in-depth interview on this issue. Your participation is very important to this research, but it is entirely voluntary. Your responses will be treated as confidential, and we will ensure that any statements or comments you make cannot be linked either to you as an individual or to your organization.

You will be facing no harm by participating and you are also not obliged to answer any question you don’t wish to answer. If you wish to comment feel free to use the contact address.

Consent Form

Considering the information you get from the general information sheet, we would be thankful if you spend some time with us in answering questions related to the issues. Are you comfortable to participate in this study? ☐ If yes, continue to next page ☐ If no, skip to other participant

Contact

Name: Samuel Zewde, Tel: +251-911-436197, E-mail: samuel56z@yahoo.com
In-depth Interview Guidelines

Workforce Training and Redeployment

1. Has the office Developed Training Programme?

2. Has the transition team met with other governmental agencies and private businesses to learn about the successful ways to plan workforce redeployment, retraining, and reductions?

3. Are Organizations’ executives working closely with employee unions to minimize the potential for adverse effects of the implementation on its members and to make use of union suggestions where feasible?

4. Has the Organization provided career counselors and outplacement assistance as needed to help employees plan new career paths or seek new employment?

Change Management

Refining and Implementation of Change Management Plan

1. Does the office have comprehensive Change Management plan?

2. Did the Office use outside experts to help its executives and the transition team to become more aware of underlying organizational and cultural issues that can pose obstacles to reengineering?

3. Did the Office use outside experts to help its executives and the transition team to incorporate proven techniques for managing these obstacles and achieving change objectives?

Senior Executives Encouragement to Accept New process and Roles

1. Have senior executives have clearly identified and explained the Office's concerns regarding customer service issues and other change drivers?

2. What formal and informal opportunities have senior executives provided for employees to provide feedback about the operational and personal problems they face during implementation?
3. How senior executives’ commitment to assist employees to make the transition to the new process can be communicated and reinforced to the employees?

4. Has the Office provided career counseling or outplacement assistance to individuals at all ranks who have lost their positions, who must develop new career plans, or who chose to resign?

Performance Measure

1. What performance measures for the new process did the Office actually decide to put in place? Do these measures different from the team’s recommendations? If so why?

Results of Business process reengineering implementations

1. Does your organization quantified Percentage point improvement in ROE as a result of the BPR program

2. Does your organization quantified Percentage point improvement in cost to income as a result of the BPR program

3. Does your organization quantified reduction in cycle time as a result of BPR

4. Which responses best describes your organizations ability to satisfy customers following the implementation of your business process reengineering program?
   - Expectations exceeded delighted customers
   - Always meet expectations
   - Consistently meet expectations
   - Generally meet expectations
   - Sometimes meet expectations
   - Unable to meet expectations at all

5. What action is the Office taking to correct any shortfalls in expected performance?

Information Technology Use

1. Do you think the information technology is playing a role of a much more integral part of your organization’s reengineering business process

2. What role has IT played in the organization’s BPR program(In reducing cycle time, costs, improving efficiency and enhancing communications and Collaborations)
3. Is IT facilitating communication between people working in collaboration?

4. Is IT facilitating knowledge sharing?

5. Is IT helping the organizations in achieving the flexible organization structure?

6. Is IT supporting the core competencies of the organization?

7. Is IT helping the organizations in coping with an increasingly complex and uncertain environment?

8. Is IT facilitating alliances and other methods of cross organization coordination, collaborations and interactions?

9. What are the software and hardware procured to integrate information technology as enabler in the business process reengineering?
Annex III: Diagrams

Diagram 1: Availability of Written Comprehensive Implementation Plan

Identification of All Tasks to be implemented

Setting Time frame of Implementation

Quantification of resource required

Aligning the plan to nature of the work and structure of the office

Assignment of roles and responsibilities

Means of Collecting and sharing Implementation Problems and solutions

Means of Monitoring implementation progresses

Comprehensive Written Implementation Plan

Great Contribution to Succeed in BPR
Diagram 2: Change Management

- Effective Communication strategy
- Facilitate needed Cultural change
- Assignment of roles and responsibilities
- Alignment of change management plan with implementation timetable
- Periodic assessments of employee needs, concerns, and reactions
- Great Contribution to Succeed in BPR
Diagram 3: Availability of Communication Strategy

- Emphasize major changes
- Use comments constructively
- Create an open communication
- Addressing common objections to change
- Share vision and Mission
- Explain why changes are necessary, workable and beneficial
- Early beginning of communication effort
- Great Contribution to Succeed in BPR
Diagram 4: Performance Measurement System

- Effectiveness measures
- Impact Measures
- Efficiency measures
- Growth and development measures
- Output and outcome Measures
- Internal process measures
- Customer satisfaction measures

Great Contribution to Succeed in BPR
Diagram 5: Use of IT as Enabler

- IT helps collaboration, interactions, information and knowledge sharing
- Usability of Software for non-technical users
- Great Contribution to Succeed in BPR
- IT supports achievement of Flexible organizational Structure
- Support of core competency of the Organization
- Use of software tools in Monitoring and Evaluation
- Supporting effectively project management efforts
- IT improves quality, value creation, speed of service delivery and customer satisfaction
- IT effectively support data collection, storage, presentation, analysis and utilization
- Alignment of IT strategy with Business strategy
Diagram 6: Critical Factors for Successful BPR Implementation

- Communication strategy
- Effective and efficient Change management strategy
- Performance Management System
- Availability of Written Comprehensive plan
- Use of IT as Enabler
- Use of Pilot test before full implementation
- Motivation to take new roles and responsibilities

Success in BPR Implementations