

**IMPLEMENTATION OF BUSINESS PROCESS  
REENGINEERING:  
AN ANALYSIS OF KEY SUCCESS AND FAILURE  
FACTORS**

**(A case study of Ethiopian Revenues and Customs Authority, Mekelle Branch)**

Research Project submitted to Mekelle University, Department of Accounting and Finance for the award of the Degree of Master of Science in Finance & Investment

By

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June, 2010

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## DECLARATION

I, Dereje kenea Goboto R.N<sub>0</sub> CBE/PR0018/01, hereby declare that the project work entitled *“Implementation of Business process reengineering; An analysis of key success and failure factors, a case study of Ethiopian Revenues and Customs Authority Mekelle Branch”* submitted by me for the award of the masters degree in Finance and Investment to the College of Business and Economics, Mekelle University, through the Department of Accounting and Finance ,is original work and the matter embodied in this project work has not been submitted earlier for award of any degree or diploma ,fellowship , or other similar titles of any other University or institution.

Name of the student: Dereje kenea

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

Date: June, 2010

*Place: Mekelle*

## **CERTIFICATION**

I certify that this project work titled “ *Implementation of Business process reengineering; An analysis of key success and failure factors- a case study in Ethiopian revenues and customs Authority Mekelle branch*” is the bona-fide work of Mr. Dereje kenea Goboto who carried out the research under my guidance.

Certified further ,that to best of my knowledge the work reported here in doesn’t form part of any other project report or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

Signature\_\_\_\_\_ June, 2010

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Dereje kenea

June 2010

## ABSTRACT

*This study of Implementation of Business process reengineering (BPR): an analysis of key success and failure factors – A Case Study of Ethiopian Revenues and Customs Authority Mekelle branch is an attempt to explore the effectiveness of the practices in the organization. Prior studies made on the organization have indicated inefficient organizational structure and unnecessarily complicated procedures that had permitted insufficient service delivery, corruption, smuggling and serious tax evasion in the organization. These problems have depressed the attempt of the organization to be successful in achieving its objectives. To increase its efficiency, the organization has implemented BPR recently. However, the effect of the reengineering on quality service, employee satisfaction, and speed has not been so far investigated.*

*The major theme of the research was to analyze the key success and failures factors while implementing BPR in the tax collection procedures, customer service, and employee satisfaction in the Ethiopian Revenues and Customs Authority Mekelle branch (ERCA). To attain this objective, the study used descriptive method. Purposive sampling method was used because it is the best method to collect relevant information from the knowledgeable individuals willing to provide it. Primary data was the largest portion of information source and collected from managers, employees and customers. To collect primary data the study used questionnaire. Discussion was made with management of the organization to obtain key information. Finally, based on the findings, the organization's Business process reengineering (BPR) implementation is just an improvement, not radical change in terms of tax collection procedures, customer service, employees' beliefs and cultural change. Using other method of study, the researcher recommend the researchers to study the impact of Business process reengineering (BPR) implementation on cost reduction, the impact of Business process reengineering (BPR) on tax collection performance of the organization and the impact of Business process reengineering (BPR) in reducing tax evasion and avoidance.*

# ACRONYMS

**BPR** - Business Process Reengineering

**BSC** - Balanced Score Card

**CPI** - Continuous Process Improvement

**ERCA** - Ethiopian Revenues and Customs Authority, Mekelle branch

**ICT** - Information and Communication Technology

**IPMS** - Integrated Performance Management System

**IT** - Information Technology

**MBO** - Management by Objective

**MOR** - Management by Objective and Result

**NR** - Number Respondent

**OJT** - On the Job Training

**PBM** - Performance-Based Management

**SIGTAS**- Standard Integrated Government Tax Administration System

**TIN**- Taxpayers Identification Number

**QMS** - Quality Management System

**SPC** - Statistical Process Control

**TOR** - Term of Reference

**TQM** - Total Quality Management

**IS**-Information system

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# CHAPTER I

## INTRODUCTION

### **1.1. Background of the study**

Business process improvements increase an organization's efficiency, productivity and profitability. Minor or incremental process improvements usually result in a little increase in profitability. In order to create a dramatic increase in efficiency, productivity, or profitability, a drastic change in the design of the organization's processes is required (Burger and Sikora, 1994).

A process is an ongoing, recurring and systematic series of actions or operations whereby an input is transformed into a desired output (goods or services) which increases value to a firm. Such process improvement could be achieved through business process reengineering. Business process is primarily a change initiative resulting from a firm engineering assessment and /or strategic visioning. It is the way in which a firm dramatically improves performance and customer satisfaction by reinventing the business processes and other operational aspects, culture, social systems, and technology.

BPR has been defined by different scholars. Among the different definitions the one given below is widely accepted and worth considering:

Reengineering is 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 (Hammer, 1993).

In BPR, firms start with a blank sheet of paper and rethink existing process to deliver more value to the customer. They typically adopt a new value system that places increase emphasis on customers' needs. BPR also advocates that enterprises go back to the basics and reexamine their very roots. It doesn't believe in small improvements. Rather it aims at total reinvention.

Davenport (1993) points out the major difference between BPR and other approaches to organization development, especially the continuous improvement or TQM movement, he stated that: today firms must seek not fractional, but multiplicative

levels of improvement – 10x rather than 10%.

Ethiopia, which is the least developed countries in the world, is known by its prevalent poverty, plague and drought. The incumbent government is committed to pull out the nation from this vicious circle by putting national vision to change its miserable image and line up with a row of middle income generating countries. To achieve this goal, the government has drawn strategies, policies and programs which are capable enough to build up democratization process and sustainable socio-economic development. One of the most crucial measures taken by the government is undergoing radical institutional transformation all over the nation. Accordingly, the study for reform began in 2001/02 in Federal and Regional government institutions.

The core aim of the study was to establish a conducive civil service system characterized by cost-saving, transparency, accountability, participatory and responsiveness. The pilot project has been launched practically in 2003/04 in some selected organizations which have broad activities in their sector. Based on their action plan and methodology, other organizations have been conducting their own reform process in 2004/05 extensively. The fundamental institutional transformation can be enhanced where strategic performance management, business process reengineering, and Result oriented management system are considered and exercised properly.

Integrating those principles in harmony could definitely lead to successful institutional change. Business process reengineering could facilitate accomplishment of institutions' vision and mission by avoiding wastages of scarce resources and precious time. Reengineering is a monstrous task to undertake and it is also very risky. There is a chance it will fail to improve the process. There is a greater chance that there will be resistance to change. In line with this fact, ERCA has implemented BPR since 2007 in all its units. Thus, it is worth to analyze the key success and failure factors while implementing business process reengineering (BPR) in Ethiopian Revenues and Customs Authority Mekelle branch (ERCA).

## **1.2. Statement of the problem**

Today, globalization along with the key driving forces of change such as fundamental change in the nature of customer and competition has created tough environment for organizations that have been working in traditional philosophies and principles. This situation will have a direct or indirect impact on the policies, strategies, behavior, and structure of an organization. Ultimately, it affects the fundamental activities of the organization. In order to survive, organizations should evaluate the way they are performing their business and should systematically rethink or rearrange the organizational structure, develop new working style, to cope up with the change (Hammer and Champy, 1993).

With this undertaking, a long study called “Business Process Reengineering study” had taken place before any steps were taken to effect the merger of the Ministry of Revenue, Customs Authority and The Federal Inland Revenue Authority. The study was undertaken for a year and half beginning from November 2007 by teams of officials selected from within the administration. The study has looked into the selected key business processes and has come across inefficient organizational structure and unnecessary complicated procedures that permitted insufficient service delivery. The study has also indicated that there was corruption; smuggling and serious tax evasion problems in the organization (ERCA, 2008).

The former administration has failed to deliver efficient service to its customers such as importers, exporters, taxpayers, the federal government, the society, etc. For instance, international trade participants (importers, exporters) were unable to deliver their goods to domestic and international market on time. Every import or export goods and their documents must be processed through the former tax and customs administration. Due to the inefficient procedures, these goods were subject to delay at exit or entry points of the former Customs Authority. Owing to this the importers and exporters viewed the former Customs procedure with disfavor or as an impediment that blocked the movement of international trade (ERCA, 2008).

The former tax and customs administration also has long been criticized for lack of efficient system to control tax evasion. The administration had inefficient system to control taxpayers who fail to declare their actual income in order to reduce their tax bill and the federal government's revenue (ERCA, 2008)

The former administration was also far behind in protecting investors from adverse effects of contraband. It was a daily occurrence to see contraband goods displayed on and being sold in the streets of major towns of the country. These and other myriad problems call for solutions or significant change and in response to them, the study team has made problem-solving proposal. The team believed that it would be better if the three administrations merged, and implement BPR which is the base for modern and equitable tax and customs administration system, effective resource utilization and quick service delivery can be laid down (ERCA, 2008)

However, the change it has made and its implementation on improvement of tax collection procedures, customer service delivery, and employee satisfaction has not been so far investigated. There for it is this gap why the researcher is motivated to conduct research on the area. In this paper, the researcher has tried to analyze what key success and failure factors the ERCA has been experiencing implementation of BPR.

### **1.3. Research questions**

The study was specifically designed to seek answer for the following research questions:

1. What are the successes and failures experienced on improvement of tax collection procedures after implementation of BPR?
2. What are the successes and failures on customer service delivery after implementation of BPR?
3. What is the reaction of employees on the new system?

## **1.4. Objectives of the study**

The overall objective of the research was to analyze the key success and failure factors in the implementation of BPR.

### **1.4.2. Specific objectives**

Specifically, the research is designed to achieve the following objectives.

1. To describe the success and failure factors in implementation of BPR on improvement of tax collection procedures.
2. To assess the satisfaction of the customers on the service delivery of the organization after implementation of BPR.
3. To describe the reaction of employees toward the newly implemented BPR system.

## **1.5. Significance of the study**

The study will be significant for its contribution as base line data for people who have interest to gain insight about BPR implementation in government organization. It can also use as a source of data to compare against similar studies to be made in the future. It will serve as a reference material for strategic orientation of ERCA. To initiate Academicians, consultants, and government agencies or other interested bodies to carry out further study in the area at an advanced level.

## **1.6. Scope of the study**

BPR is wider in its scope and touches every aspects of the organization. The focus of this research is only to analyze the key failures and success factors of BPR implementation in tax collection work process of Ethiopian Revenues and Custom Authority, Mekelle branch from 2006 to 2010 only.

## **1.7. Limitations of the study**

Even though large sample size is essential for in-depth analysis of the study, because of time and financial resource constraints the study was limited to take a sample size of only sixty eight tax customers. The study used secondary data from year 2007 to

2010.

### **1.8. Organization of the study**

This research paper was organized in to five chapters. Chapter one presents the background of the study, objectives of the study, significance of the study, and organization of the paper.

Chapter two deals with the literature review. The methodology and profile of the organization is presented in chapter three. The data presentation and analysis is presented in chapter four. Finally, chapter five discusses on findings of the study, the conclusion and recommendations made on the basis of the research findings.



# CHAPTER II

## LITERATURE REVIEW

### *2.1. Basic definition of BPR*

The term 'reengineering' was first introduced in 1990 in a Harvard Business Review article: Reengineering Work: Don't Automate Obliterate. The article's author was Michael Hammer, a former Computer Science professor at the Massachusetts Institute of Technology. Hammer then went on to develop the concept further in a book: Reengineering the Corporation, written jointly with James Champy. They provided the following definition: reengineering is 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. According to Hammer and Champy (1993), the definition comprises four keywords: fundamental, radical, and dramatic and processes.

***Fundamental:*** Understanding the fundamental operations of business is the first step prior to reengineering. Business people must ask the most basic questions about their companies and how they operate: Why do we do? What we do? And why do we do it the way we do? Asking these basic questions lead people to understand the fundamental operations and to think why the old rules and assumptions exist. Often, these rules and assumptions are inappropriate and obsolete.

***Radical:*** Radical redesign means disregarding all existing structures and procedures, and inventing completely new ways of accomplishing work. Reengineering is about business reinvention, begins with no assumptions and takes nothing for granted.

***Dramatic:*** Reengineering is not about making marginal improvements or modification but about achieving dramatic improvements in performance. There are three kinds of companies that undertake reengineering in general. First are companies that find themselves in deep trouble. They have no choice. Second are

companies that foresee themselves in trouble because of changing economic environment. Third are companies that are in the peak conditions. They see reengineering as a chance to further their lead over their competitors.

**Processes:** Process is the most important concept in reengineering. In classic business structure, organizations are divided into departments, and process is separated into simplest tasks distributing across the departments. The preceding order-fulfillment example shows that the fragmented tasks - receiving the order form, picking the goods from the warehouses and so forth - are delayed by the artificial departmental boundaries. This type of task-based thinking needs to shift to process-based thinking in order to gain efficiency.

## ***2.2. The principles of BPR***

The principles of Business Reengineering emerged during the early 1990`s are as follow (Thomas, 1994).

- Externally, focus on end customers and the generation of greater value for customers.
- Give customers and users a single and accessible point of contact through which they can harness whatever resources and people are relevant to their needs and interests.
- Internally, focus on harnessing more of the potential of people and applying it to those activities which identify and deliver value to customers. This principle tends to be overlooked.
- Encourage learning and development by building creative working environments. This principle has been almost forgotten in many organizations, the current emphasis being to squeeze more out of people and working them harder, rather than improving the quality of work life and working more cleverly.
- Think and execute as much activity as possible horizontally, concentrating on flows and processes (including communication) through the organization.
- Remove non-value added activities, undertake parallel activities, and speed up response and development times.

- Concentrate on outputs rather than inputs, and link performance measures and rewards to customer related outputs.
- Give priority to the delivery of value rather than the maintenance of management control. The role of the manager is being redefined and an emphasis on command and control is giving way to empowerment, and the notion of the coach and facilitator.
- Network related people and activities. Virtual corporations are becoming commonplace in some business sectors.
- Implement work teams and case managers extensively throughout the organization.
- Move discretion and authority closer to the customer, and re-allocate responsibilities between the organization, its suppliers and customers.
- Encourage involvement and participation. This requires error-tolerant leadership.
- Ensure people are equipped, motivated and empowered to do what is expected of them.
- Where ever possible, people should assume full responsibility for managing and controlling themselves. This requires planning skills.
- Work should be broadened without sacrificing depth of expertise in strategic areas.
- Avoid over-sophistication. Don't replace creative thinking with software tools.
- Keep the number of core processes to a minimum. They all should be directed to external customers. Management processes such as corporate planning processes which deliver too late to have any real impact can lack both internal and external customers.
- Build learning, renewal, and short feedback loops into business processes.
- Ensure that continuous improvement is built into implemented solutions. Experience of Business Reengineering can re-awaken interest in TQM (Total Quality Management); both are natural complements. This is widely overlooked.

### **2.3. Who need BPR?**

There are three kinds of companies that undertake reengineering (Hammer and Champy, 1993):

**Companies that find themselves in deep trouble need reengineering.** These companies have no choice.

- o If a company's costs are an order of magnitude higher than the competition's or than its business model will allow,
- o If its customer service is so weak that customers openly complain against it,
- o If its product failure rate is twice, three times, or five times as great as the competitions,
- o If, in other words, it needs order-of-magnitude improvement, that company clearly needs business reengineering.

**Companies that are not yet in trouble but whose management has the foresight to see trouble coming:** For the time being, financial results may appear satisfactory, but looming in the distance are storm clouds new competitors, changing customer requirements or characteristics, an altered regulatory or economic environment that threaten to sweep away the foundations of the company's success. These companies have the vision to begin reengineering in advance of running into adversity.

**Company undertaking reengineering are those that are in peak condition.** They have no discernible difficulties, either now or on the horizon, but their Managements are ambitious and aggressive.

### **2.4. What reengineering is not?**

**According to Hammer and Champy (1993) Reengineering is not:**

#### **A. Automation or computerization**

It is true that computerization can speed work up and Automation can faster jobs accomplishment. But, fundamentally, the same jobs are being done within the existing system. The old system improved to make things better but no fundamental improvement in performance. Automating existing processes with information technology does not provide the breakthrough performance because you are

automating or computerizing the old system. Automation simply provide more efficient way of doing the wrong kind of things or, if your processes are inefficient and not customer focused, automating them will allow you to work inefficiently more quickly. Therefore, automation or computerization does not mean reengineering. Reengineering is innovation, creating new system of work. Automation is fixing the existing system to work faster (Hammer and Champy,1993)

### **B. Restructuring or downsizing**

Restructuring or downsizing has relevance with reducing capacity to meet current, lower demand. Reduce size to match the demand at time of fewer markets. It means doing less with less, however, reengineering mean doing more with less. Downsizing reduce costs by getting rid of people and jobs, reengineering reducing cost by eliminating non value-adding activities, non-value adding steps, stages, and hand offs and non-value adding rules and procedures(Hammer and Champy,1993).

### **C. Reorganizing, delivering or flattening an organization.**

Although, reengineering produce flat organization, simply delivering or flattening an organization doesn't mean doing reengineering. The key issue is on process structure, not organizational structure. The problem facing organizations do not result from their organizational structure, but their process structures. Bureaucracy is not a problem. For the last two hundred years bureaucracy has been the solution to being glue that holds traditional organization together. If there was no bureaucracy, chaos will result. The underlying problem that bureaucracy has been and remains a solution is that of fragmented process. The way to eliminate bureaucracy and fatten the organization is by reengineering the processes so that they are no longer fragmented. Then the company can manage nicely without its bureaucracy. (Hammer and Champy, 1993)

### **D. Quality improvement, Total Quality Management (TQM)**

It is true that quality programs and reengineering shares a number of common themes. They both recognize the importance of processes. They are also start with the needs of the process a customer. However, the two program fundamentally different. The Quality program work within the framework of the organization's existing processes to make them better and it is incremental improvement to process

performance. Reengineering is breakthroughs, not enhancing existing process but discarding them and replacing them with entirely new ones. It is beginning again with a clean sheet of paper, inventing new approaches to process structure (Hammer and Champy, 1993)

**E. Decentralizing or outsourcing:** The objective of outsourcing is to reduce costs (the market can perform more efficiently). Reengineering has no assumption (old thought); but determining what the organization needs to do and the best way to do it. Decentralization has advantage to reduce costs of bureaucracy and centralization by devolving power and authority so that the decentralized entity is able to make decisions, find solutions for local problems by themselves rather than waiting for the center. However, it doesn't mean providing breakthrough performance, it entails the existing system doing better (it exists with the old system). Decentralizing might mean sending down the inefficient, problematic system procedures, rules, etc. to let them use these. It is pouring soured wine into new bottles' (Hammer and Champy, 1993)

**F. About incremental change, but step change, dramatic change:** Reengineering is not about making incremental improvement in performance (e.g. 5% reduction of cost, 10% sales increment) but is about achieving quantum leaps in performance (e.g. 5 times cost reduction, 10 times sales growth). The hallmark of Reengineering is achieving dramatic breakthrough performances in cost reduction, quality, service level, speed of delivery, etc.

## ***2.5. Fundamental techniques and tools for getting reengineering***

To create a conducive environment by embracing more change agents in the reengineering effort, the leader organizes a governance structure for the project consisting of the Reengineering Leader, Process owner, Reengineering Team, Reengineering Czar and Steering Team (Hammer and Champy, 1993)

### ***2.5.1. The Leader***

A reengineering leader is a senior executive who authorizes and motivates the overall reengineering effort. The leader is the primary or key ingredient for reengineering to happen. This is so because reengineering succeeds when driven from the top most level of an organization. Therefore, the active engagement and

commitment of top management is critical for the reengineering to happen. Without top-down leadership, reengineering failure is a foregone conclusion. Undertaking reengineering in this situation is a deceptive exercise and a fatal mistake. The likely attempt by other bodies (teams), in absence of the top level leadership is a fatal exercise hence no reengineering will actually happen. The tools that the leader uses are so essential in discharging his/her responsibilities and achieve the revolution required. These tools include: Signal, explicit communications; symbol, personal behavior; and system, measurements and rewards (Hammer and Stanton, 1995).

**Signals** are the explicit messages that the leader sends to the organization about reengineering. That is communicating about the reengineering program: what it means; why we are doing it; how we are going to do it; what it will take etc. Communication is not a one-time task or limited to only to the unfreezing phase, it should be undertaken continuously. Constant repetition of reengineering message is essential to make people understand it and being part of it. It is important to note here that communication must be simple. The basic concepts must be conveyed clearly and concretely. It must be dramatic and exciting and of course has to be able to show the urgency of the project.

**Symbols** are actions that the leader performs to reinforce the content of the signals, to demonstrate that he lives with his words. The leader's acts as important symbolic activities are demonstrated through assigning the company's best and brightest to reengineering teams; and rejecting design proposals that promise only incremental improvement; removing managers who block the reengineering efforts. The leader must display the depth of his personal commitment to the effort by having contact with the team, coaching and advising; by authorizing them to break the rule and publicly honoring those who have become creative. The reengineering leader has to prove to the organization that he/she is serious about the transformation and change is inevitable.

**System** means the organization's management system by which people are measured and rewarded. Management systems are key instruments to shaping the attitude and behavior of people; and giving life and reality for the value required to develop in the reengineered company. Speeches need to be supported by management systems,

that is, the system should reward good performers and encourage people to engage in new innovation. Generally, a leader is a senior executive who has a great conviction on reengineering and sponsors the process. He/she is the one who can turn the organization inside out acting as the primary change agent in the organization.

### ***2.5.2. Process owner***

A Process owner is one responsible for reengineering a specific process. The owner should be a senior-level manager, who carries prestige and reputation, credibility, and clout (power/influence) within the organization. As leader's job is to make reengineering happen in the large, process owner's job is to make it happen in small, at the individual process level. An owner along with leader assembles a reengineering team. A process owner motivates, inspire, and advices the team.

Process owner acts as the team's spokesman and liaison. Moreover, he works with other process owners to ensure that the processes are compatible and integrated. The process owner's job will not end when the reengineering project is completed.

He/she stays with the project throughout the design and implementation phases. In process - oriented organization, it is process, not function that will form the bases of organizational structure. Therefore, every process will continue to need an owner; processes would have owners.

### ***2.5.3 Reengineering Team /Design Teams***

Reengineering teams are the second key ingredients next to the leader in making reengineering happen. Each process team in charge of one process at a time does the actual work of reengineering. Each member works as a team not as group and the size of the teams could be between five to ten people. They are experts that others have trust in them and act as key agent for conveying the others in the organization.

Reengineering work is not a part-time assignment rather a full time work. Hence, organizations should assign team members 100% to the project, do not stretch them with other assignment and commitments. This is one of the powerful signals for the organization for committing reengineering. The teams prepare high level maps of the current processes and identify the overall cycle time and satisfaction or frustration of



the customers. They reinvent the business processes by producing breakthrough changes through breaking assumptions using whacko ideas, benchmarking etc.

The teams are composed of insiders and outsiders. Insiders are people currently working inside the process undergoing reengineering. These should be 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. Outsiders' also known as disruptive elements for they give a different perspective are people outside the process undergoing reengineering. These people could be within the organization or outside -the--organization. It is good to look at outsiders from departments of such as: engineering, information systems, and marketing.

An organization that does not have the right people for outsiders, must go outside the company, and use consulting firms. Experiences show that teams that consist of only insiders are likely to produce only incremental improvement, as they might be biased and confused with the existing system and tend to recreate what already exists. They remain within the frame of the existing process. As they are in the system, they are already familiarized and accustomed with it and do not break it. But outsiders will bring different ideas, can make waves in the team, they tend to take risks. A reengineering team has no official head but a captain/first among equals/ usually nominated by the group members. However, the process owner is their client. The members should remain on the team at least through implementation of the first field pilot site.

#### ***2.5.4. Reengineering Czar/Chief of staff/***

The reengineering leader needs strong staff support to realize the reengineering effort. Of the people who give support to the leader, the Reengineering Czar is one and if necessary could be a group of people. He/she plays a pivotal role in the overall reengineering project. The czar who serves as the leader's chief of staff for the reengineering has two distinct functions. One is just supporting each individual process owner and reengineering team by obtaining and allocating resources and giving technical advice to process owners and teams. The other is playing a crucial role in coordinating the all ongoing reengineering activities by helping select high-quality people for the reengineering team, keeping a watchful eye on process owners

to keep them on track, moderating discussions among process owners, helping how teams can coordinate their works/if there is a need for/, anticipating the infrastructural needs and meeting them before hand. However, sometimes the Czar is seen becoming a problem by becoming too controlling person forgetting that the leader and process owner are in charge. Thus, organizations must guard against these possibilities.

#### ***2.5.5. Steering Committee / Team***

The steering team consists of senior managers and process owners chaired by the reengineering leader. It is a policy-making body that articulates and develops the organization's overall reengineering strategy, and monitors the progress. The steering team decides on which business process should be reengineered first and the required resources.

The team also deals with the problems that are beyond the process owners and reengineering teams. What is more, it hears and resolves conflicts that could arise among process owners. Forming steering team could be optional at an organization level; however, it appears essential at all levels for coordinating the reengineering effort.

### ***2.6. Common steps when performing BPR***

Successfully perform BPR can be grouped into seven steps, or phases. All successful BPR projects begin with the critical requirement of communication throughout the organization. (Covert,1997).

***2.6.1. Phase 1: Begin Organizational Change:*** The first step is to take a long, hard look at how the organization operates. The focus of this examination is on the operating procedures and the bottom-line results that are generated by them. The purpose of performing the analysis described below is to determine whether dramatic change by doing BPR is really necessary. It may be that only marginal change (the result of Continuous Process Improvements, Total Quality Management, and other similar programs) is needed -- which would expose the change initiative and the organization to much less risk.

Aspects of the business that need to be evaluated are: how things are currently done, what changes may be occurring, and what new circumstances exist in our business

environment. Next, a look at how certain operating procedures within the organization has caused or will cause irreparable damage to the company's livelihood. What is the source of the organization's concern? Maybe the demands of the marketplace are shifting. Perhaps competitors have made significant advancements in products and services. Regardless of the reasons, it should be clear whether or not the organization, in its current state, is able to meet the needs of the markets it serves. The consequences of inaction should be identified and well understood. In most cases, these consequences are the loss of jobs by shutting down portions of the business, or perhaps the entire business. Finally, the proper future direction of the organization should be decided. The future "vision" of how the business must operate will serve as a clear and concise guide with measurable goals for employees to focus on.

If an organization wishes to change the way it operates, it must turn to its people to make it happen. People are the agents of change. Creating business plans and strategies are important, but they are only tools to guide the actions of people. Because BPR can potentially require significant changes throughout an organization, it must begin with a communications campaign to educate all those who will be impacted by this change. Communication to all levels of personnel must remain active from start to finish keeping everyone involved and working towards a common goal. Without a common understanding about what is happening, confusion and uncertainty about the future can result in resistance strong enough to stop any reengineering effort. BPR is most effective when everyone understands the need for change, and works together to tear down old business systems and build new ones. In order for change to be embraced, everyone must understand where the organization is today, why the organization needs to change, and where the organization needs to be in order to survive.

**2.6.2. Phase 2: Build the Reengineering Organization:** An infrastructure must be established to support reengineering efforts. Although this phase consists of only a few tasks, it has a tremendous impact on the success of a BPR endeavor. Who are the people that will be chartered to reengineer the business? What will their responsibilities be? Who will they report to? These are the questions that must be

answered as the reengineering staff is gathered together to communicate, motivate, persuade, educate, destroy, create, rebuild, and implement.

One of the most important members of the reengineering effort is the *executive leader*. The leader must be a high-level executive who has the authority to make people listen, and the motivational power to make people follow. Without the commitment of substantial time and effort from executive-level management, most BPR projects cannot overcome the internal forces against them and will never reach implementation. A process owner is responsible for a specific process and the reengineering effort focused on it. There should be a process owner for each high-level process being reengineered. Allocating the responsibility of a process to a specific person ensures that someone is in charge of how that process performs. Process owners are usually appointed by the executive leader.

The process owner convenes a reengineering team to actually reengineer his or her process. The team dedicated to the reengineering of a specific process should be made up of current insiders, who perform the current process and are aware of its strengths and weaknesses, along with outsiders who can provide objective input to spark creative ideas for redesign. The team should be small, usually five to ten peopling. Since they will be the ones who diagnose the existing process, and oversee the redesign and implementation, they should be credible in their respective areas. This qualification plays an important role in reducing the resistance by company personnel to the new process.

In some BPR initiatives it is helpful to institute a steering committee. Especially in larger or multiple reengineering projects, a steering committee can control the chaos by developing an overall reengineering strategy and monitoring its progress.

Lastly, a reengineering specialist can be an invaluable addition to the overall effort. A reengineering specialist can assist each of the reengineering teams by providing tools, techniques, and methods to help them with their reengineering tasks.

**2.6.3 Phase 3: Identify BPR Opportunities:** In this phase, it begins to break away from normal patterns of identifying business opportunities. It starts by dividing the entire organization into high-level processes rather than the usual vertical business

areas such as marketing, production, finance, etc. These processes, usually less than a dozen, are the major or core processes of the organization.

This activity is not a time consuming task, but it is difficult because it requires a shift in how we think of ourselves. One goal here is to identify the process boundaries (where the process begins and where it ends), which will help set the project scope for those processes that are to be reengineered.

At this point, it is helpful to begin thinking about potential *change levers* which may lead to dramatic changes in the organization's processes. Change levers usually will fall under one of three categories: the use of information, the use of information technology, and human factors. What new information is available and easily accessible to the organization? What new technologies have recently been introduced, or are on the horizon, that can change how businesses and customers interact? What new ways of structuring cross-functional work teams, compensation systems, and incentive methods have proven to be effective in improving operations within other organizations? In many instances, a modification in one of these areas requires changes in the other two areas to be the most effective.

Once the major processes have been defined, it needs to decide which of high-level processes needs to be reengineered. The most objective and accurate way is to compare the performance of high-level processes, identified earlier, with the performance of competitors as well as organizations outside of industry. Even if it outperforms the direct competition, there may be companies in other industries which may be much more effective in performing a similar task -- such as order fulfillment or product development.

If we fulfill orders in six months, while a competitor fulfills orders in two weeks, It may consider this a process that needs to be reengineered. What it look for here are overall, bottom-line performance metrics for the high-level processes that will help us select which of these processes to reengineer. Typically, organizations use the following three criteria: Dysfunction (which processes are the most ineffective), Importance (which processes have the greatest impact on our customers), and Feasibility (which processes are at the moment most susceptible to accomplish a successful redesign, or which ones are the "low hanging fruit" as many experts call

them). Picking the "low hanging fruit" can show quick success and help build the much needed momentum and enthusiasm at all levels of the organization. Prioritizing the processes chosen to reengineer guides in scheduling the order of reengineer these processes

Going after the highest priority process first, it is to be assessing the preexisting business strategy which governed its component tasks. Most likely, this existing business strategy is not focused on driving a process; therefore, it has to be defining a new process strategy to reflect the new strategic goals for the process. Process customers are an important source of information to help set the new direction. It must consult with them to not only discover their desires, but also to find out what they actually need by watching what they do with the output. Process goals and objectives can be determined by combining customer needs with competitor benchmarks and "best of industry" practices (metrics on the best performers of a similar process in other industries). In addition to goals and objectives, it needs to complete the conception of the new process by identifying key performance measures, key process characteristics, critical success factors, and potential barriers to implementation.

**2.6.4. Phase 4: Understand the Existing Process:** Now that it is known which process to reengineer, it need to take a look at why currently perform the process the way it does. *Understand* is a key word here. It may not need to scrutinize every detail of how it is performing the process -- this effort has the potential to go on indefinitely, sometimes referred to as analysis paralysis, which can weaken the momentum needed to carry the project all the way to implementation. What it needs to do is understand the underlying reasons why the existing process is carried out the way it is, so that it can question those assumptions during reengineering sessions later on. When we have the new process objectives clearly defined (in *Phase 3*), it can measure the existing process in terms of the new objectives to see where it is and how far it has to go.

Modeling the current process is an important part of this phase. It not only helps to better understand the existing process, but also helps with planning the migration from the old to the new process and executing the physical transformation of

personnel, organizational structures, information requirements, and how technology is used. Information that should be included in the models is process inputs (such as task times, data requirements, resources, demand, etc.) and process outputs (such as data outputs, cost, throughput, cycle time, bottlenecks, etc.).

Understanding how and why the current processes use information is also important. Do staff members have access to essential information? Are some business areas wasting time and effort by creating duplicate information when it can be shared across organizational boundaries? Why is technology used to support some tasks and not others?

How effective are the current interfaces? Are they easy to use, or are they counterintuitive and thus inhibit the effectiveness of current tasks? In what way does the existing process take advantage of technology, and in what way has technology imposed artificial restrictions? It needs to end up with an estimate of the current cost, robustness, and functional value of each technology and information systems currently being used.

**2.6.5. Phase 5: Reengineer the Process:** During this phase, the actual "reengineering" begins. It has to be moved from strategy and analysis phases into the redesign phase. The Reengineering Team that was formed to take part in the reengineering sessions should consist of designers and implementers, including people well versed in technology. These team members should come from both inside and outside the existing process.

The "inside" perspective may reveal information about the existing process that was not uncovered in Phase 4. Having people who will be process owners in the future, or those responsible for the new process, is a critical component of the Team. Including the future owners will help to ensure that the reengineered process succeeds once it is implemented.

Equally important is the "outside" perspective of someone who will look at the process with a "fresh eye" and raise questions about operating assumptions that may not be obvious to the insider who might be too close to the process to see this.

Lastly, a technologist will provide insight as to how technology can be applied in new and innovative ways. In other words, the technologist will help to visualize how

the process can be performed outside the boundaries of the current implementation. Including both outsiders and technologists on the team will help spark "out-of-box" thinking (thinking creatively above and beyond the current restrictions - the walls of the box).

Having developed a good understanding of how the existing processes work in the previous phase, it is now necessary to question the operating assumptions underlying the processes. Is there some (outdated) historical reason why a process has been performed a certain way? Are there customer requirements that dictate the steps in a process? Many times the operating assumptions can be thrown out and new ones developed. However, it is important to evaluate the impact the assumptions have outside the process in question.

The Reengineering Team is now tasked with brainstorming to create new process ideas. According to Hammer, brainstorming sessions are most successful when BPR principles are considered. For example, hybrid centralized/decentralized operations encourage the formation of cross-functional workgroups. Ideally, the Team will identify those processes which should be centralized (because those processes are of value across the enterprise) as well as the processes which are of value to a specific group within the organization. A company might maintain a customer database on a centralized system, but it would provide data for a variety of processes throughout the organization such as sales, purchasing, or accounts receivables.

During the brainstorming sessions, the Reengineering Team must also consider new technologies. They will need to evaluate the impact of new technology on the process. Technologies that are often considered enablers of reengineering include: distributed computing platforms, client/server architectures, workflow software, and application development tools.

The Reengineering Team should also search for uses of new information as well as new ways to use existing information. The reengineered process may enable the organization to collect data that was not gathered before, thereby bringing new knowledge into the process to help in decision making. Another benefit is the sharing of data across the organization to eliminate redundancies in data storage and increase internal communication.



The act of reengineering a process may require evaluation of the organizational model and the management strategy. A newly formed cross-functional workgroup will not fall neatly into a traditional hierarchical management structure. In addition, this work group will most likely require new measurement systems and reward programs. Changes in the infrastructure can also have an impact on corporate values and belief systems. It may be found at this stage that a new process simply will not fit into the current organization without a new process-oriented organizational structure.

Lastly, the Reengineering Team must consider all process stakeholders in the redesign of a process. Stakeholders are those whose actions impact the organization, and those who are impacted by the organization's actions. Stakeholders include both those internal to the process and those external to the process. External stakeholders may not be concerned with how a process is performed but they are certainly concerned with the output of the process if they are the recipients.

Throughout this phase, the Team must consider the impact on external processes that interact with the reengineered process. Does the implementation of client/server architecture have an effect on another process? Will that process need to be reengineered also? Reengineering cannot be performed in a vacuum. However, it cannot be performed on all processes simultaneously either.

**2.6.6. Phase 6: Blueprint the New Business System:** Blueprints are detailed plans required to build something in accordance with the designer's intentions. In BPR, blueprints must be created to identify all the necessary details of the newly reengineered business system and ensure it will be built as intended.

This phase of the project takes the reengineered process developed in the previous phase, and provides the details necessary to actually implement it. Blueprinting involves modeling the new process flow and the information required to support it. Just as we modeled the "as is" process and information requirements in *Phase 4*, it need to create "to be" models to illustrate how the workflow will be different. The information models, or data models, will indicate where the new process will use information that is shared across functional areas of the business. The blueprints should also contain models of the redesigned organizational structure. Instead of the

traditional organization chart, a different kind of chart is needed. This chart will show the new process flow along with the process team members, the process owners, the case managers, the process facilitators. The chart should also indicate parts of the organization which interact with the process personnel.

In addition, detailed technology specifications required to support the new process should be defined. Although minor changes, or fine tuning adjustments to the technical configuration will probably occur during the implementation phase, an initial physical description of the technologies used and their physical specifications should be recommended in this phase, to set the stage for rapid application development. Included in the blueprints should be the new management systems and values or belief systems of this redesigned area of the business. New management strategies, along with new performance measurements, compensation systems, and rewards programs should be outlined. The reengineered process may require a change in the *values or belief* systems of the company. The redesign may require an entirely different *culture*, or atmosphere, than what is prevalent in the organization today. It is critical to have these areas, and their responsibilities, defined as we go into the implementation phase.

**2.6.7. Phase 7: Perform the transformation:** Now it is ready to transform the organization. It has to be communicated, strategize, analyzed, reengineered, and blueprinted the ideas for the new process. This is where all of the previous efforts are combined into an actual business system – something that can be seen and feel and use to enable the organization to meet the market demands of today and tomorrow.

The first step in transforming the organization is to develop a plan for migrating to the new process. It needs a path to get from where the organization is today, to where the organization wants to be. Migration strategies include: a full cutover to the new process, a phased approach, a pilot project, or creating an entirely new business unit. An important point to consider is the integration of the new process with other processes. If only one process is reengineered, then it must interact with the other existing processes. If multiple processes are slated for reengineering, then the new process must not only integrate with existing processes, but also with the newly reengineered processes that will come on line in the near future; therefore, the

implementation of the new process must be flexible enough to be easily modified later on.

Successful transformation depends on consciously managing behavioral as well as structural change, with both sensitivity to employee attitudes and perceptions, and a tough minded concern for results. BPR Implementation requires the reorganization, retraining, and retooling of business systems to support the reengineered process. The new process will probably require a new organization, different in structure, skills, and culture. The new management structure should result in the control paradigm being changed to the facilitation paradigm. The new process team structure should result in the managed paradigm being changed to the empowered paradigm. Once the new structures are established, it should map tasks in the process to functional skill levels, and ultimately to workers.

Transforming the workforce will require an array of activities. It begins with an assessment of the current skills or capabilities of the workforce to include soft skills, operational skills, and technical skills. This inventory may require personal evaluations (including areas of interest), peer evaluations, and supervisor evaluations. Feedback should be provided to all personnel to ensure accuracy of current skills and interests for all staff. Armed with the new process skill requirements and a current skills inventory, the gaps can be assessed. Is the new process feasible with the current skill set? Which are the areas to focus on to enhance personnel skills to meet the requirements of the new process? An education curriculum needs to be established to get all employees educated on the business and, most important, on how their jobs relate to the customer.

An educational pyramid is an effective way to transfer knowledge of team building, self mastery, and subject matter knowledge. Systems training are essential to understanding the use of new information systems and how to take advantage of their capabilities. Process training may be needed to help employees think beyond a linear process to a more holistic interdependent process. Facilitation training for management is critical to develop their abilities to listen, allow mistakes, handle disputes among process experts, and transition to a coach/facilitator role. Education may be necessary for Total Quality Management (TQM), Statistical Process Control

(SPC), or Continuous Process Improvement (CPI) if these mechanisms are designed into the new processes. Finally, a structured on-the-job training (OJT) program is instrumental in providing continuity of the new process during periods of personnel turnover or attrition.

As with any dramatic change, people will have personal difficulties, to varying degrees, with the paradigm shift that has taken place. Almost all new process implementations are surrounded by confusion, frustration, and sometimes panic. The best transition strategy is one that minimizes, as much as possible, the interference caused to the overall environment. Attempts should be made to keep the new process chaos to a controlled level, to maintain the focus of the reengineering team and the faith of the employees. Transforming information systems to support the new process may involve retooling the hardware, software, and information needs for the new process.

One approach to this transition could be a controlled introduction. The method would ensure that each part of the system is operational for a segment of the business before going on to the next module to implement. Although the risk may be low while the bugs in the new system are ironed out, it may be difficult to integrate the hybrid old/new systems in a step-wise manner. The *flash cut* approach is where the entire system is developed in parallel to the existing system, and a complete transition occurs all at once. This may put the organization at a higher risk if the systems do not function properly at first, but it is the more common approach due to the "all-or-nothing" nature of BPR.

Most reengineered processes function in an entirely different manner than existing processes; thus, a stepwise introduction would, most likely, not be fully functional until all steps were introduced anyway. An important reason to justify the flash cut approach is that the reengineering benefits can be realized much sooner than with a controlled introduction.

Transitioning the information used to support the old process to become useful in the new process involves reducing some requirements while expanding others. Usually 30 to 40% of the old information can be discarded because it was administrative data needed to tie the old disjointed, linear processes together. On the other hand, the old

systems may have poor data integrity, incorrect data, or insufficient data to support the new business needs.

In these cases the data must be expanded to fill the gaps in the existing data and supply the new information requirements of the reengineered process. The information blueprints help manage the development of the new information systems. The thoughts of management experts, the experiences of management consulting firms, and the research conducted by academicians have resulted in the methods and procedures outlined in this document. In order to establish the *dramatic change*, it requires having *dramatically* increase chances of successful BPR. The phases and activities described here must be considered, as a minimum, when attempting to *successfully* plan and perform Business Process Reengineering.

### ***2.7. Key success and failure factors***

Following the publication of the fundamental concepts of BPR, many organizations have reported dramatic benefits gained from the successful implementation of BPR. Companies like Ford Motor Co., CIGNA, and Wal-Mart are all recognized as having successfully implemented BPR. However, despite the significant growth of the BPR concept, not all organizations embarking on BPR projects achieve their intended result. It is estimated that as many as 70 percent do not achieve the dramatic results they seek. Having BPR repeatedly at the top of the list of management issues in annual surveys of critical information systems reflects executives' failure to either implement properly or acquire the benefits of BPR. This mixture of results makes the issue of BPR implementation very important (Al-Mashari and Zairi, 1999).

BPR has great potential for increasing productivity through reduced process time and cost, improved quality, and greater customer satisfaction, but it often requires a fundamental organizational change. As a result, the implementation process is complex, and needs to be checked against several success/failure factors to ensure successful implementation, as well as to avoid implementation pitfalls. The factors listed below are distilled from various articles and empirical research on BPR implementation. They were then categorized into a number of subgroups representing various dimensions of change related to BPR implementation. These dimensions are change management; management competency and support;

organizational structure; Project planning and management; and IT infrastructure (Al-Mashari and Zairi, 1999).

### **2.7.1. BPR Success Factors**

#### **2.7.1.1. Factors relating to change management systems and culture**

Change management, which involves all human and social-related changes and cultural adjustment techniques needed by management to facilitate the insertion of newly designed processes and structures into working practice and to deal effectively with resistance, is considered by many researchers to be a crucial component of any BPR efforts. Revision of reward systems, communication, empowerment, people involvement, training and education, creating a culture for change, and stimulating receptivity of the organization to change are the most important factors related to change management and culture (Al-Mashari and Zairi, 1999).

**Revising Reward and Motivation Systems:** Staff motivation through a reward program has a crucial role in facilitating re-engineering efforts and smoothing the insertion of new processes in the workplace. As BPR brings about different jobs, existing reward systems are no longer appropriate for the new work environment. Therefore, reward systems should be revised as part of the BPR effort and the new reward and incentive system must be widespread, fair and encourage harmony among employees. Introducing new job titles can be considered as one example of encouraging people to endorse the reengineering program without fear.

**Effective Communication:** Effective communication is considered a major key to successful BPR-related change efforts. Communication is needed throughout the change process at all levels and for all audiences, even with those not involved directly in the re-engineering project. Effective communication between stakeholders inside and outside the organization is necessary to market a BPR Programmed and to ensure patience and understanding of the structural and cultural changes needed as well as the organization's competitive situation. Communication should take place frequently and in both directions between those in charge of the change initiatives and those affected by them. Communication should be open, honest, and clear,

especially when discussing sensitive issues related to change such as personnel reductions.

**Empowerment:** As BPR results in decisions being pushed down to lower levels, empowerment of both individuals and teams becomes a critical factor for successful BPR efforts, since it establishes a culture in which staff at all levels feel more responsible and accountable and it promotes a self-management and collaborative teamwork culture. Empowerment entails that staff are given the chance to participate in the redesign process. When empowered, employees are able to set their goals and monitor their own performance as well as identify and solve problems that affect their work, thus they are supporting the BPR efforts.

**Human Involvement:** In re-engineering, all people must be openly and actively involved and should be consulted at all stages on the process and its leaders. This includes line managers, process owners, those involved in IS and human resources, and workers. The culture of experimentation is an essential part of a successfully reengineered organization and, therefore, people involved or affected by BPR must be prepared to endure errors and mistakes while re-engineering is taking place.

**Training and Education:** Many researchers consider training and education to be an important component of successful BPR implementation. Organizations that undertake re-engineering projects may have to increase their training budget by 30-50 percent. BPR-related concept, skills, and techniques as well as interpersonal and IT skills, skills in TQM implementation and process analysis techniques, are all important dimensions of training for BPR. It is also important to educate people in IT related innovations for competitive advantage, the potential of IT in reshaping the business and the leadership of empowered organizations. Business managers, line managers, IS managers, and other staff in the front-line are the people who benefit most from education and training activities in both business and IT-related skills and expertise.

**Creating an effective Culture for Organizational Change:** Organizational culture is a determining factor in successful BPR implementation. Organizational culture influences the organization's ability to adapt to change. The existing culture contains beliefs and values that are often no longer appropriate or useful in the re-engineered

environment. Therefore, the organization must understand and conform to the new values, management processes, and the communication styles that are created by the newly redesigned processes so that a culture which upholds the change is established effectively. In a newly re-engineered organization, people usually share common goals and thus become more capable of working co-operatively without competing against each other. As BPR supports teamwork and integration of labor, cooperation, co-ordination, and empowerment of employees become the standard attitudes in the re-engineered work environment. However, trust and honesty among team members is also needed, and within the organization as a whole.

#### **2.7.1.2. Factors relating to management competence**

Sound management processes ensure that BPR efforts will be implemented in the most effective manner. The most noticeable managerial practices that directly influence the success of BPR implementation are top management support and commitment, championship and sponsorship, and effective management of risks. (Al-Mashari and Zairi, 1999).

**Committed and Strong Leadership:** Commitment and leadership in the upper echelons of management are often cited as the most important factors of a successful BPR project. Leadership has to be effective, strong, visible and creative in thinking and understanding in order to provide a clear vision of the future. This vision must be clearly communicated to a wide range of employees who then become involved and motivated rather than directly guided. Commitment to and support for the change must constantly be secured from senior management throughout a BPR project. Sufficient authority and knowledge, and proper communication with all parts in the change process, are important in dealing with organizational resistance during BPR implementation.

**Championship and Sponsorship:** Barriers such as political, economic, and organizational risks are all associated with BPR related change. And champions of the change play a major role in overcoming these barriers and increasing the chance of successful BPR implementation. The champions must be able to persuade top management of the need to change and to continually push the change efforts throughout the organization. Political and material sponsorship by the champions of



change to business processes, job definitions, reward systems, and organizational structure needs strong support from senior management

**Management of Risk:** BPR implementation involves radical change to several systems in the organization. Risks associated with acceptance of changes in the organizational structure, deploying emerging ITs with little familiarity, large investment in new resources needed for the new processes, loss of personnel, and loss of earnings are some examples of the many risks that an organization may take when implementing BPR. Therefore, continuous risk assessment is needed throughout the implementation process to deal with any risk at its initial state and to ensure the success of the re-engineering efforts. Anticipating and planning for risk-handling is important for dealing effectively with any risk when it first occurs

### ***2.7.1.3. Factors relating to organizational structure***

As BPR creates new processes that define jobs and responsibilities across the existing organizational functions, there is a clear need to create a new organizational structure which determines how BPR teams are going to look, how human resources are integrated, and how the new jobs and responsibilities are going to be formalized. (Al-Mashari and Zairi, 1999).

**An adequate Job Integration approach:** Several researchers emphasize that designing and implementing an adequate organizational human resources infrastructure is important to a BPR project's success. Job and labor integration (case worker) is the most appropriate approach of human resources design that supports the process-based organizational structure rather than a function-based one. When individuals within a process perform a series of tasks efficiently, product quality, processing time, and cost are all going to improve. However, the move to integrate human resources architecture necessitates a careful consideration of all related organizational changes

**Effective BPR Teams:** Cross-functional BPR teams are a critical component of successful BPR implementation. Teams should be adequately composed. Team members should be experienced in variety of techniques. Teams should be made up of people from both inside and outside the organization. The determinants of an effective BPR team are as follows: competency of team members, their credibility

within the organization and their creativity, team empowerment, motivation, effective team (Leadership) the training of members in process mapping and brainstorming techniques, proper organization of the team, complementary skills among team members, adequate size, interchangeable accountability, clarity of work approach, and specificity of goals.

**Appropriate Job definitions and allocation of responsibilities:** As BPR results in a major structural change in the form of new jobs and responsibilities, it becomes a prerequisite for successful implementation to have formal and clear descriptions of all jobs and responsibilities that the new designed processes bring along with them.

#### **2.7.1.4 Factors related to BPR project management**

Successful BPR implementation is highly dependent on an effective BPR program management which includes adequate strategic alignment, effective planning and project management techniques, identification of performance measures, adequate resources, appropriate use of methodology, external orientation and learning, effective use of consultants, building process vision, effective process design, integrating BPR with other improvement techniques, and adequate identification of the BPR value. (Al-Mashari and Zairi, 1999).

**Aligning BPR Strategy with Corporate Strategy :** As corporate strategy determines objectives and guidance on how organizational capabilities can be best Utilized to gain competitive position, BPR strategy, accordingly, guides the alteration of tasks and flows into integrated, and variance in how tasks are performed and the flow of material, people, and information because a source of competitiveness. Therefore, a consideration of the strategic context of growth and expansion, creating a top-level strategy to guide change, and careful alignment of corporate strategy with BPR strategy are crucial to the success of BPR efforts.

**Effective Planning and Use of Project Management Techniques:** Proper planning for the BPR project with adequate time frame are key factors in delivering a successful BPR project on time. Effective use of project management techniques and managing people-related issues has also a crucial role in smoothing the flow of the process redesign stages. A comprehensive piloting of the new design, and learning from errors are particularly important for tuning a BPR implementation process to

the most successful way. Measurement of project progress should also be maintained continually throughout a BPR project.

**Setting Performance Goals and Measures:** Setting high goals for performance and extendable targets for BPR are important success factors.

**Adequate Resources:** Adequate resources and sufficient budget allocated properly are important for a successful BPR project.

**Appropriate Use of Methodology:** Establishing a disciplined approach for BPR and using a sound methodology are prerequisites for BPR success. A BPR methodology should be designed or selected creatively to satisfy the current needs of the organization. Adequate customization of available BPR methodologies determines the level of comprehensiveness and effectiveness that a new customized BPR methodology can reach.

**External Orientation and Learning:** External orientation based on customer research, competitive analysis, and benchmarking is a critical element of successful BPR efforts. Benchmarking is an effective technique to learn from customers and competitors. Customers' requirements and expectations should be defined and measured for BPR and processes should be defined broadly in terms of customer value. Benchmarking allows learning from other organizations' experiences in BPR, as well as learning from one re-engineering process to another in the same organization.

**Effective Use of Consultants:** Several authors suggest that an effective use of consultants is useful in ensuring successful implementation of BPR. Consultants can bring to the organization specialized skills, experience, and know-how that the organization needs and it is both time-consuming and expensive for it to build internally. They can also provide a firm wide view, encourage unity between members, and are usually neutral. Success of consultants in BPR is determined by their level of experience in implementing similar projects in other organizations, as well as their ability to direct the re-engineering efforts to areas of substantial benefits to the organization.

**Build BPR vision.** Process vision directs both long term and day-to-day actions. A complete development of process vision includes evaluating business strategy to

anticipate future processes, conducting customer-based assessment of performance targets, benchmarking similar BPR efforts, and developing process attributes and its performance measures.

**Effective Process redesign:** Effective process orientation, appropriate level of process knowledge, documentation of existing processes, appropriate selection of core processes, and use of prototyping are all critical components in successful BPR implementation. Adequate identification of process gaps and evaluation of effectiveness of current processes by making use of appropriate software tools to visualize and analyze them is also useful. Identifying process owners is also vital to BPR implementation.

**Integrating BPR with other Improvement approaches:** Several researchers suggest that using continuous improvement techniques increases dramatic gains. TQM is particularly suggested to be integrated with BPR

**Adequate Identification of BPR Values:** BPR efforts should focus on identifying re-engineering opportunities and values to internal and external stakeholders. A continuous focus should be maintained on business objectives.

## ***2.7.2. BPR Failure Factors***

### ***2.7.2.1. Factors related to change of management systems and culture***

**Problems in Communication** which results from inadequate communication of need to change, hiding uncertainties in communication, Poor communication between BPR teams and other personnel, Lack of motivation and reward.

**Organizational Resistance** include resistance to change, fear, lack of optimism, and skepticism about BPR results, worries about job security, fear of job loss, fear of loss of control and position, middle management impermeability, lack of adequate planning for resistance to change. Lack of determination/courage/skills of management for radical changes, Lack of cross-functional co-operation; Line managers are not receptive for change and demand for change exceeds the capacity to absorb.

**Problems related to creating a culture for change:** Not considering existing management systems and organizational culture, values ignorance, lack of trust

between management and employees, underestimating the role of politics in BPR, animosity toward.

**Lack of training and education:** The absence of theory, Lack of understanding of BPR, Lack of appropriate training for those affected by BPR (Al-Mashari and Zairi, 1999).

#### ***2.7.2.2. Factors related to organizational structure***

**Ineffective BPR Teams:** difficulty in finding suitable teams members and inadequate communication among members and team skills, Lack of training for BPR teams and authority given to BPR teams (Al-Mashari and Zairi, 1999).

**Problems related to the Integration mechanism, Job definition, and allocation of responsibilities:**

- Inflexible hierarchical structures and Unclear definition of jobs
- People think solely in terms of their own immediate working group
- Conflicts between BPR team responsibilities and functional responsibilities

#### ***2.7.2.3. Factors related to BPR project management***

**Problems Related To Planning and Project Management:**

- Inadequate planning for BPR project and Compressing the time needed to succeed
- Not enough time to develop new skills for BPR and too many improvement projects underway
- Variable quality of ideas for BPR and incomplete restructuring of an organization
- Extremely radical process change and too incremental and not enough radical process change
- Missing assessment of BPR project performance in the early stages and inability to control BPR efforts  
(Al-Mashari and Zairi, 1999).

**Problems Related to goals and measures:**

- Lack of clear performance objectives and milestones for BPR project and spending too much time in analyzing existing processes
- Poorly defined needs and difficulty in establishing performance goals

- Difficulty in measuring BPR project performance and using only quantifiable and easy measures  
(Al-Mashari and Zairi, 1999).

**Inadequate focus and objectives:**

- Narrow technical, Cost-cutting, absence of strategic focus
- Focusing on planning rather than on doing and using re-engineering to avoid making hard decisions
- Old patterns of automating existing processes and short-term view and quick fix mentality

**Ineffective Process Redesign:** missing process understanding and re-engineering the wrong processes

- Missing process owners and narrowly defined processes.
- Inadequate focus on core processes and determination of scope of change

**Problems Related to BPR Resources:** Lack of required resources for BPR efforts

- Difficulty in forecasting human, financial, and other resources

**Ineffective Use of Consultants:** Poor implementation by consultants; Lack of external consultants' support for BPR process. (Al-Mashari and Zairi, 1999).

#### ***2.7.2.4. Factors related to IT infrastructure***

**Problems Related to IT Investment and Sourcing Decisions:** Optimizing lower-level processes that can be outsourced for cheaper, Cost and fewer efforts, Premature IT outsourcing, costing models fail to consider the totality of system elements

**Improper IS Integration:** inadequate treatment of compatibility issues, insufficient telecommunication infrastructure capabilities, insufficient database infrastructure capabilities, insufficient IS application infrastructure capabilities (Markus and Riley, 1994).

## **2.8. Balanced Scorecard**

*Balanced scorecard is* a system of corporate appraisal which looks at financial and non-financial elements from a variety of perspectives. It is an approach to the provision of information to management to assist strategic policy formation and achievement. It provides the user with a set of information which addresses all

relevant areas of performance in an objective and unbiased fashion. It is a set of measures that gives top managers a fast but comprehensive view of the business.

The scorecard produces a balance between four key business perspectives: financial, customer, internal processes and innovation. It balances how the organization sees itself and how others see it. It balances the short run and the long run. It also balances between the situation at a moment in time and change over time (Norton, 1992).

Balanced scorecard helps companies to focus on what has to be done in order to create a breakthrough performance. It acts as an integrating device for a variety of corporate programs. It makes strategy operational by translating it into performance measures and targets. It helps break down corporate level measures so that local managers and employees can see what they need to do well if they want to improve organizational effectiveness. It provides a comprehensive view that overturns the traditional idea of the organization as a collection of isolated, independent functions and departments (Norton, 1992).

### **Review of Empirical Studies**

The above empirical review of literature emphasizes that all the studies so far conducted are mainly discussing the problems related to management systems and organizational culture, values ignorance, lack of trust between management and employees, the role of politics in BPR, the absence of theory, Lack of understanding of BPR, and Lack of appropriate training for those affected by BPR in general at Macro-level. The researcher also observed in the review of literature that there are no studies conducted mainly to identify the problems related to the implementation of BPR in the Ethiopian Revenues and customs Authority Mekelle branch. Thus, the researcher felt it appropriate to take up the present study entitled "*Implementation of business process reengineering(BPR); An Analysis of key Success and Failure Factors – A Case Study of Ethiopian Revenues and Customs Authority ,Mekelle Branch*", to assess the Successes and failure factors, thereby to recommend appropriate courses of action in order to gain from the benefit of BPR.

# CHAPTER III

## METHODOLOGY AND PROFILE OF THE ORGANIZATION

### 3.1. Methodology

#### 3.1.1. Research design

To attain the stated objectives, the researcher has followed descriptive method of the study. Descriptive study was used because this type of research is commonly conducted to collect detail description of existing phenomena with the intent of employing data to justify current conditions and whenever possible to draw conclusions from the facts discovered.

#### 3.1.2. Sampling design

There are several approaches to determine the sample size. The researcher used purposive sampling method because it is the best method to collect relevant data from individuals or organization willing to provide it.

There are three hundred six tax customers of the organization since 2006. Among these, the researcher purposely selected 22% (sixty eight in number) of tax customers which include twenty VAT customers, forty seven profit tax customers and only one turn over tax customers.

Besides, the researcher selected all seven management members, and all thirty two employees of the tax collection and customer service work process. So, in this study, the total sample size was 100.

These, sample respondents were selected from the updated list provided by the statistic and documentation section of Ethiopian Revenues and Customs Authority-Mekelle branch.



### **3.1.3. Data type and source**

In order to attain the objectives of the study, the researcher utilized both primary and secondary source of data. To have valuable research output the way of collecting data is vital, because inappropriate utilization of instruments of data collection resulted in unreliable conclusion.

**Primary data:** The study is highly depends on primary data, the data required for the study was collected through questionnaire. To fulfill the objectives of the study, primary data was collected using questionnaires and interview. Open ended and close ended questions were arranged in the questionnaire for the sample employees (thirty two in number); customers of the organization (sixty eight in numbers). The questionnaires were designed to address the objectives of the study and the research questions rose in the study.

Interview was held with management to acquire key additional information.

**Secondary data:** Secondary data was collected from documents of ERCA and literatures on the subject area, reports of ERCA, and internet sources.

### **3.1.4. Data analysis**

Once the data were organized and presented, they were analyzed using descriptive statistical tools such as data tabulation, diagrams, percentage and ratios. It has been analyzed to provide answers for the research questions and draw appropriate recommendation.

## **3.2. Profile of the organization**

It is commonly understood that every government seeks to raise revenue, mainly through taxation, in order to pay its expenditure on infrastructure development. In Ethiopia, the responsibility to collect revenue for the federal government rests with the Ethiopia Revenue and Customs Authority. In addition to raising revenue, the Authority is responsible to facilitate the legitimate movement of people and goods across the border. Simultaneously, the Authority focuses on those people and vehicles that might be involved in the act of smuggling i.e. the act of bringing into or

taking out of the country goods on which customs duty and taxes are not paid and goods the importation or exportation of which are prohibited by law. The Authority conducts investigation, audit and prosecutes offenders. In an attempt to discharge its responsibility, the Authority closely works with the Federal Police, Standardization Authority, Ministry of Health and Immigration Service and with other stakeholders.

According to article 3 of the proclamation no.587/2008, the Authority is looked upon as "an autonomous federal agency having its own legal personality". The Authority came into existence on 14 July 2008, by the merger of the Ministry of Revenue, Customs Authority and The Federal Inland Revenue Authority who formerly were responsible to raise revenue for the Federal government and to prevent contraband. Reasons for the merger of the foregoing administrations into a single autonomous Authority are varied and complex. Some of those reasons include: to provide the basis for modern tax and customs administrations, to avoid unnecessary and redundant procedures that results delay and are considered cost-inefficient, to be much more effective and efficient in keeping and utilizing information, promoting law and order, resource utilization and service delivery, to transform the efficiency of the revenue sector to a high level.

The Authority has the following Objectives:

- To establish modern revenue assessment and collection system; and provide customers with equitable, efficient and quality service,
- To cause taxpayers voluntarily discharge their tax obligations,
- To enforce tax and customs laws by preventing and controlling contraband as well as tax fraud and evasion,
- To collect timely and effectively tax revenues generated by the economy;
- To provide the necessary support to regions with a view to harmonizing federal and regional tax administration systems.

**Vision:** The Authority's vision is to see “fair and modern taxes and customs administration system that enhances the proper and effective revenue collection”.

**Mission:** The ERCA shall promote the voluntary compliance of taxpayers, ensure integrity and develop the skill of the employees, support the modernization and harmonization of the taxes and customs administration system, contribute to economic development and social welfare through effective revenue collection.

**Values:** The Authority has the following values:

- Customer focused service delivery (trust, respect, protect, support)
- Protect the well-being of the society
- Integrity and transparency
- Professionalism and collaborative working

# CHAPTER IV

## DISCUSSION AND ANALYSIS

This chapter presents the discussion and analysis on the data gathered from primary and secondary sources in relation to implementation of BPR in Ethiopian Revenues and Customs Authority Mekelle Branch. The primary data was gathered from employees of the tax collection and customer service delivery process of the organization and from the outside tax customers using independent questionnaire. Additional data was conducted from the management using interview.

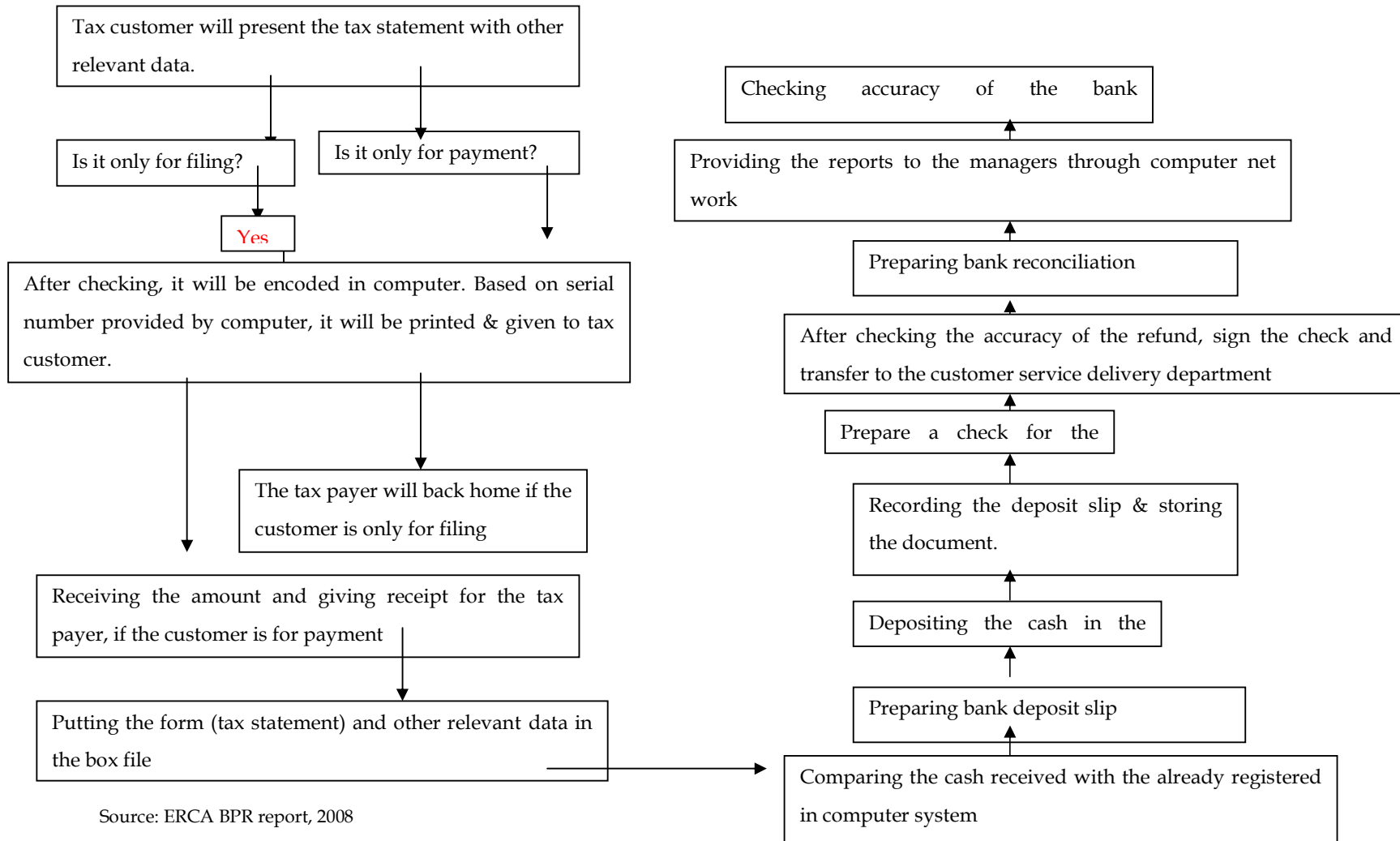
### **4.1. Data from document of ERCA and interview survey analysis**

The ERCA BPR study report (2008) shows that in the first part of the implementation of the BPR, weakness on service delivery as well as internal problem was identified. At this step, priority was given to solve the organization's internal problem, improve the service delivery. The following measures were taken as per the BPR to improve the tax collection procedures. The study for the improvement has been made in tax revenue and accounting department, tax assessment, tax refund, tax payers follow up and control.

#### **4.1.1. Tax collection and Accounting sub process**

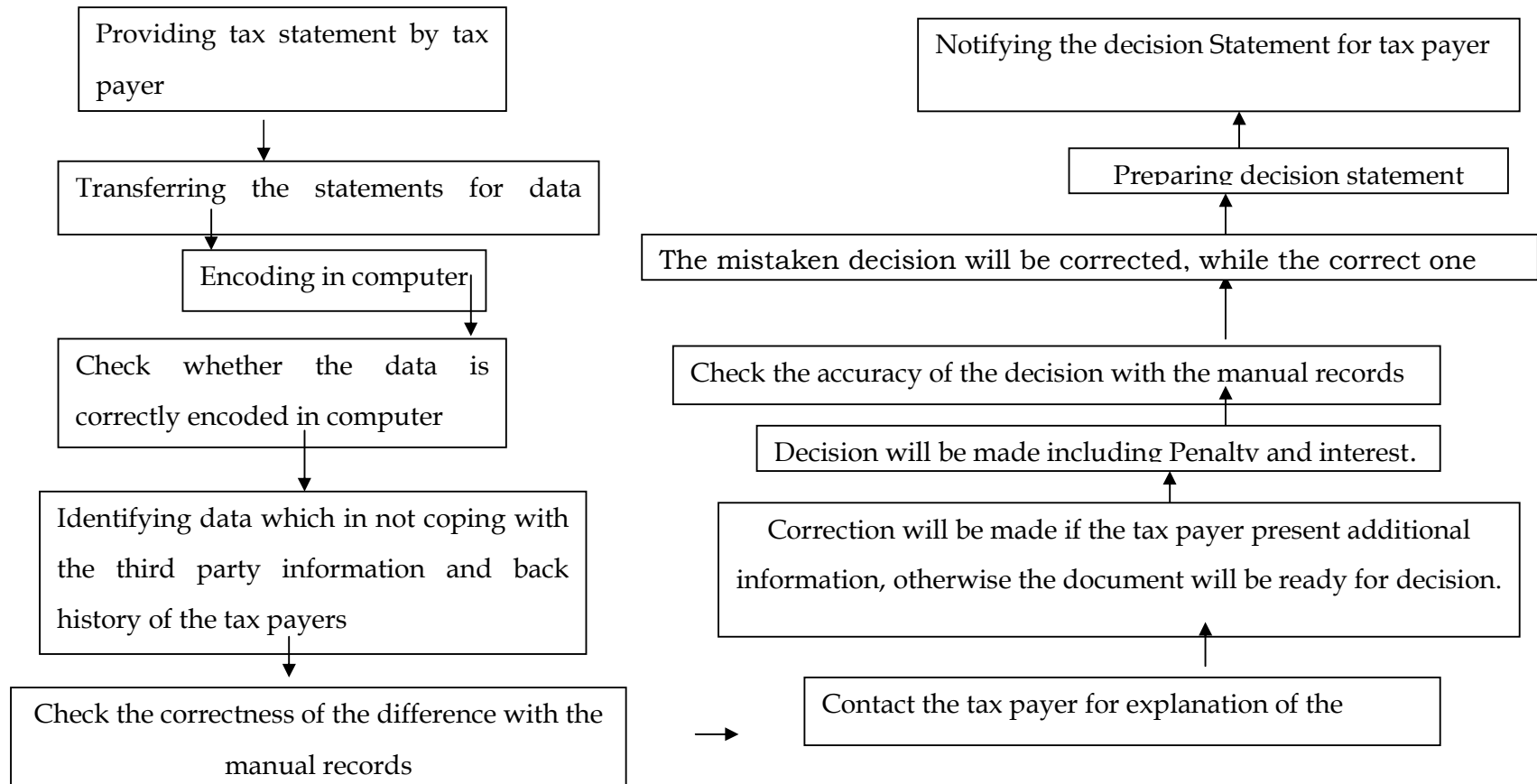
According to ERCA BPR study report (2008), the main activities of this sub process are receiving tax declaration and payment, depositing the amount in bank, preparing check for the refund, preparing journal for revenues and expenses, bank reconciliation, and preparing reports. The BPR study report also shows the organization has identified three methods of tax declaration and payment methods. These include electronic method, using third party (bank and other financial institution) and by contacting the organization.

Diagram 1: The process map designed as per the BPR for tax collection and Accounting sub process.



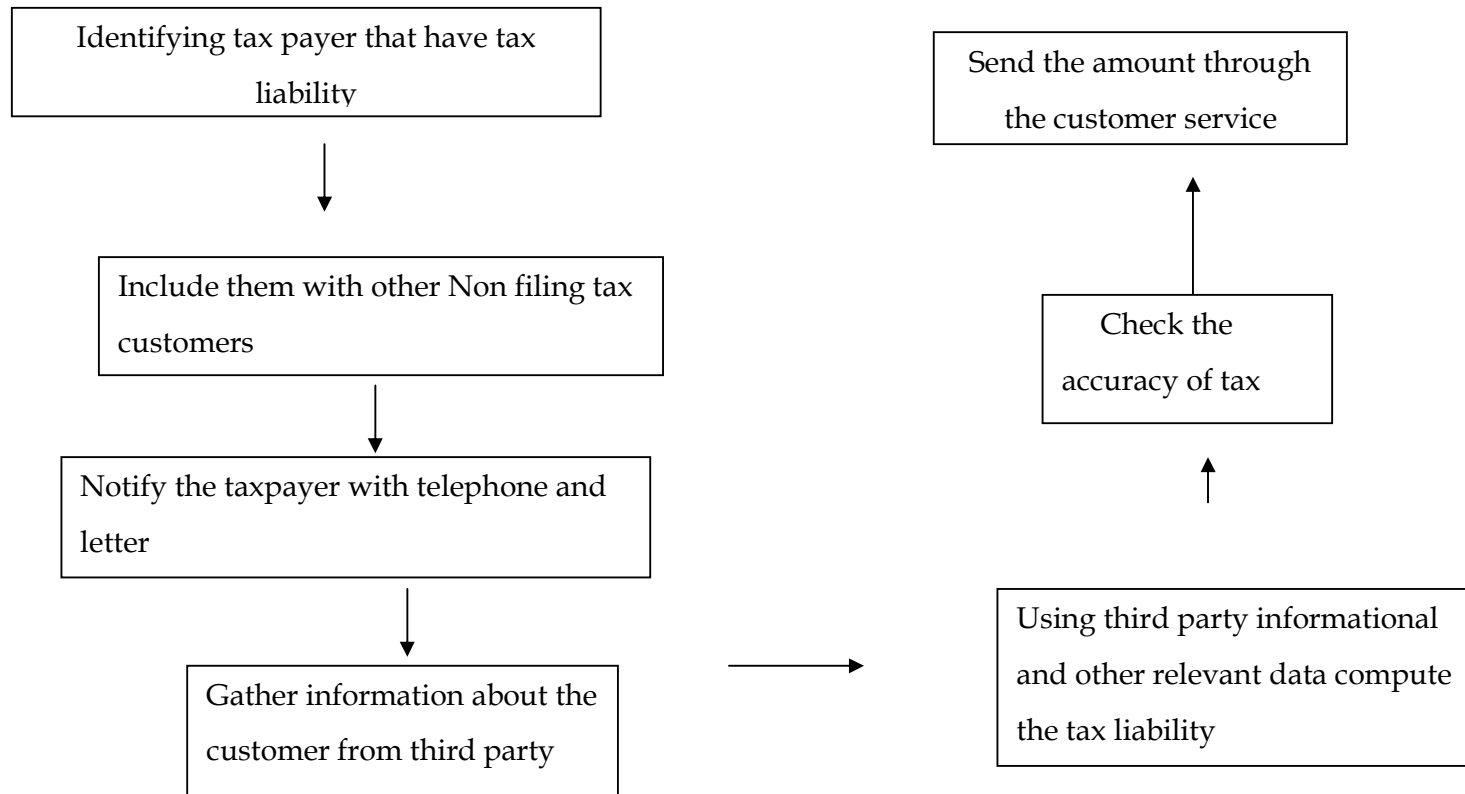
Source: ERCA BPR report, 2008

Diagram 2: Process map designed as per the BPR for Tax assessment sub process



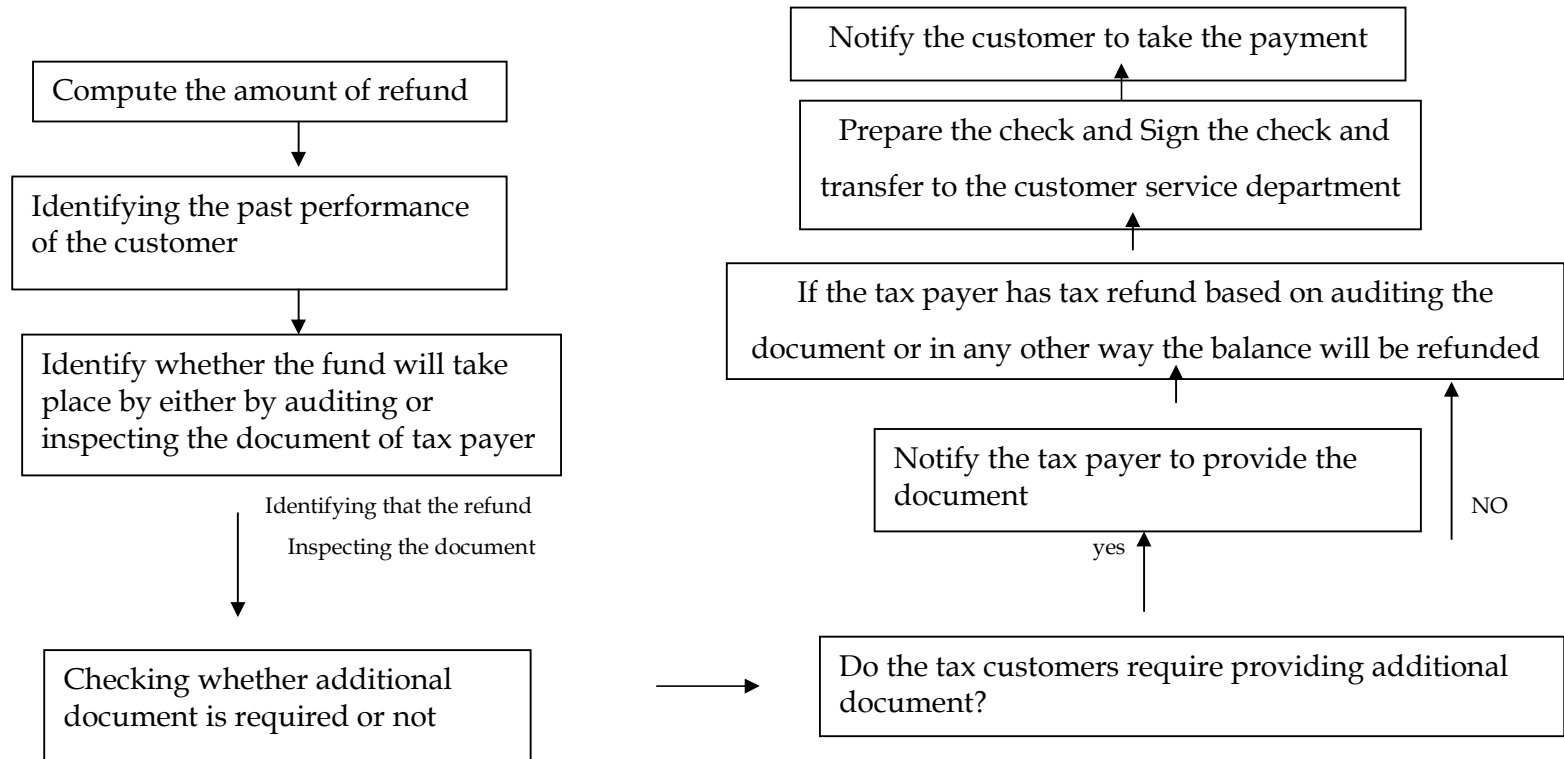
Source: ERCA BPR report, 2008

**Diagram 3.** Process map designed as per the BPR for follow up process for non- filing customers.



Source: ERCA BPR report, 2008

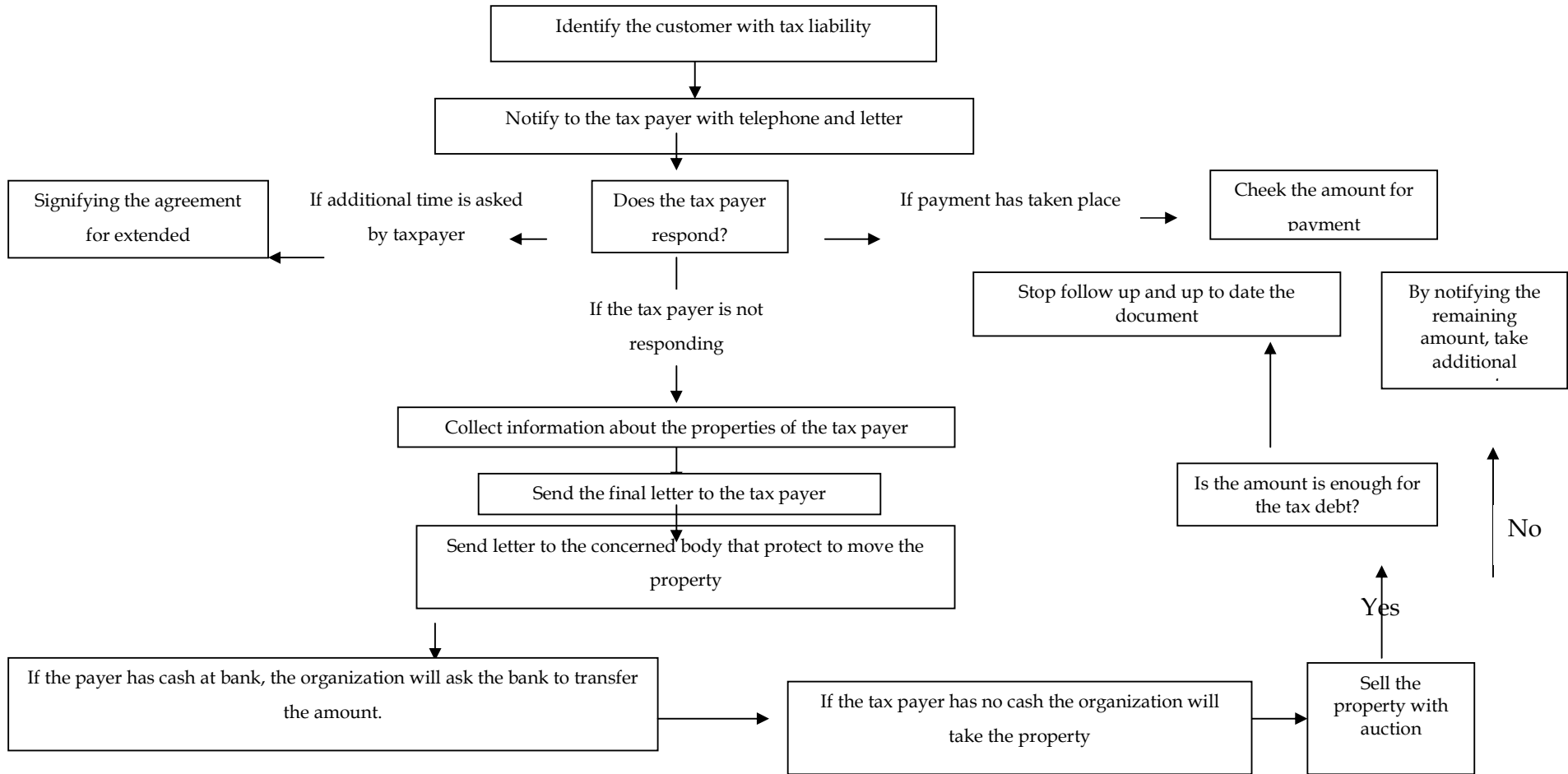
Diagram 4. The process map designed as per the tax refund Sub process.



Source: ERCA BPR report, 2008



Diagram 5 The process map designed as per the tax follow up Procedures for unpaid tax.



The management of the organization had asked as: **What were the main problems in tax collection and Accounting sub process?**

The manager's response shows that Electronic-filing, electronic-payment, filing and payment using third party as alternative is not practiced in the organization due to internal and external factors like infrastructure problems (like financial institutions are not automated), absence of legal frame work in relation to electronic commerce, and other socio-cultural problems (like poor awareness of the customers about the use of technology, lack of skilled man power in the organization etc.).

Due to the limited coverage of tax Audit the organization almost depends on the amount declared by the customer. There are no clear rules and regulation on the procedure of writing off the tax liability that are deemed to be uncollectible. This has a serious impact on the quality of tax collection and open hole for tax evasion. According to the tax proclamation, every tax payers are expected pay their tax obligation within the given time. If they are not paying on time, the organization will notify them with either telephone or letter to pay their tax obligation. However, the organization is poor in handling up to date customer file which vital for follow up and control of customers. Tax refund is the amount that is paid back to the customer for excess tax payment. For good performing tax payers, the organization will calculate the excess amount and pay back without application of the customer. However, if the customer has poor track record, the computed excess payment will be refunded based on the application of the tax payer. If there is unpaid tax based on the audit report and other techniques of inspections, the tax payer is required to pay the amount within 30 days of notification or appeal for the decision. However, the organization fails to follow up and collect the tax liability due lack on manpower.

The management of the organization had asked as: **What were the main success and problems of tax Automation and Modernizing tax Administration in ERCA?**

The manager's response shows that in modernizing tax administration satisfy the tax payers' requirements in the best possible manner. Changing the administration in

computerized way satisfies two requirements. It makes the work effective and efficient, it also facilitate for fairness and justice and rehabilitates the management of the Authority with regard to tax payer requirement.

Federal Inland Revenue Authority announces from 24 February 2004 the development of new software enabling to carry out the duty of the collection of value added tax through computer's Named Standard Integrated Government Tax Administration System (SIGTAS). It is an integrated package with all modules necessary to manage all taxes and licenses. SIGTAS has the following benefits. For Governments, it improves the efficiency of the tax collection, simplifying administration of tax laws and providing better control over compliance, make easy to compare the taxes assessed and taxes collected, provides a detailed tax roll along with each taxpayer's assessments and payments, provides many management and statistical reports to keep the government fully informed on the state of tax administration.

Currently, ERCA uses Taxpayers Identification Number (TIN). The system was notorious for its inability to deal with those who change a single alphabet in their name thereby altering an individual's identity. For instance if a hypothetical tax payer, Zeru, wanted to change his identity he could record his name as Zerue or Zeroo," Five years back, tax payers used to put their addresses on the individual document, which was not appropriate for it was ineffective in performing the tax collection activities.

In light of all the shortcomings with TIN, it is time to use modern Information Technology equipment. The Authority to use more proficient technology by adding some biometrics features (fingerprints and photographs] onto the previous TIN system. Biometrics is a method unique for its ability to recognize individuals based on one or more intrinsic physical or behavior traits. Biometrics technology is often used to make identification easier to verify and an access controlling mechanism. This latest development in the tax collection system is a milestone in avoiding inaccuracies, blunders and limitations.

The management of the organization had asked as: **What were the main success and problems with regards to Customer Service delivery?**

The manager's response shows that the Ministry of Revenue and customs authority has embarked reforms in all its sectors of activities. The reforms are geared to an enhancement of its capacity to service delivery, modernize management and operations throughout the organization.

An efficient service delivery can be defined as the ability of an organization to render simple, effective, and transparent service, which address customer expectation. Efficient service delivery can ensure customer satisfaction and enables the clients to feel confidence towards organization. Divergence of providing effective and efficient service results in complaints. Since complaint could give an organization all the information what the management needs, it should be addressed properly. Complaint information is valuable only when it has feedback into the management decision-making process. Therefore, integrating complaints handling into the overall strategy of an organization, providing complaint staff enough management backup, empowerment and enable fast complaint information flow to all the required direction are crucial for the betterment of an organization.

The respondents also reveal following rights of the customer were designed as per the BPR:

**The right of understanding tax regulation;** The customer has the right to obtain description about tax regulation, tax refund, and the right to get urgent responses, audit report, information about tax decision and computation methods.

**The right to appeal:** Customers have the right to appeal for any confusion on tax decision. The organization has to accept the appeal positively, and the appeal has to be inspected by the expert not involved in the decision. If the case of the appeal is not complex and does not need additional document, it has to be decided within seven days. Written description has to be provided to the customer for partial or full rejection of the appeal.

**The right not to pay excess amount:** The organization has to serve the tax customer honestly. The excess amount had to be refunded, benefits and dedications has to be given to the tax customer honestly.

**The right in relation to confidentiality:** the organization has to keep the financial secret or other records of the customer. The financial information of the tax customer is only allowed to the organization and the legal workers of the organization.

The following obligations of the customer were designed as per the BPR:

**The obligation to declare correct and up to date document:** The customer has to declare the tax statement timely. Based on the tax regulation, the tax payers has notify the organization if it changes its address ,amalgamation with other firm, expanding the business etc.

**The obligation to have Account Record:** The tax customer is expected to record and provide financial information and other relevant data.

**The obligation to pay tax with in specified time:** The customer is expected to pay the tax obligation fully. If payment of tax obligation as per specified time is beyond the capacity of the tax customer, the organization has to make support by arranging convenient payment schedule.

Improving the speed of the service delivery is an important issue for the successful implementation of BPR. Quality service can be seen in terms of speed that the system provides for the customer. In ERCA, the time for various activities is fixed as per the BPR based on practical studies.

Table 4.1: Speed of service

N0	Types of service	Time required	
		As per the older Method	As per BPR
1	Declaring and payment of tax obligation	33-50 minutes	10 minute
2	Providing certificate for tax payment and	4 hours	10 minute
	For renewing.	4 hours	10 minute
3	For tax refund		} 10 - 22 Days
	<ul style="list-style-type: none"> <li>• Inspecting the document</li> <li>• Making audit</li> </ul>	70 - 120 days 6 - 12 months	
4	Tax assessment and audit	6 - 12 months	21 hours
5	Tax registration	2 days	1 hours

Source: ERCA (2008)

## 4.2. Questionnaire survey analysis

### 4.2.1. Response by employees

Questionnaires were prepared and distributed to twenty five employees of the tax collection and customer service work process.

Table 4.2. Educational level.

Criteria for evaluation		Number of respondents	Percent (%)
What is the highest level of education?	Primary education	0	0%
	Secondary education	4	12.5%
	College diploma	17	53.125%
	University degree	11	34.375%
	Total	32	100%

Source: questionnaire survey, 2010.

Educational background of the employees is an important component for successful BPR implementation. According to Table 4.2, the majority of the employees in tax collection and customer service department have qualification of college diploma and university degree. So, with their current educational level, the employees can perform their duties successfully.

Table 4.3. Work experience

Criteria for evaluation		Number of respondent	Percent (%)
Work experience	5-10 years	11	34.375%
	11-15 years	3	9.375%
	16-20	12	37.5%
	Above 20 years	6	18.75%
	Missing	0	0%
	total	32	100%

Source: questionnaire survey, 2010

Experienced employees and management have better information about the nature of customers, the weakness of the organization and may provide better input for the successful implementation of the BPR. Table 4.3 shows about 65.625% of the employees have work experience of above 11 years. This opportunity can help the organization for successful implementation of BPR.

Table 4.4. Understanding about the BPR

Criteria for evaluation		No. of respondents	Percent (%)
How do you understand BPR?	Continuous improvement	4	12.5%
	Process improvement	7	21.875%
	Fundamental, radical, dramatic improvement	21	65.625%
	total	32	100%

Source: questionnaire survey, 2010.

Employees' clear understanding about the concept of BPR plays a critical role for the implementation of BPR. Employees were asked on their understandings about business process reengineering. They understand BPR from different perspective. Table 4.4 shows that the majority of the employees (65.63%) understand BPR as a mechanism that could bring both processes, continuous, fundamental, radical and dramatic improvements. This show the employees of the organization have good awareness about the concept BPR.

Table 4.5. Adequate training of BPR for employees

Criteria for evaluation	YES		NO		Total		Missing		Total	
	NR	%	NR	%	NR	%	NR	%	NR	%
Do the employees obtain adequate training on the concept of BPR?	24	75%	6	18.75%	30	93.75%	2	6.25%	32	100%

Source: questionnaire survey, 2010.

Training is considered to be an important component for successful BPR implementation. Lack of appropriate training about the concept of BPR may create resistance to change, lack of optimism, skepticism about BPR results, worries about job security, fear of loss of position, etc. Table 4.5 shows 75% of the respondents responded that adequate training about the concept of BPR was given.

Table 4.6. Factor that lead to undertake BPR in ERCA

Criteria for evaluation	YES		NO		Total		Missing		Total	
	N	%	N	%	N	%	N	%	N	%
Factor lead to undertake BPR within the ERCA due to management foresight that trouble is coming	0	0%	24	75%	24	75%	8	25%	32	100%
Factor lead to undertake BPR within the ERCA the company is in deep trouble	0	0%	18	56.25%	18	56.25%	14	43.75%	32	100%



Factor lead to undertake BPR within the ERCA because the cost is very high	2	6.25%	9	28.125%	11	34.375%	21	65.625%	32	100%
Factor lead to undertake BPR within the company because customer service is weak	19	59.875%	7	21.875%	26	81.25%	6	18.75%	32	100%
Factor lead to undertake BPR within the ERCA because of change in customer character	0	0%	17	53.125%	17	53.125%	15	46.875%	32	100%
Factor lead to undertake BPR within the ERCA because the existing policy and regulation are contradicting to business affairs	0	0%	23	71.875%	23	71.875%	9	28.125%	32	100%
Factor lead to undertake BPR within the ERCA because the ministry of capacity building demand to be reengineered	29	90.625%	0	0%	29	90.625%	3	9.375%	32	100%

Source: questionnaire survey, 2010.

BPR can be implemented for various reasons: weak customer service, contradicting regulation and policies, deep trouble in the organization, etc. Table 4.6 shows that most of the employees agree that the main reason for implementation of BPR in ERCA is the demand originated from Ministry of Capacity Building. Besides, more than half of the respondents agree that the factor that lead to undertake BPR within the organization is because customer service is weak.

Table 4.7. Leading the reengineering project

Criteria for evaluation	YES		NO		Total		Missing		Total	
	NR	%	NR	%	NR	%	NR	%	NR	%
Did the management planned and assigned the best and the right staff?	26	81.25%	6	18.75%	32	100%			32	100%
Did the top management lead the engineering project to the end?	28	87.5%	4	12.5%	32	100%			32	100%
Does the management involve the employees for implementation of BPR?	22	68.75%	5	15.625%	27	84.375%	5	15.625%	32	100%

Source: questionnaire survey, 2010.

Active engagement and commitment of top management is critical for the reengineering to happen. Without top-down leadership, reengineering failure is a foregone conclusion. Commitment to and support for the change must constantly be secured from senior management throughout a BPR project. In re-engineering, all people must be openly and actively involved and should be consulted at all stages on the process by leaders. Table 4.7 shows that the majority of the respondents agreed that the organization was assigned the best and brightest staff, top management leads the reengineering project to the end and the management has involved the employees for reengineering. Table 4.8 also shows that the management has been equipped with sufficient knowledge and led the BPR project as his/her own.

Table 4.8. Skill and performance of management.

Criteria for evaluation	low		good		average		Very good		Missing		Total	
	NR	%	NR	%	NR	%	NR	%	NR	%	NR	%
Had the management taken the reengineering as his/her own?	2	6.25%	4	12.5%	23	71.875%	2	6.25%			32	100%
Had the management equipped with sufficient knowledge?	-	-	1	3.125%	7	21.875%	24	75%			32	100%

Source: questionnaire survey, 2010.

Table 4.9. Understanding the current BPR

Criteria for evaluation	YES		NO		Total		Missing		Total	
	NR	%	NR	%	NR	%	NR	%	NR	%
Current business process shows where it begins and ends.	25	78.125%	2	6.25%	27	84.375%	5	15.625%	32	100%
Current business process specifies input and out put	22	68.75%	5	15.625%	27	84.375%	5	15.625%	32	100%
Current business process describes sub process	27	84.375%			27	84.375%	5	15.625%	32	100%
Current business process uses process map	20	62.5%	6	18.75%	26	81.25%	6	18.75%	32	100%

Source: questionnaire survey, 2010.

Table 4.9 shows that the majority of employees agree that the current business process shows where it begins and ends, specifies its input and output, describes the sub process and uses process map. This plays key role for the success of implementation of BPR.

Table 4.10. Ways of understanding the customer

Criteria for evaluation	YES		NO		Total		Missing		Total	
	NR	%	NR	%	NR	%	N R	%	N R	%
Understanding customer needs by identifying who are customer	12	37.5%	9	28.125%	21	65.625%	11	34.375%	32	100%
Understanding customer needs by studying customer goals	8	25%	2	6.25%	10	31.25%	22	68.75%	32	100%
Understanding customer needs by studying their needs	6	18.75%	14	43.75%	20	62.5%	12	37.5%	32	100%
Understanding customer needs by identifying customers' real problems	5	15.625%	17	53.125%	22	68.75%	10	31.25%	32	100%
Understanding customer needs by identifying the government's requirement, strategy and policies	28	87.5%	-		28	87.5%	4	12.5%	32	100%

Source: questionnaire survey, 2010.

The employees were also asked how the current processes understand customers' needs. Table 4.10 shows that almost all respondents understand customers need

based on the government's requirements, strategy and policies. The respondents have shown that almost no consideration taken for customers' real problems (15.625%).

Table 4.11. Role of Information Technology

Criteria for evaluation	YES		NO		Total		Missing		Total	
	NR	%	NR	%	NR	%	NR	%	NR	%
Did you take into consideration the role of information technology as a factor for success during implementing BPR?	8	25%	21	65.625%	29	90.625%	3	9.375%	32	100%
Did you have easy and rapid access to all information within the company related to the process that was to be reengineered?	25	78.125%	2	6.25%	27	84.375%	5	15.625%	32	100%

Source: questionnaire survey, 2010.

The IT infrastructure and BPR are interdependent in the sense that deciding the information requirements for the new business processes. Building a responsive IT infrastructure is highly dependent on an appropriate determination of business process information needs. Table 4.11 depicts that weak IT infrastructure in the organization. This might have negative impact on quality customer service.

Effective communication is a key to successful BPR-related change efforts. Communication is needed throughout the change process at all levels including those

not involved directly in the re-engineering project. Table 12; show that the majority of the employees have rapid access to all information within the organization. The table shows that adequate communication about BPR has been taken place with the stakeholders on the new design and feedback has been taken from them.

Table 4.12. Establishment of high level performance baseline

Criteria for evaluation	YES		NO		Total		Missing		Total	
	NR	%	NR	%	NR	%	NR	%	NR	%
Have you establish high level performance baseline for the whole process by calculating the cycle time?	17	53.125%	8	25%	25	78.125%	6	18.75%	32	100%

Source: questionnaire survey, 2010.

Table 4.12 shows that high level Performance baseline for the whole process has been established by calculating the cycle time.

Table 4.13. Measurement linked with compensation

Criteria for evaluation	YES		NO		Total		Missing		Total	
	NR	%	NR	%	NR	%	NR	%	NR	%
Is the performance measurement system linked with the individual compensation system? Based on the score card?	10	31.25%	17	53.125%	27	84.375%	5	15.625%	32	100%

Source: questionnaire survey, 2010.

Staff motivation through a reward program has a crucial role in facilitating re-engineering efforts and smoothing the insertion of new processes in the workplace.

Table 4.13 shows that few employees (31.25%) have agreed the link of performance system with the individual compensation system.

Table 4.14. New thinking brought by BPR.

Criteria for evaluation	YES		NO		Total		Missing		Total	
	NR	%	NR	%	NR	%	NR	%	NR	%
Change in reduced cost & cycle time	31	96.875%			31	96.875%	1	3.125%	32	100%
Change in retain employment schemes	12	37.5%	9	28.125%	21	65.625%	11	34.375%	32	100%
Change in improve quality of services	30	93.75%			30	93.75%	2	6.25%	32	100%
Change in customers satisfaction	28	87.5%	1	3.125%	29	90.625%	3	9.375%	32	100%

Source: questionnaire survey, 2010.

Reengineering is 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. Table 4.14 shows that customer's satisfaction (87.5%), improvement in quality of service (93.73%), reduce cost and cycle time (96.87%).

Table 4.15. Organizational structure change after BPR implementation

Criteria for evaluation	YES		NO		Total		Missing		Total	
	NR	%	NR	%	NR	%	NR	%	NR	%
Are there organizational structure changes that accommodate process based activity?	18	56.25%	7	21.875%	25	78.125%	7	21.875%	32	100%

Source: questionnaire survey, 2010.

Table 4.15 shows that after the implementation of BPR, the organization has made change in its organizational structure that accommodates process based activity (56.25%).

Table 4.16. Rate of change after implementing BPR

Criteria for evaluation	low		good		average		Very good		Missing		Total	
	NR	%	NR	%	NR	%	NR	%	NR	%	NR	%
Rate in behavior & attitudinal change	8	25%					12	37.5%	12	37.5%	32	100%
Rate in skill, knowledge & training change	5	15.625%					15	46.875%	12	37.5%	32	100%
Rate in incentive & reward system change	18	56.25%					11	34.375%	3	9.375%	32	100%
Rate in culture, value & beliefs	19	59.375%					8	25%	5	15.625%	32	100%
Rate in team coordination, organizational & management change	3	9.375%					21	65.625%	8	25%	32	100%
Rate in change communication	1	3.125%					25	78.125%	6	18.75%	32	100%

Source: questionnaire survey, 2010.

Organizational culture is a determining factor in successful BPR implementation. It influences the organization's ability to adapt to change. The organization must understand and conform to the new values, management processes, and the communication styles that are created by the newly redesigned processes so that a culture which upholds the change is established effectively. In a newly re-engineered organization, people usually share common goals and thus become more capable of working co-operatively without competing against each other.



Table 4.16 shows that high behavioral, attitudinal, communication, skill, knowledge and training change is observed in the organization. However, change in incentive and reward system, culture, value and beliefs ranked as low. Moderate improvements in team coordination, organizational and management are observed after implementing of BPR.

Table 4.17. Personal gain after BPR

Criteria for evaluation	YES		NO		Total		Missing		Total	
	NR	%	NR	%	NR	%	NR	%	NR	%
Did you have Benefit in salary increment?	27	84.375%			27	84.375%	5	15.625%	32	100%
Did you have Benefit in promotion?	14	43.75%	11	34.375%	25	78.125%	7	21.875%	32	100%
Did you have empowerment?	9	28.125%	18	56.25%	27	84.375%	5	15.625%	32	100%
Did you have work satisfaction?	23	71.875%			23	71.875%	9	28.125%	32	100%
Did you have work reduced work load and service time?	9	28.125%	22	68.75%	31	96.875%	1	3.125%	32	100%

Source: questionnaire survey, 2010.

As BPR results in decisions being pushed down to lower levels, empowerment of both individuals and teams becomes a critical factor for successful BPR efforts, since it establishes a culture in which staff at all levels feel more responsible and accountable and it promotes a self-management and collaborative teamwork culture. Empowerment entails that staff are given the chance to participate in the redesign process. When empowered, employees are able to set their goals and monitor their

own performance as well as identify and solve problems that affect their work, thus they are supporting the BPR efforts. Table 4.17 summarizes that employees' have got salary increment, promotion and work satisfaction. They disagree that the employees have empowered. The work load and service time is not reduced after the implementation of BPR.

### 4.3. Responses by Customer

Table 4.18. Educational level

Criteria for evaluation		Number of respondent	Percent (%)
What is your highest level of education?	Primary education	3	4.41%
	Secondary education	41	60.3%
	College diploma	21	30.9%
	University degree	3	4.41%
	Total	68	100%

Source: questionnaire survey, 2010.

Table 4.18 shows the majority of the respondents (60.3%) are high school graduates.

Table 4.19. Type of tax payer

Criteria for evaluation		Number of respondent	Percent (%)
Type of tax payer	VAT	27	39.7%
	Profit tax payers(cooperatives)	40	58.82%
	TOI	1	1.47%
	Missing	0	0%
	Total	68	100%

Source: questionnaire survey, 2010.

Table 4.19 also shows that the majority of the tax customers (98.52%) are cooperatives (profit tax payers) and VAT customers.

Table 4.20. Years of Contact

Criteria for evaluation		Number of respondent	Percent (%)
Years of Contact with ERCA	1-5 years	56	82.35%
	5-11 years	7	10.29%
	Above 11 years	0	0%
	Missing	5	7.35%
	Total	68	100%

Source: questionnaire survey, 2010.

According to Table 4.20 most of the customers (82.35%) have registered as a tax payer in the last five years.

Table 4.21. Information about BPR

Criteria for evaluation	YES		NO		Total		Missing		Total	
	NR	%	NR	%	NR	%	NR	%	NR	%
Have you any information that ERCA undertaken improvement on its service by reengineering process?	32	47%	27	39.7%	59	86.76%	9	13.23%	68	100%

Source: questionnaire survey, 2010.

Involvement of all stakeholders in the reengineering plays a key role for its success. However, Table 4. 21 show that less than half of the respondents (47%) have information on the implementation of BPR in ERCA. Table 4.22 shows that the majority of the tax customers have (83.82%) observed improvement in customer service delivery in the organization one year back.

Table 4.22 Time of improvement observed

Criteria for evaluation		Number of respondent	Percent (%)
When did you observe improvement made by the organization?	1 years back	57	83.82%
	2 years back	1	1.47%
	before 2 years	0	0%
	Missing	10	14.7%
	Total	68	100%

Source: questionnaire survey, 2010.

Table 4.23. Source of information for customers

Criteria for evaluation		Number of respondent	Percent (%)
How do you get up to date information about current tax regulation, rules ?	News papers, , magazine ,brochures, websites	7	10.29%
	TV, radio	5	7.35%
	From organization websites and telephone	0	0%
	Participating on meeting	0	0%
	Other ,specify if any		
	missing	57	83.82%
	total	68	100%

Source: questionnaire survey, 2010.

Modernizing the tax collection procedures satisfy the tax payers' requirements in the best possible manner. Changing the administration in computerized way satisfies two requirements. It makes the work effective and efficient, it also facilitate for fairness and justice and rehabilitates the management of the Authority with regard to tax payer requirement.

It makes simple, effective, and transparent service, which address customer expectation. Efficient service delivery can ensure customer satisfaction and enables

the clients to feel confidence towards organization. Table 4.23 reveals that the organization is weak in providing information to its customers. No customer participates on meeting and use organization website to get information.

Table 4.24 - Area of BPR Improvement observed

Criteria for evaluation	YES		NO		Total		Missing		Total	
	NR	%	NR	%	NR	%	NR	%	NR	%
Improvement on identifying customer type	60	88.23%	2	2.94%	62	91.17%	5	7.35%	68	100%
Improvement on studying customers goal	41	60.29%	12	17.64%	53	77.94%	15	22.1%	68	100%
Improvement on studying customers real problem	18	26.47%	10	14.7%	28	41.17%	40	58.82%	68	100%

Source: questionnaire survey, 2010.

Table 4.24 show that an improvement has observed on understanding the customer based on customer type, and customer goal. But, still the organization is poor in understanding its customers by their real problem.

Table 4.25 Major improvement after ERCA's BPR

Criteria for evaluation	YES		NO		Total		Missing		Total	
	NR	%	NR	%	NR	%	NR	%	NR	%
Observe major Improvement on employees attitude	60	88.23%	6	8.82%	66	97.01%	2	2.94%	68	100%
Observe major Improvement on quality of service	40	58.82%	13	19.11%	53	77.94%	15	22%	68	100%
Observe major Improvement on skill and knowledge of employees	32	47%	19	27.94%	51	75%	17	25%	68	100%
Observe major Improvement on team coordination, organizational and management system	62	91.17%	6	8.82%	68	100%			68	100%
Observe major Improvement on speed of service delivery	66	97.01%	1	1.47%	67	98.52%	1	1.47%	68	100%

Source: questionnaire survey, 2010.

Table 4.25 shows that major improvements have been observed on speed of service delivery, employees' attitude and 91.17% of the respondents show improvement on team coordination, organization and management system.

# CHAPTER V

## FINDING, CONCLUSION AND RECOMMENDATION

### 5.1. Findings

BPR has come to existence in Ethiopia with the intent to bring radical institutional transformation all over the nation and to replace traditional and outdated working System. The survey shows that Ministry of Capacity Building demands ERCA working practices to be reengineered was the major compelling reason that leads ERCA to undertake BPR.

As it has been clearly indicated in the introduction part, the main objective of this research paper was to analyze the key success and failure factors in the implementation of BPR in ERCA. Analysis of the data gathered revealed the following findings with regard to the tax collection procedures, customer service delivery, and employee's reaction.

#### 5.1.1. Tax collection procedures

The following successes were observed with regard to tax collection procedures in the organization.

- Tax collection procedure improvement measures were taken as per the BPR in tax revenue and accounting department, tax refund, tax assessment, and tax payers' follow up department of the organization. The BPR study of the organization has identified three methods of tax filing and payment. These include using electronic method, using third party (bank and other financial institution) and by contacting the organization.
- Modernizing the tax collection procedures satisfy the tax payers' requirements in the best possible manner. It improves the efficiency of the tax collection, simplifying administration of tax laws and providing better control over compliance. The ERCA has announced to use new software enabling to carry

out the duty of the collection of value added tax through computer's named Standard Integrated Government Tax Administration System (SIGTAS).

- Currently, the Authority has designed to use a more proficient technology by adding some biometrics features (fingerprints and photographs] onto the previous TIN system which is more unique for its ability to recognize individuals based on one or more intrinsic physical or behavior traits. Biometrics technology is often used to make identification easier to verify and an access controlling mechanism.

The following failures were observed in with regard tax collection procedures after the implementation of BPR,

- The organization has launched a procedure for tax collection, assessment and control of the tax customers. Due to the limited coverage of tax audit, the organization almost depends on the amount declared by the customer. No third party information is considered for tax assessment. ERCA annual report shows that it takes even more than one year to collect the tax liability of the customers that fail to declare and pay on time.
- The organization has not practiced the use of electronic system and the third party (bank and other financial institutions) as alternative for tax filing and payment. According to the ERCA annual report, the organization fails to use these systems due to internal and external factors. Lack of awareness of the customers to use the technology, lack trained man power in the organization, frequent connectivity failure in telephone lines, unavailability of the internet especially at peak hours are among the major problems for the failure of the system.
- The designed procedure also fails to control the customers that make transaction without receipt or using illegal receipt.
- Currently, ERCA uses Taxpayers Identification Number (TIN) which is not able to deal and control with those who change a single alphabet in their name thereby altering an individual's identity. The Authority has design to use a more proficient technology by adding some biometrics features (fingerprints and photographs] which are more unique for its ability to recognize



individuals based on one or more intrinsic physical or behavior traits. But the organization is not using this technology to improve handling of its customer file.

### **5.1.2. Customer Service delivery**

The organization has designed and implemented a system of service delivery to provide simple, effective, and transparent service, which address customer expectation and enables the clients to feel confidence towards organization. The following successes are observed with regard to customer service delivery in the organization.

- The annual reports of the organization show that, the following improvements in the speed of service deliveries were observed after the implementation of BPR.
  - Time for filing and making payment of tax obligation has reduced from 33-50 to hours to 10 minutes.
  - The time for providing certificate for tax payment reduced from 4 hours to 10 minutes.
  - The time for renewing certificates reduced from 4 hours to 10 minutes.
  - The time for inspecting the document for tax refund reduced from 70-120 days to 10-22 days.
  - The time for making audit for tax refund reduced from 6-12 months to 10-22 days.
- The survey revealed the following improvements
  - Implementation BPR resulted in moderate improvement quality service and better customers' satisfaction.
  - Employees' attitude has been improved.
  - Improvement on team coordination, organizational and management system has been observed.

The following failure or weakness is observed in the organization with regard customer service delivery in the organization after the implementation of BPR,

- Almost no news papers, magazine, brochures, websites are provided for the customer to get information about the tax rules, regulation.
- The study show that the employees of the organization understand and treat the customer based on the government's requirements, strategy and policies. Insignificant consideration is taken for the real problem of the customers.

### **5.1.3. Reaction of the employees**

The survey reveals the following successes with regard to employees in the organization.

- The organization has provided training for employees on the concept of BPR; this has helped the employees to understand it as a mechanism that brings continuous, fundamental, radical and dramatic improvements.
- Better improvement is observed in communication between employees and the management. The employees can easily access information in the organization.
- Better improvement on job satisfaction, salary increment is among the opportunities that the employees have gained in their work area.
- The management has equipped with sufficient knowledge and managed the project. The management has assigned the best and brightest staff.

The following failure or weakness is observed in with regard to employees in the organization after the implementation of BPR,

- The survey reveals that insignificant change is observed not only in incentive and reward system, but also in culture, values and beliefs of the employees.
- Moderate changes are observed not only in team coordination, organizational and management but also in skills, knowledge of the employees after the implementation of BPR.

## 5.2. Conclusions

This paper deals with analyzing the key success and failure factors in ERCA's reengineering attempt on the basis of data presented and in consideration of BPR principles. Accordingly, from the findings of the study, the following conclusions have been reached.

Reengineering is not about making incremental improvement (e.g. 5% reduction of cost, 10% sales increment) but is about achieving quantum leaps in performance (e.g. 5 times cost reduction, 10 times sales growth). The hallmark of reengineering is achieving dramatic breakthrough performances in cost reduction, quality, service level, speed of delivery, etc ( Hammer and Champy,1993).

Measures were taken as per the BPR in tax revenue and accounting department, tax assessment, tax payers' follow up department, tax refund, and control of non performing customers in ERCA since 2007.

Activity based process was designed as per the BPR to show clearly the procedures for tax payment, depositing the amount in bank, preparing check for the refund, preparing journal for revenues and expenses, bank reconciliation, and preparing reports. The BPR study of the organization has identified three methods of tax filing and payment methods. These include electronic method, using third party (bank and other financial institution) and by contacting the organization. However, the organization has not practiced the use of electronic system and the third party (bank and other financial institutions) as alternative for filing and payment of tax.

The organization has launched a procedure for assessment and control of the tax customers. Due to the limited coverage of tax Audit, the organization almost depends on the amount declared by the customer. No third party information is considered for tax assessment. ERCA annual report shows it takes even more than one year to collect the tax liability of the customers that have not filed and paid on time. The designed procedure also fails to control the customers that make transaction without receipt or using illegal receipt. There is no clear rules and regulation on the procedure to write off the tax liabilities that are deemed to be uncollectible. This has a serious impact on the quality of tax collection and open hole

for tax evasion (The illegal avoidance of paying tax, especially by making a false declaration of income etc).

Modernizing the tax collection procedures satisfy the tax payers' requirements in the best possible manner. It improves the efficiency of the tax collection, simplifying administration of tax laws and providing better control over compliance, make easy to compare the taxes assessed and collected, provide statistical reports to help the government fully informed on the state of tax administration, provides an overall view of all taxpayer liabilities and payments, eliminates manual calculation of penalties and interest etc. The ERCA has announced to use new software enabling to carry out the duty of the collection of value added tax through computer's named Standard Integrated Government Tax Administration System (SIGTAS). However due to lack of trained man power the organization is not using the software.

Currently, ERCA uses Taxpayers Identification Number (TIN) which is not able to deal and control with those who change a single alphabet in their name thereby altering an individual's identity. The Authority has design to use a more proficient technology by adding some biometrics features (fingerprints and photographs] onto the previous TIN system which is more unique for its ability to recognize individuals based on one or more intrinsic physical or behavior traits. Biometrics technology is often used to make identification easier to verify and an access controlling mechanism. However, ERCA has not used this technology to increase its quality tax collection.

The annual reports of the organization shows that improvements in the speed of service deliveries, in quality service, improved employees' attitude, better customers' satisfaction, improvement on team coordination, organizational and management system were observed after the implementation of BPR

From the findings of this study, it is possible to know that the employees can easily access information in the organization. Work satisfaction, salary increment are among the opportunities that the employees have gained in their work area. On the other hand, the survey reveals that insignificant change is observed not only in incentive and reward system, but also change in culture, values and beliefs of the employees.

According to Hammer and Champy (1993), reengineering is the fundamental rethinking and radical redesign of business process to achieve dramatic improvement in critical, contemporary measurement of performance, such as quality service, and speed. However, the reengineering in ERCA is just an improvement, not radical change, in terms of tax collection procedures, customer service, employees' beliefs and cultural change.

### **5.3. Recommendations**

On the basis of ERCA's reengineering attempt which was summarized under the findings of the study, the following are recommended.

The survey shows that the current tax collection procedures shows where it begins and ends, describe sub process, and uses process map. Process thinking is the heart of business reengineering, which is no longer looking upward into the hierarchy, but ahead to the customers who ultimately drive the organization. However, the tax decision is taken place only based on the report of the tax payer without information from the third party and very limited coverage of tax audit. There is no clear rules and regulation on the procedure of writing off the tax receivable that are deemed to uncollectible. Due to this it takes even more than one year to identify and collect the tax liability of the customers that have failed to file and pay on time. Hence,

- ❖ Hence, ERCA should discuss with other branches and the Authority to formulate clear rules and regulation on the procedure of writing off the tax liability that are deemed to uncollectible and concentrate on collectible taxes.

According to the principle of BPR, priority shall be given for delivery of values rather than maintenance of management control. Modernizing the tax collection procedures satisfy the tax payers' requirements in the best possible manner. It is possible to observe that improved customers' satisfaction due to quality of service as well as increase in speed of service are among the new thinking and achievements which was brought by BPR. Currently, the Taxpayers Identification Number (TIN), which is practiced in the organization is not able to deal and control with those who change a single alphabet in their name thereby altering an individual's identity. The Authority fail to use more proficient technology by adding some biometrics features (fingerprints and photographs).Hence,

- ❖ ERCA should modernize the system of handling customer file by using biometrics features (fingerprints and photographs).
- ❖ ERCA should discuss with its customer to understand their real problems and increase the awareness of the customer about the tax rules and regulation by providing information using news papers, magazines, brochures, websites, and other Medias.
- ❖ ERCA should use the third party (bank and other financial institutions) as an alternative for tax filing and payment for the customers.

Business reengineering enables to ensure people are equipped, motivated and empowered to do what is expected from them. Reengineering disregards all existing structure and procedures and invents completely new ways of accomplishing tasks. It seeks radical design of business process to achieve dramatic improvements and fundamental rethinking rather than merely continuous improvement. (Thomas, 1994). However, the survey reveals that insignificant change is observed not only in incentive and reward system, but also in culture, values and beliefs of the employees. The organization's incentive & reward system can be changed by considering benefits in terms of promotion, empowerment and compensation. Hence,

- ❖ ERCA should implement the concept of balanced score card to practice a widespread, fair and encouraging reward system for the best performing employees.
- ❖ ERCA should consider radical change in respect of in culture, values and beliefs of the employees.

#### ***5.4. Implications for further research***

The researcher tried in this study to cover some of the key success and failure factors in implementations of BPR. A major limitation in this study was time constraint which led to the use of case study approach. In future, different methods of research could be used for study of the same topic or other related aspects of the topic. Specifically, the impact of BPR implementation on cost reduction, the impact of BPR on tax collection performance of the organization and the impact of BPR in reducing tax evasion and avoidance.

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**Annex A- Questionnaire filled by management and employees.**

**Mekelle University**

**College of Business and Economics**

**Department of Accounting and Finance**

The purpose of this questionnaire is to collect data for the study on the title implementation of BPR: An analysis of key success and failure factors, a case study of Ethiopian revenues and customs Authority mekelle branch. This study is for academic purpose i.e. for a partial fulfillment of master's degree project work for finance and investment.

Your cooperation to provide genuine and relevant information is highly important and appreciated for the success of the study. I would like to assure you that your response will be kept confidential. Hence, please feel free to give answer for all questions frankly and accurately. It is not necessary to write your name on questionnaire. I thank you for your precious time that you spend for answering the question.

**Instruction:** Read the question and make tick mark (√ ) in the box provided

**PART ONE: Back ground information**

1. What is your education level?

- Primary education  college diploma   
Secondary education  university degree   
Above university degree

2. Work experience

- 5 - 10 years  16 - 20 years   
11 - 15 years  >20 years

3. Work position before BPR \_\_\_\_\_

Work position after BPR \_\_\_\_\_

**PART TWO: GENERAL INFORMATION BEFORE IMLEMENTATION OF BPR**

1. Basic information about BPR

❖ How do you understand the BPR?

- Continuous improvement
- Process improvement
- Fundamental, radical, dramatic improvement
- Other, specify if any \_\_\_\_\_

2. Selection and prioritizing BPR

- Do the BPR selected is prioritized using dysfunctional, important, feasibility criteria? Yes  No
- Has sufficient discussion been made when prioritizing the BPR? Yes  No

4. What are the reasons that lead to undertake BPR in your organization?

- Because management has foresight that terrible is coming. Yes  No
- Because the organization found in deep trouble. Yes  No
- Because the magnitude of cost was high. Yes  No
- Because customer service was weak. Yes  No
- Because management is ambitions and aggrieve for further improvement Yes  No
- Because the ministry of capacity building demand to be reengineered Yes  No
- Other, specify if any \_\_\_\_\_

PART THREE: OBSERVATION AFTER IMLEMENTATION OF BPR

1. Did you found your expectation fruitful after implementation?

Yes  No

2. Major changes after implementation of BPR

- Did you observe major change in your personal in skill and training change after implementation of BPR  
Low  moderate  high  very high
- Did you observe major change in your personal in incentive reward system after implementation of BPR?  
Low  moderate  high  very high

- Did you observe major change in your personal in culture values and believes changes after implementation of BPR  
Low  moderate  high  very high
- Did you observe major change in team coordination, organizational & mgt change  
Low  moderate  high  very high
- Did you observe major change in communication  
Low  moderate  high  very high
- Did you observe major change in retain employment opportunity  
Low  moderate  high  very high
- The importance of customer and their needs are known and accepted by all employees.  
Low  moderate  high  very high
- The existence of easily changeable structure system  
Low  moderate  high  very high
- Openness of chain of command from both side  
Low  moderate  high  very high
- Recent company's confidence on employee's satisfaction.  
Low  moderate  high  very high
- Understanding and cooperation between work division  
Low  moderate  high  very high
- Fast decision on recommended suggestions concerning change  
Low  moderate  high  very high
- Follow up competence on forces resisting the change  
Low  moderate  high  very high
- Interest of leadership in accelerating the change  
Low  moderate  high  very high
- Other, specify if any \_\_\_\_\_

3. New thinning brought after implementing BPR

- Change in reduced lost & time Yes  No
- . Change in retain employment scheme: Yes  No

- Change in improve quality of service    Yes            No
- Change in customer satisfaction            Yes     No

4. Personal gain after BPR

- Did you have benefited in salary increment? Yes     No
- Did you have benefited in promotion?    Yes     No
- Did you have involved in engineering process? Yes     No
- Did you have empowered?    Yes     No
- Did you have work satisfaction?            Yes     No
- Did you have benefited in terms of reducing work load and service time?  
Yes     No
- Did have compensated?    Yes     No

5. Simplification of job

- Did you found your job simplified in terms of lost reduction  
Yes                             No
- Did you have easy and rapid access to all information within the company related to the process that was to be reengineered?    Yes                     No
- Did you found your job simplified efficiency in delivering service?  
Yes                             No
- . Did you found job simplified in terms of cycle time?    Yes     No
- Did you found your job simplified in terms of altitudinal and behavioral change?    Yes     No

6. Do the employees obtain adequate training on the concept of BPR?

Yes     No

7. What do you observe about the current status of BPR?

Success                     Failure

8. If your answer on question number 7 is "success "what is factor for success in Implementing BPR

- Success in implementing BPR within the company by change management system & culture    Yes                     No
- Success in implementing BPR within the company by management commitment and support    Yes                     No

- Success in implementing BPR within the company by organizational structure  
Yes  No

9. If your answer on question number 7 is "failure" what is factor for failure in Implementing BPR

- Due to problem in communication Yes  No
- Due to organizational resistance Yes  No
- Lack of organizational readiness for change Yes  No
- problem of creating a culture for change Yes  No
- Lack of training & education Yes  No
- Due to problem related to commitment support leadership Yes  No
- Due to problem related to championship and sponsorship Yes  No
- Due to ineffective BPR team Yes  No
- in problem relating to the integration mechanism, job definition and allocation of Responsibilities Yes  No
- Other, specify if any \_\_\_\_\_

10. Have you establish high level performance baseline for the whole process by calculating the cycle time? Yes  No

11. Is the performance measurement system linked with the individual compensation system? Based on the score card? Yes  No

12. The management uses the measurement system for managing improvement  
Yes  No

14. After implementation of BPR, is there organizational structure changes that accommodate process based activity? Yes  No

15. Do the employees' have decision making authority? Yes  No

16. Did the BPR implemented as planned and per the design? Yes  No

**Annex B- Questionnaire filled by customers**

**Mekelle University**

**College of Business and Economics**

**Department of Accounting and Finance**

The purpose of this questionnaire is to collect data for the study on the title implementation of BPR: An analysis of key success and failure factors, a case study of Ethiopian revenues and customs Authority mekelle branch. This study is for academic purpose i.e. for a partial fulfillment of master's degree project work for finance and investment.

Your cooperation to provide genuine and relevant information is highly important and appreciated for the success of the study. I would like to assure you that your response will be kept confidential. Hence, please feel free to give answer for all questions frankly and accurately. It is not necessary to write your name on questionnaire. I thank you for your precious time that you spend for answering the question.

**Instruction:** Read the question and make tick mark (√ ) in the box provided

**Background information**

1. What in the highest level education achieved?

Primary education  secondary education

College diploma  university degree

Above university degree

2. What type of taxpayer you are?

VAT tax payer  Excise tax

Turn out tax and profit tax payer

VAT and profit tax payer

Only profit tax payer

**Changes customers deserved after BPR implementation**

1. Years of contact with Ethiopia revenues and customers authority

4 - 10 years  above 10 years

2. Have your any information that Ethiopia revenues and customer authority under taken improvement its service by reengineering process?

Yes  No

3. When did you observe improvement made by the company?

Since 1 year  since 2 year  since 3 year

4. What are the major improvements observed after BPR?

- Improvement on employee attitude Yes  No

- Improvement on skill and knowledge of the employee Yes  No

- Improvement on team coordination, organizational and management System. Yes  No

- Improvement on the speed of service delivery Yes  No

Other, please specify \_\_\_\_\_

5. How do you get up information about current tax rules and regulation?

TV, radio  from organization websites and telephone

Participating on meeting  News papers, magazine, brochures, websites

Other, specify if any specify \_\_\_\_\_

6. Area of BPR Improvement observed

Improvement on identifying customer type Yes  No

Improvement on studying customer's goal Yes  No

Improvement on studying customer's real problem Yes  No

Improvement on studying customers needs Yes  No

Other, please specify \_\_\_\_\_

7. Major improvement after ERCA's BPR

Criteria for evaluation	YES	NO
Observe Major Improvement on employees attitude		
Observe Major Improvement on quality of service		
Observe Major Improvement on skill and knowledge of employees		
Observe Major Improvement on team coordination, organizational and management system		
Observe Major Improvement on speed of service delivery		

Other, please specify \_\_\_\_\_

## **Annex C: QUESTIONS FOR INTERVIEW WITH MANAGEMENT**

1. What are the success and failures encountered in :
  - a. Tax collection and Accounting sub process?
  - b. Tax Assessment Sub process?
  - c. Follow up Processes for non- filing customers?
  - d. Tax refund Sub process?
  - e. Follow up Procedures for unpaid tax?
  - f. Tax Automation?
  - g. Customer Service delivery?
  - h. Employees of the organization?
2. How do you tackle these problems and what are the possible solutions for the problems?