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***ADDIS ABABA UNIVERSITY  
SCHOOL OF GRADUATE STUDIES***

***BUSINESS PROCESS RE-ENGINEERING CHALLENGES AND  
OPPORTUNITIES FOR ENHANCE SERVICE DELIVERY AT  
YIRGALEM HOSPITAL***

***BY: FITIH WONDMNEH***

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***JUNE 2010***

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**BY: FITIH WONDMNEH**

**A Thesis submitted to the School of Graduate Studies, Addis Ababa  
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**PUBLIC ADMINISTRATION AND DEVELOPMENT MANAGEMENT**

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## **ABSTRACT**

Business Process Reengineering (BPR) is practiced in so many organizations of different countries to improve the efficiency of any organization by automating its business process through re-engineering. Currently in Ethiopia, hospitals are adopting the concept of BPR. Yirgalem hospital is one of the public hospitals in Ethiopia that has started the implementation of BPR to enhance service delivery.

The major objective of this research is to assess the challenges and opportunities of BPR for enhance service delivery at Yirgalem hospital. The study has employed the descriptive research method in order to perceiving challenges and opportunities in the enhancement of service delivery during the implementation of BPR. Analysis of the data collected shows lack of understand/awareness of the employee about the benefit, objectives and principles of the BPR; inadequacy of facilities, equipment, human power and medical supplies in the hospital; in addition to lack of information technology and poor measures of costs and benefits, quality and speed of service, communication, commitment of leaders and organizational learning.

To improve the efficiency of service delivery, the following capacity building measures are recommended. Training, addressing shortage of facilities and equipment, research/ assessment on employee attrition, improving communication, leadership development, employees work environment, remuneration and outsourcing some of its activities. The management of the hospital builds internal and external benchmarking allows the transfer of learning from one re-engineering process to another in the same organization.

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## **ACRONYMS**

ART	Anti Retroviral Therapy
BPR	Business Process Re-engineering
CSR	Customer Service Representative
IT	Information Technology
MD	Medical Doctor
MRT	Medical Radiological Technology
NGO	Non-governmental-organization
OPD	Out Patient Department
PICT	Provider initiating counseling test
SNNPR	Southern Nations and Nationality and People's Region
TQM	Total Quality Management

## DEFENATION OF TERMS

BPR	the fundamental re-thinking and radical re-design of business process to achieve dramatic improvement in critical contemporary measure of performance such as cost, quality, service and speed.
Case team members	who previously were located in different departments at several geographical locations – were brought to gather in to a single unit and given total responsibility to rendering service.
Downsizing	downsizing means getting rid of people and joins to improve short-term financial results
Inpatient service	service given for those patients admitted to hospital
Organizational learning	encoding inferences from history into routines that guide behavior, and increasing an organization's capacity to take effective actions
Outpatient service	a service, which is given for those who return home after treatment
Pilot Testing	It is the phase when the new processes designed are tested on the ground. This gives information on whether the designed processes' performance is compatible to the set service delivery time, quality standard, cost and quantity.
Process	Process is a set of related activities designed to produce a particular outcome
Runner	a person who helps a patient through communication, locating place, process admission and discharge
Total Quality Management	Is about modifying the process to solve the problem in which it is based on a problem solving centered and the result is incremental change.
Triage	a system that is used to determine the emergency case from other normal case

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## CHAPTER ONE

### 1. INTRODUCTION

'Work is respectful', it's an age old saying and possible to affirm that the saying is as old as 'work' even a human being since his survival is based on work. Work is a means of prosperity and progress to human being. It leads individual, groups, organizations and nations to growth and development.

As far as human being and work are inseparable, and in-real sense, one is part of the other, it is definite that 'work is Respectful'. It is a general truth and general accepted concept.

However, when we come to particular case, this generally accepted truth would seem to be paradoxical. The 'truth' would not always be 'true', and obliged to take some reservation for the concept. There might be many reasons for this. The results of inefficient and ineffective work performance would be among other.

There are, therefore, works that could be practiced only and for sake of working without the expected results that had been targeted. Such works might not bring about either the expected growth, or development or prosperity and progress to the extent of satisfying the customer and stakeholders.

In this respect, it seems very difficult to say that such kinds of work are 'respectful'. In the contemporary world 'For the work to be respectful', Re- engineering the business process has been practiced as a remedy. (Tele Negarit, 2006/2007).

Business process re-engineering is a relatively new overall concept of management techniques. The concept of Business process re-engineering is derived from the concept of scientific management, Job enrichment, TQM, In search of excellence and value- Added analysis.

BPR is a practice of improving the efficiency and effectiveness of an organization by automating it is business process through re-engineering. As Hammer and Champy (1993) definition

Re-engineering is the fundamental re-thinking and radical re-design of business process to achieve dramatic improvement in critical contemporary measure of performance such as cost, quality, service and speed.

In fact, as a relatively new overall concept, many practitioners have created their own different technical term for re-engineering the business process. For –example business process re-engineering (Hammer, 1990), Davenport and Short (1990) business process redesign, Business management (Duffy, 1999), Business scope re-definition and the like.

However, all these terms have one thing in common- challenging the status quo and registering dramatic improvements.

Health care systems have been challenged in recent years to deliver high quality services with limited resources. In Ethiopia, large segments of the population have inadequate health insurance Coverage, forcing them to rely on an underfunded public health system

Given the pressures to contain costs, it is critical for Hospitals and health care systems to develop systems that ensure the best possible patient care with in limited resources.

An important aspect of this objectives is to develop procedures to improve patient flow (i.e. a flow that show how patient move through the health-care system), to provide timely treatment and maximum utilization of available resources.

Patients are harmed in the process of delay, not only through unnecessary suffering and through adverse medical outcomes. Health care providers harmed through the added cost and reduced efficiency resulting from the complication and handling delayed patients.

For this reasons, it is imperative for all provider to seek out and implement solution that reduced delay. As are a responsible for this, the government of Ethiopia is adopting the concept of business process Re-engineering in the public sector.

The main factor that are forcing hospitals to accept the concept of BPR is to improve delivery of service quality, to reducing bottlenecks that hamper the service delivery, reduce processing time of reducing service delivery, pressure to comply with regulatory requirements.

One of the pillars of the health sector reform has been the improvement of service delivery. Under the strategic objective, the key program areas relate, among others, to the development of management systems to support service delivery, the implementation of a human resource

strategy, which will improve the distribution of health staff across the country, and the adoption of resource distribution criteria that will ensure equity in the allocation of resources,

BPR is a relatively new overall concept of management technique. From recent years on, BPR is practiced in so many organizations of different countries. It is a practice of improving the efficiency of any organization by automating its business process through re-engineering.

Globalization has forced different types of service industries to adopt BPR for reducing operating costs, time and maintaining customer complaint to a level where it remains competitive.

Exponential rise in the cost of delivery of health care services, price competition, market realignment are the major actor that are forcing hospitals to scrutinize their business process and to re-design them in a manner that would not only help to keeps the process competitive but also in delivering quality care of the patients.

Moreover, successful BPR can result in enormous reduction in cost or cycle time. It can also potentially create substantial improvement in quality, customer service, or other business objectives.

Currently in Ethiopia, hospitals are adopting the concept of BPR. The main aim of adopting BPR in hospitals is to improve delivery of service quality to customer, reducing bottlenecks that hamper delivery of service quality, upgrade clinical performances, reducing processing time of service delivery, pressure to comply with regulatory requirements.

Whereas the success of BPR depends on perception and awareness of executives on BPR, the commitment of hospital directors, bottom up acceptance of process re-engineering design, information technology, computer and communications, continuous quality improvement is necessary.

Yirgalem Hospital is one of the public hospitals in Ethiopia that is founded in Yirgalem Town, Sidama zone, in south region, which is 315 km away from Addis Ababa and 45 Km away from Hawassa. The foundation of this Hospital was laid by H.M. king OLAU of Norway on January 12, 1966. The Hospital is the donation to the people of Ethiopia from the people of Norway. The

Hospital currently led by the management Committee. It has also different Committee under the management Committee.

Yirgalem hospital gives service for 50,000-60,000 people per year, with a population of more than 3 million. It covers more than three zones around the area.

On May 22, 2001 E.C., the hospital has started the implementation of BPR to enhance service delivery.

### **1.1. Statement of the Problem**

Successful implementation of the BPR to achieve the desired result may face obstacles. These are lack of cooperation from staff since BPR is viewed reducing the work force cutting jobs and income, insufficient staff training and development, lack of enthusiasms and interests, lack of funding leads to problem in acquisition of technology and research in BPR, lack of top management support in trying to implement solutions generated by BPR initiatives, selection and training of employees in BPR process is time consuming, and not so well-defined internal control is under the new process re-engineering.  
<http://www.expresshealthcaremgmt.com/20020515/focus2.5htm/>

As it is a public hospital, Yirgalem hospitals have a huge number of patients and provide a number of services to external customer. Keeping patients and employees of the hospitals satisfied with the service of the hospital require more than simply opening a complaint department, smiling a lot, and being nice.

Yirgalem hospital has already started the implementation of BPR that are designed to providing more-cost-effective and increase value of customers. Nevertheless, in the real world there are a number of problem could be observed that is collude with theoretically designed. These problems are as follows: - Getting service is more problematic in ophthalmology, emergency and ART medical departments. It results in more trouble for the patient/client. The patient is forced to wait for long time, a long number of queues. Especially in outpatient department, theoretically, five minutes are enough to take out card but practically it can be observed that the patient spend 30-40minute. Over all medical service, rendering time to one patient takes at least 4 – 5 hours but the hospital design to render the service is within 2 – 3 hours. The hospital refers

more patient to other hospital, even if that department is available there, the costs of rendering medical service is high relatively to the other hospital e.g. for cards it is 10 & 15 birr for normal and emergency service respectively. Laboratory is 80 birr. The doctor and the clinical nurses do not wear gloves during their work with patients and patients complain of the privacy and confidentiality, especially in PICT service. .

Beside these problems, there are a number of changes that can be observed in Yirgalem hospital. For example, separation of emergency entrance door with other doors, comfort of the patient, giving priority to service rather than fee and establishing a triage system - a system that is used to determine the emergency case from other normal case, etc.

However, the implementation process is not simple. It would be a challenge for the leader. It requires behavioral, attitudinal and capacity change from both director and employee. In light of these, the present research was tried to investigate the challenges and opportunities faces during rendering of service.

### **Research questions**

The research has endeavored to answer the following research questions

- Have the service renderers understood the conceptual framework of BPR?
- Are the service renderers able to play their role well?
- What technical problems happened from preparation up to implementation?
- What changes are made?
- Is the program introduced in a way that ensures the enhancement of service delivery?
- Does the leadership organize interim coaching and progress review properly?

### **1.2. Objectives of the Study**

The major objective of this research is assessing the challenges and opportunities of Business process reengineering for enhance service delivery in Yirgalem hospital. The researches also have the following specific objectives:-

1. To investigate challenge that affects the rendering of service delivery and suggests possible solution to reduce the challenges to promote service delivery,
2. To identify the major changes brought by adopting BPR
3. To study and analyze the existing work guidelines service delivery procedures and time taken for each step
4. Assess the degree to what extent the challenges affect the service deliver.
5. To recommend the possible solution for the identified challenge and opportunities;

### **1.3. Scope of the Study**

Studying all hospitals to identify the business process re-engineering challenges and opportunities for enhance service delivery are too difficult, even if it increases the reliability of the research. Under this assumption, the researcher wants to examine the old hospitals under the study. Yirgalem hospital is one of the oldest hospitals among Gondar, Black Lion and Yekatit 12 Hospital.

There may be some questions to raise, why not examine the other old hospital? Black lion, Gondar and Yekatit Hospitals do not only give medical Service but also they give medical education. Therefore, it is difficult to see the challenges and opportunities.

Furthermore, in Southern region Yirgalem Hospital is seen as a benchmark hospital for other Hawassa, Sodo, Arbaminch, Hossana and Dilla Hospitals. In addition to this, this hospital not only gives service to Sidama Zone as the other zonal hospitals do, but gives service to more than 3 Zones i.e. Bale Zone, Arsi Zone, and Gedio Zone.

### **1.4. Limitation of the Study**

During the course of this research, the researcher faced some constraints and limitations which affected the process and outcomes of the study, some of these constraints are

1. Shortage of time to gather sufficient data and analyze them properly;
2. Lack of sufficient and relevant literature that relate BPR with enhancement of service delivery;

3. The researcher lacks of skill in using sophisticated statistical package for data coding & analysis process the accuracy & precision of the research outcomes may be restricted.
4. This study is a case study on Yirgalem hospital; this makes difficult to generalize the finding to other hospitals.

### **1.5. The Significance of the Study**

The process and the outcomes of this research work are expected to serve various purposes. The purposes are stated as follows:-

1. It will serve as input for SNNPR BPR committee and Yirgalem Hospital BPR Committee to examine the current position of the hospital, if they want.
2. It serves as a secondary data source for those who want to conduct further investigation in this area.
3. Finally, it helps the researcher full fill the requirements for Masters of Arts Degree in Public Administration.

### **1.6. Methodology of the Research**

#### **1.6.1. Methods**

The study has employed the descriptive research method in order to perceiving challenges and opportunities in the enhancement of service delivery during the implementation of BPR at Yirgalem hospital, descriptive research method is the best method for explain the phenomena as it is and also helps to answer “ what is” questions. Therefore, the objective of this research basically focuses on into two issues, what are the challenges for the service deliver performance and what changes are encountered by BPR.

For the sake of data collection, the study has employed both primary and secondary data. To investigate primary data the study used structured questionnaire (to the patient), structured interview (with BPR committee) and semi-structured questionnaire (to service staff). To investigate secondary data the study also used document analysis. After the information’s have

been gathered through these methods, the classification and analyzing were done through qualitative and quantitative methods.

The data has been presented and analyzed using different mathematical tools such as tables and percentages. The various characteristics of sample population such as sex, educational background, work position, personal opinion were presented and analyzed by qualitative methods.

### 1.6.2. Sample Plan

Yirgalem hospital has six case teams; Delivery Case Team, Emergency Case Team, In-Patient Case Team, Outpatient Case Team (ART service is under this case team), Surgical Case Team and Ophthalmology Case Team. Under the case team, there are eighty-six employees. For the sake of manageable size to analyze the data, the study has used simple random sampling techniques to select the sample from each case team. Out of the total eighty-six employees, thirty-two samples of respondents are selected. The sample of the study, out of the total populations/employees is presented below.

Table 1 sample plan

Position	No of employees	Sample Population
Medical Doctor	15	6
Clinical nurse	30	10
Laboratory technician	12	3
Pharmacy technician	11	2
Mid wife	10	5
Dentist	1	1
Anesthetist	3	2
MRT	4	3
<b>Total</b>	<b>86</b>	<b>32</b>

*Source, Field survey, 2010*

The hospital gives service around one hundred-fifty up to two-hundred people per day. The study distributed questionnaire to one- hundred people randomly within one week to catch the real situation. Moreover, the researcher conducted interviews with three BPR committee members,

two out of which is, former medical director and current medical director of the hospital. From the total number of questionnaires (out of 132 questionnaires) that were fielded to clients and employees, out of 100 questionnaires, 98 (98 percent) were collected from clients and out of 32 questionnaires, 29 (91 percent) were collected from employees.

### **1.7. Structure of the Paper**

This research will have four main parts: - part I Introduction, Part II Theoretical framework and review of related literature, part III presentation analysis of the data, part V conclusions and recommendations.

## CHAPTER TWO

### 2. REVIEW RELATED LITRATURE

#### 2.1 Introduction

Various countries, have attempted to reform public services with the evolving and changing role of the state. Whether during the onset or end of war, the collapse of communism, the demands of the populace, the development and crisis of the welfare state, economic imperatives, decentralization or the introduction of technology, states face the challenge of adapting to these dynamic factors. (Karen, 2005) These dynamic changes emanated from technological innovation, public pressure to redefine the role of the state, or the development of supranational institutions rapid global economic advances.

Today, business process re-engineering has emerging a high priority area of interest in many organizations. Jones (1994) also said that; today, BPR is widely recognized as one of the hottest topics in management field (1994). Its concepts, as presented by Hammer (1990) Devenport and short (1990), evidently appear to attract broad interests from both practitioners and academic as a strategic approach for managing organizational change (Zairi and Sinclair,1995).

BPR ideas are based on the premises that every organization needs a sense of direction without that direction on in the form of strategic plans and business plans; the organization has no foundation upon which to build process improvements. BPR is a method of improving the operation and therefore the output of organizations. Generally the topic of BPR involves discovering how business process to eliminate the wasted or redundant efforts, improve efficiency and how to implement the process changes in order to gain competitiveness.

The purpose of BPR is to find a new ways to organize tasks, organize people and redesign information technology so that the processes support the organization's goals. It means analyzing and altering the business process of the organizational as whole.

For a through and effective re-engineering project, organizations should first meet certain conditions before starting such a project. Initially the management should abandon all the

rules and procedures that have been up to that time. In addition, they should abandon other inadequate organizational and production principles. At this point, the design of a renovated and re-designed organization should begin.

Re-engineering a company means to assign aside old systems and starting over, it involves a going back to the beginning and inventing a better way of doing work. Krajewski and Ritzman (1999) further explained that Process re- engineering is about reinvention, rather than incremental improvements. Other authors such as Talwar (1993) has focused on the rethinking, restructuring and streamlining of the business structure, process, methods of working, management systems and external relationships through which value is created.

Hammer (1990) also argues that at the heart of reengineering is the notion of ‘discontinuous thinking’ -- or recognizing and breaking away from the outdated rules and fundamental assumptions underlying operations. Davenport and Short (1990) prescribe a five-step approach to BPR. They argue that process reengineering requires taking a broader view of both IT and business activity, and of the relationships between them.

As it was noted earlier, the main objective of this study is to assessing the challenges and opportunities of Business process reengineering to enhancing of service delivery in Yirgalem hospital within the theoretical framework of business process reengineering concepts. Hence, this section discuss the theoretical review of the concepts, characteristics and principles of business process reengineering, the goal of business process reengineering, evidence based critical success factor, challenges faced during the process of business process reengineering, business process reengineering practices, challenges and experiences in Ethiopia in detail with the recommended solution to eradicate and eliminate the challenges by different authors, and at last this section contain what business process reengineering looks like in Hospital.

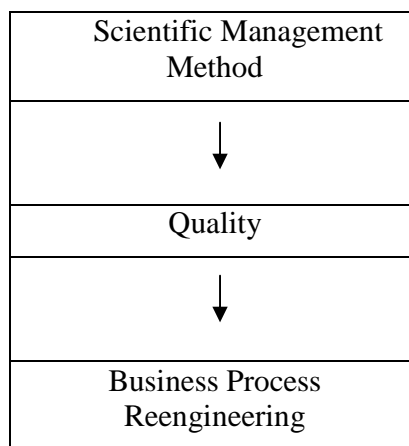
## **2.2 Origin of Business Process Reengineering**

Business process reengineering originated in the 1950s as large firms began to explore the potential impact of computers on the efficiency and effectiveness of their business processes. Many approaches, methods, and techniques have since appeared and constitute the foundations of BPR, as it is presently known. As cited by (Suzanne, 1998) Davenport (1993)

notes six areas, this influenced the emergence of BPR. These are *the total quality approach, industrial engineering, the systems approach, the socio-technical approach, the diffusion of innovations, and the use of information systems for competitive advantage.*

The origin of BPR stems from scientific management. Scientific Management was a step to the introduction of BPR. During Taylor's time, not many knowledgeable workers were employed in the manufacturing workforce, which at the time was the main wealth generator. Scientific Management involves breaking the manufacturing process down to a cycle of simple sequences, which were to be carried out in the least amount of time possible with the minimum amount of effort.

Fig 1 Evolution of BPR



### 2.3 Definition of Business Process Reengineering

When someone asks us for a quick definition of business re engineering, we say that it means 'starting over'. It does not mean tinkering with what already exists or making incremental changes that leaves basic structures intact. It is not about matching patchwork fixes - jury - rigging existing systems so that they work better, it does mean abandoning long-established procedures and looking afresh at the work required to create a company's product or service and deliver value to the customer. It means asking this question 'if I were re-creating this company today, given what I know and given current technology, what would it look like?' (Hammer and Champy, 1993)

In fact, as a relatively new overall concept, many practitioners have created their own different technical terms for re-engineering the business process. For example business process re-engineering (Hammer 1990), Davenport and Short (1990) business process redesign, (Duffy, 1999) business management, (Venkatraman, 1994) Business scope re-definition, (Burke and Peppard, 1993) business process transformation, (Harrington, 1991) business process improvement, (Kaplan and Murdoch, 1991) core process redesign, (Earl et al, 1995) original change ecology.

Different practitioners and academicians have defined BPR in different way such as Davenport & Short (1990) define *business process* as ‘a set of logically related tasks performed to achieve a defined business outcome’. A process is ‘a structured, measured set of activities designed to produce a specified output for a particular customer or market. It implies a strong emphasis on how work is done within an organization’. Business processes are sequences and combinations of activities that deliver value to a customer (Coulson, 1994).

Let us begin with a better definition of ‘Re-engineering’, the classic definition of Business Process Reengineering (BPR) is given in Michael Hammer’s and John Champy’s (1993) pioneering book, ‘Reengineering the Corporation - A Manifesto for Business Revolution’.

They define BPR as, the fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical, contemporary measures of performance, such as cost, quality, service and speed.

From this definition, it is clear that BPR is an ongoing, iterative process itself, requiring strong commitment and vision from senior management. The company should re-engineer the processes; organizations are not the objects of re-engineering. Hammer (1996) said that companies do not re-engineer their sales or manufacturing departments: they are re-engineering the work that the people in those department do.

The confusion between organizational units and processes as object of re-engineering arises because department units, division, and groups are familiar to people in business, while process are not: organizational lines are visible, plainly draw on organization charts, and process are not: organizational unites have names and processes most often do not.

Processes are not something that we invented in order to write about them. Every company's earth consists of process. Processes are what companies do.

Processes in accompany correspond to natural business activities, but they are often fragmented observed by the organizational structures. Processes are invisible and unnamed because people think about the individual departments, not about the process with which all of them are involved. Processes also tend to be unmanaged that people are put in charge of the departments or work unites, but no one is given the responsibility for getting the whole job-the process-done.

One way to get a better handle on the process that make up a business is to give them names that express their beginning and end stated. These names should imply all the work that is done between their start and finish. (Hammer and Champy, 1993)

## **2.4. Core Process and Support Process**

A process is a set of related activates designed in organizations: Hammer classified the process into two. These are Core and Support processes. Core processes meet the important needs of the organizations external customers. Support processes meet important needs of internal customers- the employees and, increasingly, the suppliers. The following lists, which describe the process, are not complete but are intended to make the concept of process more concrete.

### **2.4.1 Core Process Common to many Government and Service Organization**

The emphasis of re-engineering should be on core business process, rather than functional departments. Krajewski (1999) further explained that a process selected for re-engineering should be a core process. By focusing on processes, managers may spot opportunities to eliminate unnecessary work and supervisory activities, rather than worry about defending turf. Linden (1994) identifies and states the core process as follows

**Customer Fulfillment:** from customer request for service or product, to deliver of services or product, to receipt of payment to evaluation and customer feedback, to action on feed back as necessary;

**Program delivery:** program concept development, program planning, publicity, registration, delivery and payment, and evaluation for future program improvements;

**Information Delivery:** request for information about service, taxes, program availability and eligibility, anticipated waiting time, and soon to information delivery, tracking and analysis of information requests, to feed back, to program department;

**Licenses and permit acquisition:** request for permits and licenses, to application, delivery, and payment;

**Complains Management:** receipt of complaint, investigation, decision and communication of decision, resolution, to analysis of complaints and action on any root cause found.

**Contract Management:** identification of issues, terms of references, publication of request for proposal, contractor selection, coordination through entire project (including ongoing evaluation), to final review and payment;

**Emergency Service:** call for assistance, dispatch, provision of emergency service (fire, police, ambulance, and soon), to resolution of need, analysis of patterns of calls and action on that analysis if necessary.

**Policy Making:** identifying need for policy or policy change, understanding end users needs and priorities, to reach of options, to determination of pluses and minuses of each option, to presentation of options with recommendations, to decision.

#### **2.4.2 Support Process Common to many Government and Service Organization**

Support process mainly meet important need for internal customer- employee, supplier and for the internal activity of the organization, which helps the organization successfully/efficiently run its operation in order to achieve the stated objective

**Visioning/planning:** from identifying future opportunities and threats, to analysis of internal strength and short coming, to stakeholder input on strategy development, to strategy formulation and communication to all stakeholders.

**Purchasing:** from identification of need, to requisition, to order delivery, and to payment. This enables the employee confidently to forward/ rendering service with full resource and material.

**Filling Position:** from position vacancy, to identification of position requirements and downstream concerns; to advertising, to interviewing and selection, to orientation, to employee feedback about the process

**Employee Development:** from determination of employee goals and needs and (simultaneously) determination of future agency priorities and skill needs, to individual or team development plan, to ongoing development activities, to feed back and plan revision.

**Budgeting:-** from annual goals and revenue projections, to communication of goals and resource availability with all employees, to budget requests, to public input, to budget decision's(and communication of those decision to employees), to budget adoption, to revision of departmental or team budgets

**Information Management:** from analysis of present and future information requirements, to development of information plan, to purchase and installation of hard ware and soft ware, to training, monitoring, and updating plan and resources.

**Team Building:** from identification of need for team work, to explanation of benefits of greater team work, to team self assessment, to team plan for improved performance implementation, evaluation, and follow-up.

## **2.5. What Re – Engineering isn't**

Many people perceive wrongly the BPR, as if BPR is a downsizing, delayer and flattering an organization, this is the major challenge for the successfulness of this reform.

However, Re–engineering is not restructuring or downsizing. These are just fancy terms for reducing capacity to meet current, lower demand. Downsizing and restructuring only mean doing less with less. Re–engineering, by contrast, means more with less.

Hammer and Champy(1993) under his a manifesto for business revolution book explained that, downsizing means getting rid of people and joins to improve short term financial results.

Re engineering has nothing in common with that kind super fiscal and relative response to problems. Seyoum (2008) also further explain that, Reengineering reducing cost by eliminating non value-adding activities, steps, hand offs and rules and procedures.

Moreover, re engineering is about re thinking work from the ground up in order to eliminate work but not a person that is not necessary and to find better ways of doing work. Hammer and Stanton (1995) also said that re – engineering eliminate work, not jobs or people.

Re-engineering also is not the same as re organizing, delayer, or flattering an organization, although re – engineering may, in fact, produce a flatter organization. Rendering service effectively would relate to the process structure of the companies. In other words, the successfulness of the companies manly relied on the process of the organization but not the organization structure. Hammer and Champy (1993) have noticed that, the problems facing companies' do not result from their organizational structures but their process structures.

Re–engineering is about beginning again with a clean sheet of paper. It is about rejecting the conventional wisdom and received assumptions of the past. Finch (2003) said that re-engineering designs process starting from a clean slate rather than incrementally improving the process). Re– engineering is about investing new approach to process structure that beads little or no resemblance to those of previous eras. In re-engineering, everything is redesigned, including forms processing and information processing.

Nor is re-engineering the same as quality improvement, total quality management (TQM), or any other manifestation of the contemporary quality movement. To be sure, quality programs and reengineering shares a number of common themes. They both recognize the importance of process, and they both start with the needs of the process customer and work back grounds from there. However, the two programs also differ fundamentally.

The aim of TQM is to do what we already do, only to do it better. Quality improvement seeks steady incremental improvement to process performance. Re-engineering, seeks break through, not by enhancing existing progress, but by discarding them and replacing them with entirely new ones. (Hammer and Champy, 1993)

## **2.6. Characteristics of Business Process Reengineering**

It should be clear by now that a re-engineered business process looks vastly different from a traditional process. Here, then are some commonalities, some recurring themes or characteristics, that we frequently encounter in re-engineered business processes.

### **2.6.1 Several Jobs are combined into one**

The most basic and common feature of re-engineered processes is the absence of an assembly line: that is, many formally distinct jobs or tasks are integrated and compressed into one.

Work normally performed by a number of specialists in different functional departments can now be performed by one individual or team. Through shared databases and decision support systems, this generalist has access to all the required information and expert systems to make a sound decision.

Hammer and Champy (1993) further explained that, in re-engineering process, the company compressed responsibility for the various steps and assigned it to one person 'Customer service representative.' that person now performs the whole process and serves as the single point of contact for the customer. The term for such an individual responsibly for an end- to-end process is case worker. For example, as Belete (2007) said that a transformed hospital can organize its service to model of patient-centered care where nurses and technicians together with doctors provided most services to the patient

### **2.6.2 Workers Make Decision**

Companies that under take re-engineering, not only compress process horizontally by having case workers or case teams perform multiple, sequential tasks but vertically as well, vertically compression means that at the points in a process where workers used to have to group the managerial hierarchy for an answer, they now make their own decision process. As Seyoum stated (2008) that, empower the worker to make a decision to be responsive to the need of the customer i.e. decision making should be part and parcel of the work.

Greenberg (1996) also said that they have a full grasp of the entire process and can take responsibility if a customer is dissatisfied. Creativity, ability to work independently and a

sense of responsibility are required attributes of this 'new worker.' Managers act more as coaches than 'bean counters.'

### **2.6.3 The Steps in the Processes are performed in Natural Order**

In reengineered processes, work is sequenced in terms of what needs to follow what. 'Delinearizing' process speed them up in two ways. First, many jobs get done simultaneously. Second, reducing the amount of time that elapses between the early and late steps of a process narrows the window for major change that might make the earlier work obsolete or make the later work inconsistent with earlier. Organizations thereby encounter less rework, which is another major source of delay. (Hammer and Champy, 1993)

### **2.6.4 Processes Have Multiple Version**

Hammer and Champy(1993) called these characteristics as the end of standardization. To meet demands of today's environment, we need multiple versions of the same processes, each one turned to the requirements of different markets, situation, or inputs. Process with multiple version or usually begin with a 'triage' step to determine which version works best in a given situation

### **2.6.5 Work is Performed where it makes the Most Sense**

The correspondence between process and organizations may look very different from how it looked beforehand. Hammer and Champy (1993) shared this idea, work is shifted across organizational boundaries to improve overall process performance. Much of the work done in organizations consists of integrated related pieces of work that independent organizational boundary.

### **2.6.6 Checks and Controls are reduced**

Conventional processes are replete with checking and control steps, which add no value but are included to ensure that people aren't abusing the processes. Reengineered processes use checks and controls to the extent that the processes make economic sense.

Re-engineering processes exhibit a more balanced approach. Instead of tightly checking work as it is performed, re-engineered processes often have aggregate or deferred controls. These

control system will, by design, tolerate modest and limited abuse, by delaying the point at which abuse is detected or by examining aggregate patterns rather than individual instances. (Hammer and Champy, 1993)

### **2.6.7 Reconciliation is minimized**

This is achieved by cutting back the number of external contact points that a process has, thereby reducing the chances that inconsistent data requiring reconciliation will be received (Belete, 2006). For example, in the case of Ford Motor Company invoices are no longer reconciled with what is shipped because a shipment is not received unless it agrees with the original invoice. Further, suppliers are not paid until their parts are actually used in production, thus forcing the supplier to deliver quality and to be in tune with Ford's production schedules. (Greenberg, 1996)

### **2.6.8. A Case Manager Provides a Single Point of Contact**

This mechanism proves useful when the steps of a process either are so complex or are dispersed in such a way that integrating them for a single person or even a small team is impossible. Acting as a buffer between the still complex process and the customer, the case manager behaves with the customer as if he or she were responsible for performing the entire process, even though that is really not the case. This helps even to handle the complaint, Greenberg (1996) further explained that, when a customer calls with a complaint, one person is responsible and takes ownership for the resolution of that complaint.

To perform this role-that is, to be able to answer the customer's questions and solve customer problems-the case managers needs access to all the information systems that the people actually performing the process use and the ability to contact those people with questions and requests for further assistances when necessary.

The case manager is sometimes called 'empowered' customer service representatives to distinguish them from traditional CSRs, who are often people with skimpy information and less clout. (Hammer and Champy, 1993)

### **2.6.9 Hybrid Centralized/ Decentralized Operations are Prevalent**

Companies that have re-engineered their processes have the ability to combine the advantages of centralization and decentralization in the same processes. Information technology increasingly enables companies to operate as though their individual units were fully autonomous, while the organization still enjoys the economies of scale that centralization creates. (ibid)

### **2.7. The Implication of Re- engineered Processes on the Organizational System**

The two cornerstones of any organization are the people and the processes. If individuals are motivated and working hard, yet the business processes are cumbersome and non-essential activities remain, organizational performance will be poor.

Business process is a cure for such problem, Carter (2005) also believes the necessity of business process reengineering he said, Business Process Reengineering is the key to transforming how people work. What appear to be minor changes in processes can have dramatic effects on cash flow, service delivery and customer satisfaction. Even the act of documenting business processes alone will typically improve organizational efficiency by 10%.

#### **2.7.1 Work Unites Change –from – Functional Departments to Process Teams**

Once business processes is restructured, process teams- group of people working together to perform an entire processes-turn out to be the logical way to organize the people who perform the work (Hammer and Champy, 1993). Moreover, multi dimensional skilled individual or group of people are assigned to perform the process from start to finish and placed the employee in appropriate position. Belete et.al (2007) stated that performers in the process are placed based on the process organized. Therefore, performers are placed on the steps and jobs sequentially ordered and organized in the process based on their competency: pay-for-skill approach. Process teams don't contain representative from all the functional departments involved structure. Rather, process teams replace the old departmental structure.

### **2.7.2 Jobs Change- from Simple Tasks to Multi- Dimensional Work**

Process team workers, who are collectively responsible for process results rather than individually responsible for tasks, have a different kind of job. They share joint responsibility with their team members for performing the whole process, not just a small piece of it. They not only use a broader range of skills from day to day, they have to be thinking of a far bigger picture. While not every member of the team will be doing exactly the same work – after all, they have different skills and abilities-the lines between them blur. (ibid)

### **2.7.3 Peoples Role Change – from Controlled to Empowered**

Companies that have re-engineered do not want employees who can follow rules; they want people who will make their own rules. As management invests teams with the responsibility of completing an entire process, it must also give them the authority to make the decision needed to get done. (ibid)

### **2.7.4 Job Preparation Changes- from Training to Education**

If jobs in re-engineered processes require that people not follow rules, but rather that they exercise judgment in order to do the right thing, then employees need sufficient education so that they can discern for themselves what the right thing is. In companies that have re-engineered, the emphasis shifts from training to education- or to hiring the educated. (ibid)

### **2.7.5 Focus of Performance Measures and Compensation Shifts- from Activity to**

#### **Results**

In companies that have re-engineered, contribution and performance are the primary bases for compensation. Measure their performance and pay them on the basis of the value they create. (ibid)

### **2.7.6. Advancement Criteria Change –from Performance to Ability**

A bonus is the appropriate reward for a job well done. Advancement to anew job is not. In the aftermath of reengineering, the distinction between advancement and performance is firmly drawn. Advancement to another job within the organization is a function of ability, not performance. It is a change, not a reward.

Promotion should be based on the ability and the potential that the individual deserve for the next position, not by reward for the best accomplishment of the existing job. (ibid)

### **2.7.7 Values Change –from Protective to Productive**

Re-engineering demands that employees deeply believe that they work for their customers, not for their bosses.

An organization's management systems-the ways in people are paid, the measures by which their performance is evaluated, and so forth-are the primary shapers of employees' values and beliefs. Therefore, companies must link their value and belief they want to build in their organization with the organization management system. (ibid)

### **2.7.8 Organizational Structures Change-from Hierarchical to Flat**

When a whole process becomes the work of a team, process management becomes part of the team's job. Decision and inter departmental issues that used to require meeting of managers and managers' managers now get made and resolved by teams during the course of their normal work.

Pushing decision about work down to the people doing it means that managers' traditional roles are diminished. Consequently, the organizational structure tends to be flat, as work is performed by team of great autonomy and supported by a few managers. (ibid)

**2.7.9 Executive Change –from Scorekeepers to Leaders** In a reengineered environment, the successful accomplishment of work depends far more on the attitudes and efforts of empowered workers than on the actions of the task oriented functional managers. Therefore, executives must be leaders who can influence and reinforce employees' values and beliefs by their words and their deeds.

## **2.8. Why Re-Engineer?**

Three forces, separately and in combination, are driving today's companies deeper and deeper in to territory that most of their executives and managers find freighting unfamiliar. These forces are called the three Cs; Customer, Competition, and Change.

### **2.8.1 Customers Take Charges**

Individual customers-whether consumers or industrial firms- demand that they be treated individually, they expect products that are configured to their need, delivery schedules that match their manufacturing plans or work hours, and payment terms those are convenient for them.

The 21st century is the customer economy where customers have dominant role in the market relationship. The dominant force in the seller-customer relationship has shifted from seller to customer. The industrial thought of mass market no longer exists in real term today. Customer has upper hand; because:

- They have many options. They have choices.
- Information technology allows them to access information.
- Customers (business customers and individual consumers) know what they want, know what they want to pay for it, how to get it as their needs and preferences.
- In today's world success lies on those who are working according to the customer needs and preference. This demands organization to build customer orientation system that enable them to customer focus.(Belete, 2008)

Nowadays, consumer seek more from organization because globalization make the product and service more customized, provide quality product and easily available to the user, therefore, designing the process is mandatory in order to retain and attract customer with the satisfaction of customer. Krajewski(1999) also said that re-engineering requires a 'clean slate' philosophy- that is, starting with the way the customer wants to deal with the company. Especially in the service area the consumer more expect from the service render and varies their expectation time to time due to competition.

### **2.8.2 Competition Intensifies**

The second Cs is competition. Globalization faces a great challenge to the company because the multi organizations provide their product and service in many countries and more attractive to the customer, this increases the competition all over the world. In order to stay in

the business the companies should segment their product and service to each customer and in addition to this, they should design their organizational process.

Belete(2008), further explained that the phenomenon of mass marketing has broken. The traditional competitive strategies: lower price and highest quality, and best service become standard for almost all competitors. The shift in customer-seller relationship and the technology changes the nature of competition.

### **2.8.3 Change Becomes Constant**

Change is the third Cs, Change is the law of life as cited by Daniel (2008), Darwin says 'it is not the strongest who survive and it is not the intelligent who survive but the one who respond to change will survive.' In this age of 'globalization' where the gap between continents, countries, regions, and people in distance and information significantly reduced; socioeconomic and technological activities speed up continuously and acceleration become apparent.

In this turbulent and unprecedented global competition arena, the desire for change has to be number one be it for an individual, an organization or a nation. As Huq and Martin (2006) prescribed, one of the constants in most organizations today is change. Management would like to think that employees of the organization can handle this rapidly changing environment.

Hammer (1996) also said that we already know that customers and competition have changed, but so, too, has the nature of change it self, Foremost, change has become but pervasive and persistent. It is normality.

### **2.9. Design Principles for Re-engineering**

In Hammer and Champy's original manifesto re-engineering was by definition radical; it could not simply be an enhancement or modification of what went before. It examined work in terms of outcomes, not tasks or unit functions, and it expected dramatic, rather than marginal improvements. Russell and Taylor (1998), and Linden (1994) highlights the seven principles of re-engineering that would streamline work processes, achievement, and improves product quality and time management. These are

1. Organize around outcomes, not tasks.

Linden said those who work in on the same process should work together. We cannot control the results of our work when we aren't organized for results; if we organize around outcomes, we will find that we can control the results far more than we imagined.

There are three approaches to organizing around the outcome

- A. Organize Around the Customer. The customers' needs can form the basis of the deliverable, or outcome.
- B. Organize around the product. When the customer is not easily identifiable (their numbers are too large, their needs change too frequently) or when the deliverable is tangible good and not an intangible service, then organize around the product is the approach to take.
- C. Organize around the process. When there is no consistently identifiable customer needing a specific service, no tangible good or product, organizing around the outcome means organizing around the process itself. After all organize around outcomes enhance the satisfaction of customer Russell and et al, further said that the ultimate outcome is what satisfies a customer need.

2. Capture Information Once, at the Source.

Information must be captured once, to stream line the process and ensure accuracy (Linden, 1994). Russell and Taylor (1998) highlighted the importance of capture information once, at the source, this enables eliminate unnecessary information exchange, data redundancy, and re keying. In addition to this, gather relevant, accurate information that you need, but no more.

3. Provide a Single Point of Contact

Organization should be organized by process. Customers and vendors should deal with one representing the entire process, for the convenience of the customer.

4. Link Parallel Sub Processes instead of Integrating their Results as a Separate Step

A consumer society won't wait for sequentially produced programs and services. Bright people, supported by appropriate technology and a seamless work process, can perform

many things in parallel (Linden, 1994) and build in feedback mechanisms to minimize the need for check points and control (Russell and Taylor, 1998).

5. Ensure a Continuous Flow of the Main Sequence

Speed and user-friendly lines are key customer needs that can be met without sacrificing quality.

6. Don't Pave Cow paths: first Re-engineer, Then Automate

Streamlined work processes increase productivity. Technology amplifies strength (or weaknesses) in the process.

7. Bring Downstream Information Upstream

Information can be accessed any time, any place; it's most valuable

## **2.10 The Goal of Business Process Reengineering**

Aldowaisan et al (1999) define the goal of business process re-engineering as being 'to achieve dramatic improvements in business measures of performance by radically changing the design processes. Thun and Dipl-Kfm, (2003) further explained that, the restructuring of business process is a very complex task. A successful BPR exercise therefore requires goals and principles and must reflect the general situation. It is also necessary to take account of constantly changing environmental influence (technical, economical, geographical, political....etc. customer satisfaction is the key to company success.

A number of advantages or benefits have been attributed to BPR as cited by Rivard, (1998): (Davenport and Beers 1995) stated that: cost reductions, increases in productivity, a higher quality of goods and services 'offered, and a simplified organizational structure.

However, to gain these advantages, a specific set of conditions must be met based on the BPR consultants' interviews, Bashein et al. (1994) outline the positive preconditions for BPR success as: Senior Management Commitment and Sponsorship; Realistic Expectations; Empowered and Collaborative Workers; Strategic Context of Growth and Expansion; Shared Vision; Sound Management Practices; Appropriate People Participating; Full-Time and Sufficient Budget. Rivard (1998) also set the precondition these are;

- (1) The BPR project must have the visible commitment and full support of top management
- (2) A multidisciplinary and multifunctional steering committee must be formed and assigned to the project;
- (3) An explicit methodology must be rigorously followed; and
- (4) Enterprises must comply with the fundamental principles of BPR if they are to reap its potential benefits.

### **2.11. Evidence-based critical success factors**

Critical success factors have been distilled from research into business process re-engineering in Europe and North America.

#### **Leadership**

A re-engineering leader has to have and demonstrate a strong feeling and desire for change, otherwise, no one is to follow a leader. Homa (1995) also said Organizational leadership must be demonstrably committed to initiate, sustain and achieve successful BPR program. Leaders must nurture and encourage internal and external stakeholders to achieve the desired change. This responsibility should be distributed among the organization's top leadership and must include personal commitment of the chairperson and the chief executive. Organizational inertia and intransigence must be overcome to implement redesigned processes and requires visible and invisible support of the organization's leadership.

As Belete et.al (2007) said strong, committed, executive leadership is the absolute sine qua non for re-engineering. Visible leadership is one of the most important success criteria. . This is the leadership's responsibility. Belete et.al (2007) also in their working manual stated that in process centered organization organizational units are organized around organization's core business process which is known as process structure in which process teams performing the entire process from beginning to end, and the new manager called process owner (or process leader or process manager) becomes responsible for the end-to-end process management and result.

### **Internal and external stakeholder communication**

Communication with interest groups inside and outside the organization is necessary to prepare for a business process re-engineering program and to sustain organizational tolerance and understanding once it has commenced. Stakeholder analysis should be comprehensive and reviewed regularly. Each internal and external stakeholder group should have focused communication. This is an enduring requirement. Inadequate communication may switch off one of the organization's vital support systems during a time of rapid change.

Internal and external communication is a vital element of change program and one that is frequently under-resourced and underestimated. Communication at such times is not an overhead. Communication is as fundamental as the chief executive's personal involvement.

### **Appropriate use of information technology**

As Homa(1995) explain that information technology and its position in BPR has matured. The simple automation of existing processes should be avoided. The objective is to achieve efficient redesigned processes and apply information technology to achieve further improvements. Moreover, the benefit of using IT is helps to bring radical change, Belete et.al (2007) further explain that the main objective of using IT here is to support radical change, not to automate the old process.

Information technology is a key enabler to BPR program. Integration of information technology specialists into reengineering teams is important. Research indicates that many BPR program are initiated, in concept, from information systems department. Reengineering program often require new information systems to deliver the full potential of redesigned processes.

### **Focus on value**

As cited by Homa(1995), Coulson-Thomas and Champy emphasize the importance, in reengineering program, to focus on something of value to internal and external stakeholders. Time and quality are both excellent targets for improvement.

### **Excellent re-engineering teams**

Re-engineering team members must be credible and influential people within the organization. Their participation reinforces the organization's seriousness by its preparedness to second such valuable staff. Re-engineering team members need to display an unusually wide range of skills and aptitudes. Working in a highly ambiguous, intense and stressful environment to develop creative process solutions requires particularly talented individuals.

As Hammer and Champy(1993) further explain, the re-engineering team members...are the people who must produce the ideas and the plans and who are often then asked to turn them into realities. These are the people who actually reinvent the business...no team can re-engineer more than one process at a time, which means that a company re-engineering more than one process will have more than one re-engineering team at work.

Belete(2007) also further explain that the teams are composed of insiders and outsiders. Insiders are people currently working inside the process undergoing re-engineering. These should *the best and the brightest, the company's rising stars*. They are people who have full knowledge of the process undergoing reengineering and have credibility with the workers. Outsider's also known as disruptive elements for they give a different perspective are people outside the process undergoing reengineering.

### **Ownership of re-engineered processes**

Line managers must be closely involved in the redesign and early testing and prototyping of processes. Line managers are critical to successful implementation and their input in early design is essential to achieve ownership of redesigned processes (Homa, 1995)

### **Redesigned pay and reward system**

Redesigned work creates different jobs, which require different reward systems. Existing reward systems may be inappropriate to the revised nature of work. Revisions in reward systems facilitate changes in working practice. This helps ensure that reward systems push staff towards working in the new way rather than pull staff back to the old way. Reward system changes may occur too slowly compared to the speed of process redesign and implementation and this can result in faltering organizational performance.(Homa,1995)

### **Meticulous re-engineering program management**

Research findings have, until recently, understated the importance of effective BPR program management. Effective program management smoothes the sequence of process redesign, prototyping and piloting, human resource management, negotiations with trade unions, outsourcing arrangements (if any) and overarching communications. Meticulous planning includes risk analysis to scan the internal and external environment to anticipate obstacles and initiate action to avoid or ameliorate their occurrence. Scenario planning should also be included so that if a risk occurs, for example, industrial action, appropriate contingency arrangements are in place.

### **Organizational learning**

Organizational learning helps to employee to learn from their success, challenge and problem this helps to build their capacity. Chang and KU(2009) also said that organizational learning is encoding inferences from history into routines that guide behavior, and it is increasing an organization's capacity to take effective actions. Homa(1995) also said this, ability to learn from an organization's own early re-engineering experience and assimilate lessons into subsequent work is important. Learning can accelerate progress and avoid unnecessary and potentially damaging error. Internal and external benchmarking allows the transfer of learning from one re-engineering process to another in the same organization. The intentional use of learning processes aims at the individual, group and system level to continuously transform the organization in a direction that is increasingly satisfying to its stakeholders as cited by Chang and KU(2009), Dixon(1994) said organizational learning is a creation of new standard operating procedures and business processes that reflect organizations' experience

### **2.12. Challenges Faced during the Process of Business Process Reengineering**

Following of the publication of the fundamental concepts of BPR by Hammer (1990) and Devenport and Short (1990), many organizations have reported dramatic benefits gained from the successful implementation of BPR. However, despite the significant growth of the BPR concept; not all organization embarking on BPR projects achieve their intended results.

According to Mayer (1998), 70% of the BPR projects fail. It is known Challenge in every reform is happen; to be successful in reform process the organization should identify challenge and forward appropriate solution. Atakilt (2008) under his research finding, he identify the major challenges that faced during the process of BPR and he also put solution, According to him, such promising achievements are not achieved without any challenge. Organizational leaders, steering teams, redesign teams and change agents have passed through many challenges at different times and in different phases of BPR. These are:

**Misconceptions about Business Process Reengineering (at early stages) and existing Organizational culture:** Such misconceptions attitudinal problems include: not understanding BPR in its entire sense and attempts to reengineer departments; weakness or unwillingness to sense and internalize the need for change; complacency with the status quo; relating BPR only with downsizing and turning once back to the concepts and empirical evidences. That is, resistance to change manly by middle level management; misinterpretation of the statistics (a rumors) – ‘success rate of BPR is only 30%.’

**Limited Commitment among Some Organizational Leaders (at early stages):** Lack of such commitments and poor communication has been revealed through: lack of adequate knowledge on the concepts of BPR; putting the change agenda aside or giving it as an assignment to others; not cooperating with the assigned change agents (consultants); not assigning the best people for reengineering teams; inadequate follow up and weak support.

**Poor communication:** The BPR framework requires communication with employees, customers and stakeholders throughout the various phases of the project cycle. Due to lack of formal communication (especially in the middle of the project), however, confusion and rumors among employees have been common in many public institutions.

**Technical problems:** Many technical problems have been witnessed and have been solved through short trainings and technical support by change agents, leadership commitments, efforts by redesign teams and technical support during field visits by the national quality assurance team. The following are some of the technical problems that have occurred during various phases of BPR.

**During Stage One (Preparation)**

- Difficulty in identifying outcomes (core competencies) of the organization;
- Difficulty in understanding the meaning of processes and identifying business processes based on the outcome- example: identification of too much business processes that can be boiled down in to a few;
- Difficulty in identifying the customers of the process and their needs and expectations;

**During Stage Two (AS-IS)**

- Taking too much time analyzing the existing situation
- Technical problems related to process mapping
- Lack of or inadequate emphasis to the establishment of performance baseline

**During Stage Three (TO-BE)**

- Difficulty in properly articulating desired outcomes
- Lack of or inadequate benchmarking
- Difficulty in determining performance gaps (due to weak baselines) and stretched objectives. This includes confusing process-specific stretched objectives with organization-wide strategic objectives.
- Not allocating adequate time for redesigning.
- Limited creativity among design team members in generating breakthrough ideas as a result of inadequate breaking of old assumption, not applying key reengineering principles, not considering or limited exposure to alternative IT applications, and lack of or inadequate benchmarking.
- Difficulty and often absence of alternative designs for the same process.
- Technical problems related to organization of jobs, pinpointing responsibilities and crafting team-based organizational structure.

**During Stage Four**

- Inadequate preparation for pilot testing: This includes weaknesses in crafting proper implementation strategies that point out mechanisms to overcome future constraints, inadequate communication and orientation programs,

- Limited technical support during pilot testing (especially at early stages of the pilot testing);
- Difficulties in fulfilling office arrangements that are suitable for team work (because of old office designs suited to fragment and functional organization).
- Inadequate training to performers;
- Some problems related to keeping records of performance during pilot testing;
- Inadequate clarity on the role of process owners and their tendency (intentionally or unintentionally) to work as per the old system;
- Delay in replacing old rules and regulations by the new ones. This is not a problem in regions as they have issued a legislation that gives a legal coverage for performers to breach old rules and test the design until the new rules are properly articulated and issued. There is no such clearly observable arrangement at federal level.

### **2.13. Business Process Reengineering Practices, Challenges and Experiences in**

#### **Ethiopia**

Ethiopia is striving to build sustainable economic development and good governance aiming to improve the living standard of its citizen. The civil service system is one of the key tools in achieving these goals. However, it is certain that the old, bureaucratic system of civil service system does not help the government in achieving sustainable development and good governance.

The system is ineffective and inefficient, it has built on outdated systems and procedures and this needs system overhaul in order to have civil service system that support the development and good governance.

The government has been undertaking a lots of reform programmes in order to create the civil service system that support the attainment of economic development and good governance. Among these reform programmes BPR which aiming to radically transforming the civil service system into modern, effective and efficient system that allow government to attain the vision and policy strategies set is major and priority.

The government has chosen BPR in order to get the civil service system shift radically, transformed to totally new civil service system where jobs are organized around results, people are focused on end result, the management and measurement system based on result and the belief and values of people in the organization has changed toward supporting development. This is the fundamental reason that government has chosen BPR as a great tool to achieve their total transformation of the civil services system. (Belete, 2008)

Since 1996/97 E.C., Ethiopia has been undertaking civil service reform programs where service delivery sub component among the others has better helped the organizations in improving the organization services speed. BPR gas started more clearly and broadly 1998/99 E.C. in some of the federal government organizations and in some regions and universities.

Organizations undertaking BPR has been going through lots of challenges where lack of reengineering leader and lack of adequate knowledge and skill for undertaking BPR were critical among the others. Reengineering leadership is critical factor in achieving BPR. Because of the fact that BPR entails system overhaul, major change in rules and structure, many critical decisions on resources, unlike other change programmes, it can never be succeeded without executive leadership. There was a time that many organization's leaders did not understand this fact and the BPR effort has delayed as a result.

The other major challenges were the misunderstanding on BPR from people in organization, including stakeholders. Some of the major misunderstanding points were:

- Thinking BPR is American culture oriented, it doesn't work in our environment
- BPR resulted in massive lay off
- BPR needs sophisticated technology
- BPR is for those developed countries who passed through industrial development and technologically advanced, we are too far behind the development, so we do not have resources, readiness to absorb BPR.(Belete, 2008)

## **2.14. Business Process Reengineering in Hospitals**

Today's competitive world demands effective and flexible strategies for meeting the ever-changing challenges to the healthcare industry. Several trends drive the need to reengineer healthcare delivery. Healthcare sectors are expanding, merging, and consolidating.

There is growing demand to decrease costs and improve efficiency and access with no measurable negative impact on quality. It is illogical to assume that old processes will meet future challenges. Instead, healthcare managers must look to other industries for proven approaches to become more cost-effective and efficient in the delivery of health services.

Application of process modeling and Business Process Reengineering (BPR) has enabled American manufacturing to regain its worldwide leadership position and can enable similar improvements in healthcare. BPR is a systematic approach to breaking complex functions into manageable, understandable processes by analyzing them and then implementing prioritized changes.

Despite the fact that the input, throughput, and output of healthcare processes are people, not machinery, re-engineering efforts can be successful in healthcare. The functional areas most amenable to BPR are the non-clinical areas, such as Billing, Supply Management, etc. The functions associated with these areas are similar across other industries, and reference models from other industries are often valuable. In clinical areas, some procedures or practices may take longer to evaluate, and there may be much more resistance to change. (<http://www.wizdom.com>)

With 80 percent of the expenses tied to patient care activities, hospitals and healthcare systems can garner substantial savings and improve clinical practices by better managing their labor, supplies, equipment, and facilities. The benefits of reinventing hospitals hold the tangible and realistic promise of radically reducing cost while dramatically increasing the quality of care provided (Harmon 1996).

Improving operational effectiveness may take many forms:

- Developing better Health Care delivery systems
- Eliminating waste

- Employing new capital equipment
- Empowering organizational learning
- Enhancing quality
- Expanding capacity
- Implementing improved processes
- Improving customer satisfaction
- Improving access
- Decreasing wait time for services
- Motivating employees
- Outsourcing non-strategic activities
- Streamlining resource management

## CHAPTER THREE

### 3. DATA PRESENTATION AND ANALYSIS

#### 3.1.Explanatory statements

This chapter focuses on the data presentation and analysis of the study. Here, the data collected through questionnaire, interview and document is presented and analyzed. For this purpose, the researcher distributed questioners for 100 clients and 32 employees. Moreover, the researcher conducted interviews with three BPR committee members, two out of which is, former medical director and current medical director of the hospital. From the total number of questionnaires (out of 132 questionnaires) that were fielded to clients and employees, out of 100 questionnaires, 98 (98 percent) were collected from clients and out of 32 questionnaires, 29 (91 percent) were collected from employees.

Beside the questionnaires and interview sample documents, which are directly related with the implementation of the BPR program of the SNNPR Government health sector, were collected and used for analysis.

Therefore, the data presented and analyzed here are based on

- Data collected through questionnaires from the total 129 respondents
- Data collected through interview from the two BPR committees
- Data collected from documents which provided information about what the hospital intended to achieve, how they define quality and stretched objectives and chart flow of the service

### 3.2 Analyzing the profiles of employee respondents

**Table2: Employees by sex, age group, education, work experience and job description**

S.N	General background of the respondents	Specific Socio-demographic characteristics of study units	Number of Respondents	Percent
1	Sex	Male	8	27.6
		Female	21	72.4
2	Age group	20-30	24	82.7
		31-40	2	6.9
		41-50	3	10.4
3	Educational background	Diploma	21	72.4
		Degree	2	6.7
		Medical Doctorate	6	20.7
4	Work Experience	1-5	22	75.9
		6-10	4	13.8
		10>	3	10.3
5	Job description	Medical doctor	5	17.2
		Clinical nurse	10	34.5
		Laboratory technician	3	10.3
		Pharmacist	2	6.9
		Mid wife	4	13.8
		Dentist	1	3.5
		Anesthetics	1	3.5
		MRT	3	10.3
Total			29	100

**Source:** Field survey, 2010

As can be seen from the Table S.N 1, out of 29 respondents, eight (27.6 percent) are male while the rest (72.4 percent) are female. When we calculate the age group of the respondents S.N 2, twenty four (82.7 percent) are 20-30 year, two (6.9 percent) are 31-40 year and the remaining three (10.4 percent) are 41-50 year. When we see their educational background, S.N 3, out of the entire 29 respondents, twenty one (72.4 percent) are diploma holder, two (6.7 percent) are degree holder and the rest of six (20.7 percent) are medical doctorate holder. The work experiences of the respondents S.N 4, out of 29 respondents twenty two (75.9 percent) are 1-5 year, four (13.8 percent) are 6-10 year and the remaining three (10.3 percent) are above 10 year.

The Table shows that to S.N 5, out of the total 29 respondents, five (17.2 percent) are medical doctor, ten (34.5 percent) are clinical nurse, three (10.3 percent) are laboratory technician, two

(6.9 percent) are pharmacist, four (13.8 percent) are midwife, one (3.5 percent) are dentist, one (3.5 percent) are anesthetics and the last three (10.3 percent) are MRT.

When we see their educational background more of the employee are diploma holder, here is no problem because according to SNNPR government health sector team charter(2001) are stated that except medical doctor, the other professions like nurse can be diploma or degree holders, so no problem regarding with their education.

### 3.3 Analyzing the profiles of client respondents

**Table3: Clients by sex, age group, service category**

S.N	General background of clients	Specific characteristics	Number of respondents	Percent
1	Sex	Male	67	68.4
		Female	31	31.6
	Age group	20-30	65	66.3
		31-40	16	16.3
		41-50	8	8.2
		>51	9	9.2
	Which service are you attending	Delivery	4	4.1
		Emergency	16	16.3
		In-patient	26	26.5
		Out-patient	31	31.6
		Surgical	11	11.2
		Ophthalmology	10	10.2
Total			98	100

**Source:** Field survey, 2010

When we see the respondents (client) sex S.N 1, out of the total 98 respondents, sixty seven (68.4 percent) are male while the rest of thirty one (31.6 percent) are female. When we look at the age group of the client S.N 2, out of the 98 respondents six sty five (66.3 percent) are 20-30

year, sixteen (16.3 percent) are 31-40 year, eight (8.2 percent) are 41-50 and the remaining nine (9.2 percent ) are above51. When we see which service are they attended S.N 3, out of the total 98 respondents, ten (10.2 percent) are delivery, ten (10.2 percent) are emergency, twenty six (26.5 percent) are inpatient, thirty one (31.6 percent) are outpatient, eleven (11.2 percent) are surgical and ten (10.2 percent) are ophthalmology.

### 3.4. Understanding of the conceptual framework of BPR

**Table4: Employee responses about the sufficiency of the training, manual preparation and distribution, massive layoff and continuity of the training.**

S.N	Item	Responses				
1	Adequacy of Training that provided for employees	Strongly disagree	Disagree	No opinion	Agree	Strongly agree
		N (%)	N (%)	N (%)	N (%)	N (%)
		6(20.7)	7(24.1)	4(13.8)	9(31)	3(10.3)
2	Briefing manual, paper and guideline were prepared and distributed	9(31.7)	11(37.9)	2(6.9)	5(17.2)	2(6.9)
3	BPR reform resulted in a massive lay off?	7(24.1)	5(17.2)	2(13.8)	8(27.6)	7(24.1)
4	Continuous training is provided	13(44.8)	9(31)	5(17.2)	5(17.2)	
5	I had adequate training on BPR	10(34.5)	6(20.7)	9(31)	5(17.2)	2(6.7)
Total		29(100)	29(100)	29(100)	29(100)	29(100)

**Source:** Field survey, 2010

As can be seen from the Table to the question of S.N 1 (sufficient training is provided for employees to understand the benefit, objectives and principles of the BPR), out of 29 respondents, six (20.7 percent) strongly disagree, seven (24.1 percent) disagree, four (13.8 percent) have no opinion whereas the nine (31 percent) agree and the remaining of three (10.3 percent) strongly agree. For the question of S.N 2, concerning the manual preparation and distribution, out of the total 29 respondents, nine (31 percent) strongly disagree, eleven (37.9 percent) disagree, two (6.9 percent) have no opinion and the rest of five (17.2 percent) agree and two (6.9 percent) strongly disagree. The responses obtained from the question of S.N 3, focusing on massive layoff, out of the total respondents, seven (24.1 percent) strongly disagree, five (17.2

percent) disagree, two (13.8 percent) have no opinion while the table shows that eight (27.6 percent) agree and the rest of seven (24.1 percent) strongly agree.

When we calculate the responses obtained from the question of S.N 4, about the continuity of training that is provided from the BPR committee concerning on the overall goals of BPR, out of 29 respondents, thirteen (44.8 percent) strongly disagree, nine (31 percent) disagree, five (17.2 percent) have no opinion whereas the remaining five (17.2 percent) agree and no strongly agree responses. When we look at their personal opinion regarding to the adequacy of the training S.N 5, out of the entire 29 respondents ten (34.5 percent) strongly disagree, six (20.7 percent) disagree, nine (31 percent) have no opinion but the remaining five (17.2 percent) agree and two (6.7 percent) strongly agree.

Data obtained from the interview shows that they would gave training to employee for three times, the first one is from the regional authority and the remaining two training gave by the hospital at the first stage of the pilot test and the final stage of the pilot test only. The manual was not sufficiently distributed to each employee.

As we have seen from the table, description, and interview, the responses can be summarized as follows.

- the training was not sufficient and not continuous
- insufficient material has been prepared and distributed to support the training
- Employees think and believe that the BPR resulted massive lay off.

In general, although Hammer and Champy provide a long list of why reengineering fails, no where do they include the prerequisite that no reengineering effort will succeed without first re-educating and re-training the people who will ultimately work with the new process. Belete et.al (2007) also further explains that since employees are placed in the process and a process owner is assigned as a manager, they must start with training.

Moreover, the training covers the detail of the new processes and the manual by which they guide their operation. This shows that the management should have to give sufficient training with supportive material, especially for these kinds of new concepts to increase their

understanding and awareness. To show more the insufficiency of the training we can see that more of the employee believes that BPR resulted in massive lay off, but BPR not resulted in massive layoff.

The concept says, as Hammer and Champy (1993) explain that downsizing means getting rid of people and joins to improve short-term financial results. Re-engineering has nothing in common with that kind superficial and relative response to problems. In general even if, sufficient training with supportive material/manual/ is necessary, the management does not provide sufficient training to employee to understand the concept of BPR well.

### 3.5. Service providers able to play their role

**Table5: Employee responses about appropriate placement, facilities of the hospital, number of staff, adequacy of medical supply and application of Information technology**

S.N	Item	Responses				
		Strongly disagree	Disagree	No opinion	Agree	Strongly agree
6	All staffs work on their appropriate positions	N (%)	N (%)	N (%)	N (%)	N (%)
		4(13.8)	3(10.3)	6(20.7)	9(31)	7(24.1)
		15(51.7)	13(44.8)	-	1(3.4)	-
7	Adequate facilities to service Providers	15(51.7)	13(44.8)	-	1(3.4)	-
8	Adequacy of staffs in your department	10(34.5)	7(24.1)	4(13.8)	8(27.6)	-
9	Adequacy and timely of medical supplies	14(48.3)	13(44.8)	-	2(6.9)	-
10	Application of IT in service delivery	15(51.7)	8(27.6)	1(3.5)	4(13.8)	1(3.5)
Total		29(100)	29(100)	29(100)	29(100)	29(100)

**Source:** Field survey, 2010

For the question of S.N 6, the appropriate placement of the employees, out of the total 29 respondents, four (13.8 percent) strongly disagree, three (10.3 percent) disagree, six (20.7 percent) have no opinion while the rest of nine (31 percent) agree and seven (24 percent) are strongly agree. When we look the response to the question of S.N 7, about the sufficiency of the facilities, out of 29 respondents, fifteen (51.7 percent) said strongly disagree, thirteen (44.8

percent) disagree while the remaining one (3.4 percent) agree and there is no the responses of no opinion and strongly agree.

When we calculate the responses concerning the adequacy of number of staff in their department S.N 8, out of the entire 29 respondents, ten (34.5 percent) strongly disagree, seven (24.1 percent) disagree, four (13.8 percent) have no opinion where as eight (27.6 percent). The table shows the responses for the question of the adequacy and timeliness of medical supplies, S.N 9, out of 29 respondents, fourteen (48.3 percent) strongly disagree, thirteen (44.8 percent) disagree, two (6.9 percent) agree and none were of no opinion or strongly agreed in their responses.

When we see the responses obtained from the question of S.N 10, regarding the application of IT in their department in time of rendering service, out of 29 respondents, fifteen (51.7 percent) strongly disagree, eight (27.6 percent) disagree, one (3.5 percent) have no opinion and the rest of four (13.8 percent) agree and one (3.5 percent) strongly agree.

When we look the responses obtained from the interview, the placement of the employee have been done on the bases of their educational background and willingness of the employee. This means the employee can do multi dimensional works e.g. nurses can be perform the midwife service. Regarding to the facilities they said that there is a shortage of equipment specially laboratory equipments and service rooms, due to the shortage of budget and inadequacy of facilities. For the question of adequacy of number of staff in the entire hospital, respondents stated that, there is no stable number of staff due to high turnover, which means the numbers of staff are fluctuating in each department.

Concerning of medical supplies, there is no enough and timely delivery of supplies. Moreover, there is no significant change has encountered following of the implementation of BPR, because the hospital has not yet started the newly purchasing plan due to budget shortage. For the question of the application of information technology, they said that, they are using telephone for arranging the service in other referral hospital, but they are not using telephone under their own departments for internal activities. According to them, they are also using computers to rendering services but it is not sufficient due to shortage of budget. Budget of the hospital is inadequate

because the hospital has not gotten funds from the government because of the new health care financing system, that hospitals should finance their total operation themselves.

As we can see from the table, description and interview the data will be summarized as follows

- As for the issue concerning ‘employee placement appropriateness’, the survey tells us there is no problem with the placement of the employee.
- When we see the sufficiency of the facilities, the facilities and equipments of the hospital are not adequate. Moreover, medical supplies are not sufficient and old. The reason of insufficiency of medical and facility is lack of budget
- The survey also tells us the numbers of staff are not adequate because of the high turnover.
- When we see the application of information technology in Yirgalem hospital, it is not sufficient and satisfactory, the reason behind is shortage of budget.

Improper placements of employee are difficult to enhance efficiency of services and even to the service provider because if the employees are not familiar with the specified job, it will be difficult to play their role well. Therefore, the placements of the employee should be based on their competency. Belete et.al (2007) in their working manual / checklist describe multi dimensional skilled individual or group of people are assigned to perform the process from start to finish. Moreover, performers are placed on the steps and jobs sequentially ordered and organized in the process based on their competency. In Yirgalem Hospital employee placement process, the placement is not a challenge or a problem.

In general, as we see from different literature, BPR has a number of advantages. Rivard (1998) also further explain this, according to him the benefit of BPR are cost reductions, increases in productivity, a higher quality of goods and services offered, and a simplified organizational structure. Nevertheless, to gain these advantages, a specific set of conditions must be met.

Bashein et al. (1994) outlines the positive preconditions for BPR success. Sufficient budget is one of the positive preconditions. The data tells us Yirgalem Hospital has insufficient budget to fulfill the shortage of facilities and medical drugs. This is the big challenge to the hospital in order to give service effectively.

As Homa (1995) explained that information, technology and its position in BPR have matured. The simple automation of existing processes should be avoided. The objective is to achieve efficient redesigned processes and apply information technology to achieve further improvements. Information technology is a key enabler to BPR programs. Using information technology is the main factor to deliver the intended service timely and fast, but when we see in Yirgalem Hospital, the usage of information technology is not sufficient. This is the great challenges to rendering services because, as stated above, IT is a key enabler to BPR programs

### 3.6. Technical problems from preparation up to implementation

**Table6: Employee responses about preparation for implementation, problems during pilot test, whether problems solved enters into implementation and whether orientation performed to all staff.**

S.N	Item	Responses				
		Strongly disagree	Disagree	No opinion	Agree	Strongly agree
11	good preparations before enter into the full implementation	N (%)	N (%)	N (%)	N (%)	N (%)
		10(34.5)	11(37.9)	6(20.7)	2(6.9)	-
12	pilot test before full implementation	2(6.9)	6(20.7)	7(24.1)	10(34.5)	4(13.8)
13	problems during the pilot test	3(10.3)	3(10.3)	8(27.6)	5(17.2)	10(34.5)
14	Problems have been solved during implementation	10(34.5)	10(34.5)	7(24.1)	1(3.5)	-
15	orientation during implementation	3(10.3)	11(37.4)	4(13.8)	7(24.1)	4(13.8)
16	the pilot tests were adequate and full coverage	9(31)	8(27.6)	4(13.8)	7(24.1)	1(3.5)
Total		29(100)	29(100)	29(100)	29(100)	29(100)

**Source:** Field survey, 2010

As can be seen from the table, the responses for the question of S.N 11, about the preparation of the hospital before entering to the full implementation, out of 29 respondents, ten (34.5 percent) strongly disagree, eleven (37.9 percent) disagree where as the remaining 6(20.7%) have no opinion and two (6.9 percent) agree. When we look at whether the pilot test has been done or not

S.N 12, out of the total 29 respondents, two (6.9 percent) said strongly disagree, six (20.7 percent) disagree, seven (24.1 percent) have no opinion while the rest of ten (34.5 percent) agree and four (13.8 percent) said strongly agree.

When we calculate the responses that concern on the existence of problem during the pilot test S.N 13, out of the 29 respondents, three (10.3 percent) strongly disagree, three (10.3 percent) disagree, eight (27.6 percent) have no opinion whereas five (17.2 percent) agree and ten (34.5 percent) strongly agree. When we come to the question of whether these problems has been solved during the full implementation S.N 14, out of the total 29 respondents, ten(34.5 percent) strongly disagree, ten (34.5 percent) disagree, seven (24.1 percent) have no opinion, but one (3.5 percent) agree

When we see the responses for the question of S.N 15, focusing on orientation, out of the total respondents, three (10.3 percent) strongly disagree, eleven (37.9 percent) disagree, four (13.8 percent) have no opinion while the rest of seven (24.1 percent) agree and four (13.8 percent) strongly agree. For the question of S.N 16, about their personal opinion towards the adequacy of the training out of 29 respondents, nine (31 percent) strongly disagree, eight (27.6 percent) disagree, four (13.8 percent) have no opinion, the remaining seven (24.1%) agree and one (3.5 percent) strongly agree.

When we look at the data obtained from the interview about their preparations before enter into the full implementation of the BPR, they would not well prepared in preparation of manual, action plan and communication plan, especially in office arrangement and resource decision. The pilot test was conducted in Yirgalem hospital for three consecutive months. During the pilot test, they observed that some problems like understanding, the employee understood the BPR process as means of employee layoff. As a result there were resistance to the BPR Process, in addition to the problem of rooms and laboratory facilities. All these problems were not solved when entering into the full implementation; except resolving the resistance of the employees to some extent.

As we can see from the interview and document, the works of the hospital was organized based on customer need. When we see what outcomes the hospital are intend to achieve, the hospital are designed an objective (stretched objective) to achieve e.g. one patient should have to get

service within two hours, for inpatient service seeker within two weeks the bed should be available to them, for emergency service within five second the patient should get the service.

The management of the hospital wants Yirgalem hospital is to be one of the best service provider hospitals in Ethiopia. When we look at the re-engineering team, the re-engineering teams were SNNPR president, medical board member- physician from each hospitals and each hospital head. The hospital also identifies the core process and support process, the core process are contain the six case team namely; Delivery Case Team, Emergency Case Team, In-Patient Case Team, Outpatient Case Team (ART service is under this case team), Surgical Case Team and Ophthalmology Case Team. Purchasing, budgeting and human resource activities are designed under support process.

As can be seen from the table, description, interview and document the responses are summarized as follows

- the hospital was not well prepared before entering in to the full implementation
- the hospital performed a pilot test for three months
- there were problems during the pilot test, but are not solved
- the works of the hospital were organized based on customer needs
- the hospital has identified what outcome will achieve
- the re-engineering teams are formed by regional authority and each hospital professional
- The core process of the hospital classified in six case teams and the support process classified into three categories.

Belete et.al (2007) in their working manual stated two major issues about preparation before implementation these are action plan( testing of the new process, the employees redeployment, office arrangement, and resource decision, communication plan etc.) and manual that helps the new process be precisely tested and implemented. In light of this Yirgalem hospital did not well prepared.

Pilot testing is the phase when the new processes designed are tested on the ground. This gives information on whether the designed processes' performance is compatible to the set service delivery time, quality standard, cost and quantity. Variations observed during testing can be adjusted back to the process designed. From this point of view Yirgalem hospital performs a

three-month pilot testing and there were a problem, but those problems are not solved when entering to the full implementation.

This colludes with the aim of pilot testing. As Belete et.al(2007) explain the aim of pilot testing in their working manual, the objective of pilot testing is to see the areas of inconveniencies and then refine in a way the proceeds meets the needs of its customers. Here the main challenge is unsolved the problem which observed during the pilot test

According to the BPR principles, the work should be organized around outcome, not tasks. Furthermore, in order to organized around outcome there are three approaches, as Linden (1994) describes Organize around the customers, Organize around the product, and Organize around the process. When we see Yirgalem hospital the work is organized based on customers, so no problem regarding this.

Homa (1995) said re-engineering team members must be credible and influential people within the organization. Their participation reinforces the organization's seriousness by its preparedness to second such valuable staff. When we see the re-engineering team in Yirgalem hospital, they are medical doctors, heads of the hospital, SNNPR region president these are more familiar to the process, influential and credible.

The emphasis of re-engineering should be on core business process, rather than functional departments. Krajewski (1999) further explained that a process selected for re-engineering should be a core process. When we look at the core process of Yirgalem hospital, those that are stated above is core business process to the hospital. Linden (1994) said support processes mainly meet important need for internal customer. In light of this when we see Yirgalem hospital support process; they are actually meeting the need for internal customer.

### 3.7. Business Process Re-engineering and its Change- Client responses

**Table7: Client response about other public hospitals**

S.N	Item	Response category	N (%)
17	Did you visit other hospital	Yes	58(59.2)
		No	40(40.8)
Total			98(100)

*Source:* Field survey, 2010

As the Table shows that to the question of S.N 17, out of the 98 respondents, fifty eight (59.2 percent) visited other public hospitals while forty (40.8 percent) did not visit.

**Table 8: Cost of the Hospital**

S.N	Item	Response category	N (%)
18	Cost relative to other hospital	expensive	30(51.7)
		cheap	28(48.3)
Total			58(100)

*Source:* Field survey: 2010

When we calculate the costs of getting service S.N 18, out of the 58 respondents, who experienced with other public hospitals, thirty (51.7 percent) said expensive while the remaining of twenty eight (48.3 percent) said cheap.

**Table9: Speed of the service i.e. time taking for taking out card**

S.N	Item	Responses		
19	Waiting time for taking out card before BPR	Very short	Medium	Very short
		N (%)	N (%)	N (%)
		26(26.5)	42(42.9)	30(30.6)
20	Current waiting time for taking out card	35(35.7)	42(42.9)	21(21.4)
Total		98(100)	98(100)	98(100)

*Source:* Field survey, 2010

When we look at the time of taking out card before the BPR implementation S.N 19, out of the 98 respondents, twenty six (26.5 percent) said short, forty two (42.9 percent) said medium while the rest of thirty (30.6 percent) said very long. When we see the time of taking out card now S.N 20, out of 98 respondents, thirty five (35.7 percent) said very short, forty two (42.3 percent) said medium other twenty one (21.4 percent) said very long.

**Table 10: Punctuality, time waiting for visiting doctor and their responsiveness i.e. quality of the service**

S.N	Items	Responses	N (%)
21	Are the service providers punctual	Yes	71(72.4)
		No	27(27.6)
22	The waiting time for visiting medical doctors	Very short	25(25.5)
		Medium	17(17.3)
		Very long	56(57.2)
23	The responsiveness of the service providers	Excellent	35(35.7)
		Very good	19(19.4)
		Good	17(17.3)
		Medium	16(16.3)
		Not good	8(8.2)
		Very bad	3(3.1)
Total			98(100)

*Source:* Field survey: 2010

As can be seen from the table the responsiveness of the service providers to the patient S.N 23, out of 98 respondents, seventy one (72.4 percent) said excellent, nineteen (19.4 percent) said very good, seventeen (17.3 percent) said good, sixteen (16.3 percent) said medium while the remaining eight (8.2 percent) said not good and 3(3.1%) said very bad.

As we can see from the table to the question of S.N 21, out of the total 98 respondents, seventy one (72.4 percent) said the service provider are punctual while the rest of twenty seven (27.6 percent) said No, the service providers available in their time. When we look at the waiting time for visiting medical doctors S.N 22, out of 98 respondents, twenty five (25.5 percent) said very short, seventeen (17.3 percent) said medium while the rest of fifty six (57.2 percent) said very long

**Table11: Change compared before Business Process Re-engineering**

S.N	Item	Responses	N (%)
24	Change has registered compared to before BPR	Yes	57(58.2)
		No	19(19.4)
		No opinion	22(22.4)
<b>Total</b>			98(100)

*Source:* Field Survey: 2010

When we calculate the changes of the hospital service than compared to before BPR implementation S.N 24, out of the total 98 respondents, fifty seven (58.2 percent) said Yes, nineteen (19.4 percent) said No while the remaining twenty two (22.4 percent) have no opinion.

When we see the costs of the hospital, according to the interview they admitted that the cost of the hospital is expensive and no change has encountered following the implementation of BPR because of the hospital has no other financial alternative to finance its operation, therefore, to get adequate finance the hospital should increase the service charge

According to the interview, the hospital measure the quality of the service on the bases of time standards e.g. to be called quality service the patient should get service and leave the hospital within 2-3 hours for outpatient, for delivery service the patient within five minute should get the service and within the setting time framework the patient should have to visit the doctor. Beside this, practically it so difficult to rendering the service within the planned time because there is shortage of workforce, laboratory problem and inconvenience of service rooms

When we see the interview, the hospital has registered change in some areas, e.g. if one emergency patient arrives in Yirgalem hospital within five second he will get service and in parallel the process of taking out card will be performed by runner, separation of emergency entrance door with other doors, comfortable of the patient, giving priority to service rather than fee and establishing a triage system- a system that is used to determine the emergency case from other normal case this and other changes are registered.

As can be seen from the table and description the responses summarized as follows

- The cost of the hospital is expensive, due to no other means of finance.
- The time of taking out card has no changed compared with before BPR implementation
- The service providers available in their time, but the waiting time to visit doctor is high
- The responsiveness of the service providers to the patient is very good,

In general, the goal of business process re-engineering is as being 'to achieve dramatic improvements in business measures of performance by radically changing the design processes.' Hammer and Champy (1993) also further explain that, the fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical, contemporary measures of performance, such as cost, quality, service and speed. Moreover, a number of advantages or benefits have been attributed to BPR as cited by Rivard, (1998): (Davenport and Beers 1995) stated that: cost reductions, increases in productivity, a higher quality of goods and services 'offered, and a simplified organizational structure.

One of the BPR critical contemporary measurements is cost; giving service with a minimum cost. Rivard (1998) also said the benefit attributed to BPR is cost reductions. Nevertheless, the costs of Yirgalem hospital are high relative to other public hospitals, so the BPR not resulted in cost reduction.

The main objective of BPR is to speed up the service Rivard (1998) further explain that BPR is known to produce highly positive results for firms and clients, including significant reductions in costs, errors, and times. When we see the waiting time for Yirgalem hospital has no change the waiting time for taking out card before BPR. BPR has not change the waiting time for taking out card

When we see the quality on the bases of time standard, no significant changes made following the implementation of BPR, but one of the benefits of adopting BPR is to offer a higher quality of good and service. Nevertheless, the service of the hospital is changed compared to the time before the implementation of the BPR.

**3.8. Whether the program introduced in a way that ensures the enhancement of service delivery or not**

**Table12: Open communication with the management and the employee; BPR programs adjusted based on changing in the organization environment; periodical discussion with the different groups: the introduction of BPR is well designed and followed up by managers**

S.N	Item	Responses				
		Strongly disagree	Disagree	No opinion	Agree	Strongly agree
25	Open communication with the management and the employee	N (%)	N (%)	N (%)	N (%)	N (%)
		13(44.8)	11(37.9)	2(6.9)	2(6.9)	1(3.5)
		5(17.2)	3(10.3)	7(24.1)	11(37.9)	3(10.3)
27	periodical discussion with the different groups	17(58.6)	5(17.2)	3(10.3)	3(13.3)	1(3.5)
28	The introduction of BPR in your organization is well designed and followed up by managers	10(34.5)	7(24.1)	5(17.2)	6(20.7)	1(3.5)
Total		29(100)	29(100)	29(100)	29(100)	29(100)

**Source:** Field survey, 2010

As can be seen from the table to the question of S.N 25, out of 29 respondents, thirty (44.8 percent) said strongly disagree, eleven (37.9 percent) said disagree, two (6.9 percent) said have no opinion while the rest of two (6.9 percent) said agree and one (3.5 percent) said strongly agree. When we see the responses obtained from the question of S.N 26, BPR designed to change the organization in better way, out of the total respondents, five (17.2 percent) strongly disagree, three (10.3 percent) disagree, seven (24.1 percent) have no opinion the remaining of eleven (37.9 percent) agree and three (10.3 percent) strongly agree.

When we look at the responses to the question of S.N 27, about the existence of regular communication with stakeholders, customers and employees, out of 29 respondents, seventeen

(58.6 percent) strongly disagree, five (17.2 percent) disagree, three (10.3 percent) have no opinion whereas the rest of three (10.3 percent) agree and one (3.5 percent) strongly agree. When we calculate the responses obtained for the introduction of BPR in your organization is well designed and followed up by managers at each level S.N 28, out of the entire 29 respondents, ten (34.5 percent) said strongly disagree, seven (24.1 percent) disagree, five (17.2 percent) have no opinion while the remaining six (20.7 percent) agree and one (3.5 percent) strongly agree.

The data obtained from the interview shows that, the means and culture of communication have improved. The management held regular meeting with employees and weekly meeting with management committee.

As can be seen from the table, description and interview the responses are summarized as follows

- Although, the BPR committee said the means and culture of communication has improved but as the data obtained from the employee shows that, the employee do not agree with the existence of open communication between management and employee.
- Beside the communication with employee, the management not communicate regularly with the stockholder and customers
- The data shows that, BPR programs are adjusted based on the prevailing condition. Nevertheless, not designed well and followed up manager.

In general, communication with stakeholders, customers and employees is a vital tool to ensure the enhancements of service delivery, as Homa (1995) further explain that communication with interest groups inside and outside the organization is necessary to prepare for a business process re-engineering program, to sustain organizational tolerance, change, and understanding once it has commenced. Each internal and external stakeholder group should have focused communication. This is an enduring requirement. Inadequate communication may switch off one of the organization's vital support systems during a time of rapid change. Internal and external communication is a vital element of change program and one that is frequently under-resourced and underestimated.

In addition to this, the manager has the responsibility of follow-up in order to achieve the objectives of BPR. Belete et.al (2007) also said process owner becomes responsible for the end-to-end process management and result.

Although, BPR requires strong communication with stakeholders, customers and employees but the management are weak to do this, which means the management lost the key tool to enhance the service delivery through communicate with internal and external stakeholders. Without communication it could be difficult to ensure the enhancements of the service delivery. Moreover, Yirgalem hospital lacks of follow up by manager this is a major challenge to enhance service delivery.

### 3.9. Interim coaching and progress review

**Table13: The introduction of BPR create an opportunities for both manager and employee and addresses performance gaps**

S.N	Item	Responses				
		Strongly disagree	disagree	No opinion	Agree	Strongly agree
29	BPR creates an opportunities for both managers and employees	N (%)	N (%)	N (%)	N (%)	N (%)
		7(24.1)	12(41.4)	6(20.7)	3(10.3)	1(3.5)
		10(34.5)	9(31)	6(20.7)	3(10.3)	1(3.5)
30	Your organization addresses your performance gaps	10(34.5)	9(31)	6(20.7)	3(10.3)	1(3.5)
Total		29(100)	29(100)	29(100)	29(100)	29(100)

*Source:* Field survey, 2010

For the question of S.N 29, the table shows that, out of the total 29 respondents, seven (24.1 percent) strongly disagree, twelve (41.4 percent) disagree, six (20.7 percent) have no opinion while the remaining three (10.3 percent) agree and one (3.5 percent) strongly agree. When we calculate their responses for the question of S.N 30, out of 29 respondents, ten (34.5 percent) strongly disagree, nine (31 percent) disagree, six (20.7 percent) have no opinion where as three (10.3 percent) agree and one (3.5 percent) strongly agree.

The interview shows that the performance gaps of the employee would try to fill by training with cooperative NGO e.g. after the BPR implementation they gave two terms of training to thirty people.

The responses obtained from the questionnaire and interview summarized as follows;

- BPR did not create organizational learning
- the performance gap fulfilled by training

Homa (1995) said ability to learn from an organization’s own early re-engineering experience and assimilate lessons into subsequent work is important. Learning can accelerate progress and avoid unnecessary and potentially damaging error. However, in Yirgalem hospital there is no organizational learning, this restrict the employee to learn from their success and challenge.

When there is a performance gap in Yirgalem hospital employees, the management tries to fulfill this gap by giving training, but this is wrong in relation to BPR concept, BPR not support training as a way of fulfill the performance gap but education. Hammer and Champy (1993) said in companies that have re-engineered, the emphasis shifts from training to education- or to hiring the educated.

### 3.10. Challenges to improve performance of service

**Table14: BPR has improved the service delivery performance of the organization,**

S.N	Item	Responses	N (%)
31	Do you believe that BPR has improved the service performance of the organization	Yes	12(41.4)
		No	17(58.6)
<b>Total</b>		29	100

*Source:* Field survey, 2010

For the question of S.N 31, about whether the BPR that was introduced in your organization has improved the performance of the organization service or not, out of the total 29 respondents, twelve (41.4 percent) said yes while the other seventeen (58.6 percent) said no. when we see their reason behind why not the BPR improved the performance of the organization. According to the data obtained from the employee shows that material shortage; shortage of manpower; low

communication with the management; management commitment; resistance of employee due to salary inadequacy, workload, inconvenience of shift time, no education chance; and shortage of budget are listed as the main reasons.

To gain the advantages of BPR, a specific set of conditions must be met based on the BPR consultants' interviews, Bashein et al. (1994) outline the positive preconditions for BPR success as: Senior Management Commitment and Sponsorship; Appropriate People Participating; and Sufficient Budget. Homa (1995) also said communication with internal and external stakeholders; Redesigned pay and reward system should be designed. These all has a big role in order to achieve the intended objective of BPR.

## CHAPTER FOUR

### 4. SUMMERY AND RECOMMENDATION

#### 4.1. Summary of the findings

The objective of the present research is assessing the challenges and opportunities of Business Process Reengineering for enhance service delivery, identified the major changes brought by BPR in Yirgalem hospital, and to recommend the possible solutions for the identified challenges. To achieve the objective of the research, the research questions were formulated.

In order to answer the basic research questions appropriate data collection method were employed. The main data collection tools used in this research was questionnaires, interview and document analysis. Questionnaires prepared for both employee and client. Moreover, interview were conducted with BPR committee and documents gathered from the SNNPR government health sector office. The data analyzed using percentage and tables. Therefore, the following findings are investigated based on the above data sources. The findings classified into two categories, via challenges and changes. The findings are listed as follows;

#### Challenges for service delivery

1. Lack of understand/awareness of the employee about the benefits, objectives and principles of the BPR. The data shows that, the employee has negative attitude about BPR, they see BPR as a means of lay off. Moreover, the training was not sufficient and was not supported by briefing manuals, papers and guidelines that contain the goals and principles of BPR and no continuous training was provide.
2. Inadequacy of facilities and equipments of the hospital: The data shows, the budget of the hospital is inadequate and there is insufficient room construction. This hamper the service render to give the service efficiently. Beside this, the placement of employee is correct, as the data shows the placement done by their competency and willingness
3. No sufficient medical supply: As we can seen from the data, there is a problem in supply and timely of medical drug. The budget of the hospital limited the capacity of the hospital

regarding medical supply, beside this, the new purchasing plan not yet implemented, this makes difficulty of the timely supply of the medical

4. Insufficient work force: As can be seen the data, because of the high turnover rate of employee there is inadequate work force.
5. Problem of using Information technology: As we can seen from the data, the application of information technology in Yirgalem hospital is not sufficient, the reason behind is shortage of budget.
6. Inadequate preparedness: The hospital management body not well prepared the manual and action plan for implementation purpose.
7. Unsolved problems at early stage: From the data obtained, the management of the hospital performed pilot test and during the pilot test some challenges has been identified. However, those identified challenges /problems have not get the right cures when enter in to the full implementation.
8. Poor communication: The management of the hospital is not regularly communicate with employees, stockholders and customers
9. Limited Commitment among Some Organizational Leaders: Lack of such commitments and poor communication has been revealed through: inadequate follow up and weak support.
10. No organizational learning: As we can seen the data, in Yirgalem hospital the ability to learn from an organization's own early re-engineering experience, challenges. Problems, success and assimilate lessons into subsequent work is week
11. Lack of formal education: As the data shows, the performance gaps of the employee in Yirgalem hospital fulfilled by training, but the rate giving to formal education is low.

12. Resistance of employee: The data shows that, salary is inadequate with relation to workload, the shift time is inconvenience to employee, and the formal education chance is low.

#### Changes/Achievements encountered by BPR

13. Changes in service delivery: As we can seen from the data, services of the hospital has changed to some extent, the hospital applied triage and runner systems and separate entrance door.

14. Service renders responsiveness: As the data shows the service render responsiveness to the patient is very good. Nevertheless, there is no significant change in the contemporary measures of cost, quality and speed: The data shows, the cost of the hospital is expensive relative to other public hospitals, because of no other means of financing the operation, in addition, the waiting time for taking out card has no change compared with before implementation of BPR. Moreover, the waiting time to visit the doctor is high

## 4.2. Recommendation

To improve the efficiency of service delivery in Yirgalem hospital, the observed challenges should have to be solved. Here, under this section some recommendation is forwarded to alleviate the challenges. The recommendation is as follows;

- ❖ Sufficient and continuous training focusing on the benefits, objectives and principles of BPR should have to be given by BPR committee to improve their awareness to the employee. In addition to this, the manuals, papers and guidelines concerning the BPR benefits, objectives and principles must be prepared and distributed to each employee. Moreover, the management should undertake periodical assessment of their understanding and shall prepare the training program.
- ❖ The managements of the hospital should fulfill the shortage of facilities and equipments and build service rooms, by purchasing from their own limited budget or finding other donating organization like NGO. In addition to this, the hospital should use IT intensively
- ❖ The hospital should conduct research/ assessment why the employees leave the hospital rapidly. Beside this, as it knows the service of the hospital is related to life so the service should not interrupt/ stop a minute. Therefore, if they can retain the employee otherwise hire new professional.
- ❖ The communication among the management and the employee, stakeholders and client should be improved. The management should adjust periodical communication program.
- ❖ The leaders of the hospital has the responsibility of successfully implementation of the program, the leadership at SNNPR government has made discussions with the top leadership of the organizations and reached at consensus.
- ❖ The hospital management should design the shift time, which is convenient to the employee, and pay adequate salary or bonus related with their level of workload, beside this, give the chances to the employee to develop their knowledge through formal education on the bases of their seniority.

- ❖ When the facilities adequate and the work force are sufficient, the waiting time for taking out card and visiting doctor will be good. Therefore, hiring work force and purchasing facilities and equipments is mandatory.
- ❖ The costs of rendering service should be reduced; the hospital management must be strong in searching another means of financing the operation of the hospital e.g. NGO and other donated organization. Beside of this, the SNNPR government should have to subsidize the hospital to some extent.
- ❖ The management of the hospital builds internal and external benchmarking allows the transfer of learning from one re-engineering process to another in the same organization. In addition to this, create conducive environment.

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# Appendices

## *Appendices 1*

**Addis Ababa University**  
**Department of Public Administration and Development Management**  
**School of Graduate Studies, Faculty of Business and Economics**

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Masters in Public Administration Thesis Project  
Fitih Wondmneh

Questionnaire to be completed by employees (Medical Doctor, Clinical nurse, Laboratory technician, Pharmacy technician, Mid wife, Dentist, Anesthetist, Imaging)

Dear Participants

The objectives of this questionnaire is to gather relevant data, which may help to the study of the challenges and opportunities that are faced during undertaking of business process re-engineering

You are not supposed to write your name. All information is being sought for the intended use and shall be kept strictly confidential.

### 1. Personal profile of the respondents

Please tick mark on your appropriate responses.

- 1.1 Sex: Male \_\_\_\_\_ Female \_\_\_\_\_
- 1.2 Age: 20-30 \_\_\_\_\_ 31-40 \_\_\_\_\_ 41-50 \_\_\_\_\_ 50 and above \_\_\_\_\_
- 1.3 Education: Certificate \_\_\_\_\_ Diploma \_\_\_\_\_ B.A/B.SC \_\_\_\_\_ M.A/M.SC \_\_\_\_\_  
PHD \_\_\_\_\_
- 1.4 Work experience in years: 1-5 \_\_\_\_\_ 6-10 \_\_\_\_\_ 10 and above \_\_\_\_\_
- 1.5 Job description: Medical Doctor \_\_\_\_\_ Clinical nurse \_\_\_\_\_ Laboratory technician \_\_\_\_\_  
Pharmacy technician \_\_\_\_\_ Mid wife \_\_\_\_\_ Dentist \_\_\_\_\_ Anesthetist \_\_\_\_\_ Imaging \_\_\_\_\_
2. Please, tick on No 1 if you **strongly disagree**; No 2 if you **disagree**; No 3 if you **do not have opinions**; No 4 if you **agree**; No 5 if you **strongly agree**.

<b>Survey Questions</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1. Sufficient Training is provided for employees to understand the benefit, objectives and principles of the BPR					
2. Briefing manual, paper and guideline were prepared and distributed to describe the objectives, benefits and principles of BPR for both the managers and service renders					
3. Do you think that the BPR reform resulted in a massive lay off?					
4. Continuous training is provided from the BPR committee about the overall goals of BPR					
5. All staffs work on appropriate positions , i.e. they are placed in a position which are according to their educational background and experience					
6. There are sufficient facilities to rendering services					
7. The numbers of staffs under your department is adequate					
8. The medical supplies are adequate and timely					
9. Your department used information technology in rendering service					
10. I have adequate training on BPR that equips me better for the job					
11. There have been good preparations before we enter into the full implementation of the BPR					
12. There were a pilot test before full implementation					
13. There were a problem during the pilot test					
14. The entire problem has been solved during the full implementation.					

15. During the implementation process there were orientation to all staff					
16. I believe the pilot test were adequate and full coverage					
17. There are open communication with the management and the employee					
18. BPR programs are adjusted based on the prevailing condition.					
19. There is a periodical discussion with the different stakeholders, customers and employees focusing on BPR					
20. The introduced of BPR creates an opportunities for both managers and employees to learn from their success, challenges and problems that they face in their day to day work					
21. Your organization addresses your performance gaps i.e. if your performance does not meet desired performance standard, he/she takes actions, which includes for example coaching. mentoring, formal education...etc					
22. The introduction of BPR in your organization is well designed and followed up by managers at each level					

23. Do you believe that the BPR that was introduced in your organization has improved the performance of the organization service? \_\_\_\_\_

24. If your answer is not what are the reason behind it \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
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25. What is to be done to properly implement BPR with its ultimate objectives to improve service Delivery?

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26. If you have any additional information, please state it.

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*Thank you for your cooperation*

## **Appendices 2**

**Addis Ababa University**  
**Department of Public Administration and Development Management**  
**School of Graduate Studies, Faculty of Business and Economics**

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Masters in Public Administration Thesis Project  
Fitih Wondmneh

The objective of this interview is to gather relevant information that helps to the study of assessing the challenges and opportunities that are faced undertaking BPR at the enhancement of the service. If the answer is 'yes' or 'no' tick the space provided, if it time in question fill in the number weeks (2W) or months (2m)

Interview questions	Time	Yes	No
Did you perform the pilot test			
How long the pilot test takes place			
What problem has been observed during the pilot test			
Are the problems solved when the full implementation undertaking			
How the work is organized, based on what?			
Have you gave training to employees			
Supportive material have been used in order to support the training			
Are the service provider placed in their proper place			
Were the BPR and the quality of the service good?			
Was BPR and the speed of the service good			
Was the BPR and the costs of the service reasonable			
Has the BPR improved the service of the hospital			
Has the material and drug supplies improved as a result of the BPR			
Has the BPR improved the means of communication in the hospital			
What outcomes are intended to achieve			
Were activities undertaken to fulfill the performance gap			
Where the management want to see the hospital in the future			

Do you use IT to the support the provision of service			
Who are the reengineering teams			

Additional open-ended questions

1. What are the core and support process in the hospitals:

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2. How is the service rooms and facilities :

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3. How is the budget of the hospital? Is that adequate?

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4. What is your opinion/recommendation to the observed problems:

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*Thank you for your cooperation*



9. The waiting time for taking out card before BPR is? Very short\_\_\_ Medium\_\_\_\_\_ Very long\_\_\_
10. The waiting time for taking out card is now: Very short\_\_\_ Medium\_\_\_\_\_ Very long\_\_\_
11. Are the service providers available in their time? Yes\_\_\_\_\_ No\_\_\_\_\_
12. The waiting time for visiting medical doctors is? Very short\_\_\_ Medium\_\_\_\_\_ Very long\_\_\_
13. The responsiveness of the service renderer to the patient  
Excellent\_\_\_ Very good\_\_\_ Good \_\_\_ Medium\_\_\_ Not good\_\_\_ Very bad\_\_\_
14. Is there a department which accept complains Yes\_\_\_\_\_ No\_\_\_\_\_
15. Handling and accepting of complains: Excellent\_\_\_ Very good\_\_\_ Good \_\_\_ Not good\_\_\_

*Thank you for your cooperation*

# DECLARATION

I, the undersigned, declare that this thesis is my original work and has not been presented for a degree in any other university and that all sources of material used for this thesis have been duly acknowledged

**Declared by:**

Name: FITIH WONDMNEH

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

**Confirmed by Advisor:**

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Signature: \_\_\_\_\_

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