

**St. Mary's University College
Business Faculty
Department of Management**

**Assessing the Business Process Reengineering (BPR)
Implementation Practices of Ethiopian Alternative Energy
Development and Promotion Center**

By: Amarech Girma

**June, 2010
SMUC
ADDIS ABABA**

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BY AMARECH GIRMA

**A SENIOR ESSAY SUBMITTED TO
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DEPARTMENT OF MANAGEMENT**

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ABBREVIATIONS

EAEDPC- Ethiopian Alternative Energy Development and Promotion Center

BPR- Business Process Reengineering

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

Business Process Reengineering (BPR) is all about “the fundamental rethinking and radical redesign of business processes to bring about dramatic improvements in performance” (Hammer, 1996:3). In short BPR is about restarting everything as new in order to meet customers’ needs and secure sustainable survival in the continuously changing world.

The Ethiopian government, devising a civil service reform program, has been trying to change the performance, i.e., effectiveness and efficiency of the civil service. The need for BPR in the civil service is stated in an official document by the Ministry of Capacity Building (MCB) as follows:-" The civil service system is one of the primary and key tools in achieving these objectives. Living with the old bureaucratic system of civil service, the efforts will become futile attempt. Therefore, transforming the civil service system in order to support the building of good governance has been undertaking. Among the efforts is the civil service reform which aimed to transform the system. This reality has brought about the need for reengineering (BPR) in the Ethiopian civil service organization"(MCB, 2006:i).

Reengineering starts with a high-level assessment of the organization's mission, strategic goals, and [customer needs](#). The United States General Accounting Office (USA GAO) states this idea as follows: "Before a decision on whether to reengineer can ever be made, federal agencies must clearly know their mission, and have established strategic goals that explain the purposes of agency' programs and the results they are intended to achieve. Well-defined missions and strategic goals form the foundation for the key business systems and processes and thus help ensure the successful outcome of their operations.

Leading organizations strive to ensure that their day-to-day activities support their organizational missions and move them closer to accomplishing their strategic goals", (USA GAO, 1997:15). In order to be successful in BPR there are recommended principles to be followed. These are:-

- “Organize around outcomes (customer, product, process), not function
- Substitute parallel for sequential process.
- Bring down stream information upstream.
- Capture information once at the source.
- Provide a single point of contact for customers and suppliers wherever possible.
- Ensure continuous flow of the “the main sequence” (those activities that directly add value to the customer).”(Linden, 1994:80).

Besides this criterion for reengineered processes (*organization*), emphasis added, are given. Hammer says, “Here are some commonalities, some recurrent themes, or characteristics that we frequently encounter in reengineered business processes.

- Several jobs are combined in to one.
- Workers make decisions.
- The steps in the process are performed in a natural order.
- Processes have multiple versions.
- Work is performed where it makes the most sense.
- Checks and controls are reduced.
- Reconciliation is minimized.
- A case manager provides a single point of contact.
- Hybrid centralized/decentralized operations are prevalent“(Hammer,1993: 51,63).

Ethiopian Alternative Energy Development and Promotion Center, (EAEDPC), is a government institution. Following the direction given by the government (Ministry of mines and energy), the center has conducted BPR project. Currently it is implementing the outcomes of the project. EAEDPC is run under ministry of Mines and Energy. Having been contributing to the country in the area of alternative energy at different

capacities, its name was changed to Ethiopian Energy authority in 1980 E.C. Until this period its establishment was not based on legislation. In 1982 it was again reestablished by proclamation having the name Ethiopian Energy studies and research center. And again its name was changed to Ethiopian Rural Energy Development and Promotion Center. Finally, having its current name Ethiopian Alternative Energy Development and Promotion Center, is performing its duties given to it by proclamation number 369/1994. Four years ago its accountability was to the ministry of agriculture and rural development. But currently it is accountable to ministry of mines and energy.

EAEDPC has passed many changes in its establishment. But now it is trying to change its practices of shouldering its responsibilities by changing itself using BPR.

There are mixed opinions about the success of the BPR project in the center that was conducted two years ago. A year has passed since it started implementing outcomes of the BPR study. Some are saying that the approaches followed in the BPR project were correct and as per the literature; besides they say that real changes and improvements are being seen in its performances. On the other hand, some argue that the other way is true. The student researcher has shown interest to assess and come out with tangible findings and recommendations which will contribute something in enhancing the BPR project implementation process of EAEDPC.

1.2 STATEMENT OF THE PROBLEM

As mentioned above BPR is all about “the fundamental rethinking and radical redesign of business processes to bring about dramatic improvements in performance”. This definition indicates that reengineering focuses on redesigning the process as a whole in order to achieve the greatest possible benefits to the organization and their customers. This drives for realizing dramatic improvements by fundamentally rethinking how the organization's work should be done.

In the case of EAEDPC, there were members of the center who argued that success had not been achieved because the approaches followed in the BPR study were incorrect and the way the outcomes are implanted is faulty. There were also others who argued otherwise. On the other hand, since BPR is a new change tool used in the Ethiopian civil service, and because it is widely discussed that many institutions are redoing their BPR, assessing BPR project of EAEDPC was found to be important. The purpose of this research was, therefore, to assess EAEDPC's BPR project and evaluate facts on the ground.

1.3 RESEARCH QUESTIONS

This study tried to answer the following research questions:-

- What were the reasons (identified problems) to inter in to the BPR project?
- What are the problems that affect the BPR implementation process of EAEDPC?
- What were the mechanisms (strategies) sought to overcome the problems?
- What does the working environment look like after implementing BPR?

1.4 OBJECTIVE OF THE STUDY

1.4.1 GENERAL OBJECTIVE

The general objective of this research was to assess the BPR implementation practices of EAEDPC.

1.4.2 SPECIFIC OBJECTIVES

The following are the specific objectives to be addressed in this study.

- To identify and assess the problems encountered while implementing BPR in EAEDPC.
- To identify and assess the strategies followed to overcome the problems/resistance.
- To assess the new working environment in relation to the overall changes sought.

1.5 SIGNIFICANCE OF THE STUDY

This study was significant for the following reasons. First, it would enable to come out with recommendations that can be helpful to EAEDPC to enhance its' overall BPR implementation process. Secondly, since BPR is a relatively a new change tool in our country, it would enable the student researcher to get familiarized with BPR as well as helps to learn more about research process and techniques. Thirdly, it may serve as an input for interested researchers in the area of BPR

1.6 SCOPE OF THE STUDY

The coverage of this research study was to assess the Business Process Reengineering (BPR) that had been commenced to be implemented in EAEDPC since October 2001 E.C. After identifying the needs and problems of its customers, the center had explicitly put in its stretch objective to disseminate annually one million improved energy devices to target customers by changing the past several years dissemination figure which was less than hundred thousand. This is nine fold stretched compared to previous years experience. In order to examine the performances and come up with actual results, the implementation process, challenges and outputs before and after will be assessed and analysis will be made from different perspectives of stakeholders and customers. In addition to this, actual performance standards, i.e., quality, time and cost that are currently on the ground will be compared with the standards set by the BPR study team which was approved by officials of EAEDPC.

1.7 RESEARCH DESIGN AND METHODOLOGY

1.7.1 RESEARCH DESIGN

In this research descriptive research method was used. This was because this research focused on obtaining and analyzing information concerning the current status of the implementation of BPR. Further, the study described "what existed" on

the ground with respect to BPR principles and characteristics of reengineered processes.

1.7.2 POPULATION, SAMPLE SIZE AND SAMPLING TECHNIQUES

The population included in this study was categorized in to three groups. These were the BPR study team members, professional workers, and customers of EAEDPC. The BPR team members were all interviewed. There were about forty three workers whose education level is diploma and above in EAEDPC. Of these workers 31 were addressed by questionnaire. Of those 100 customers located in Addis Ababa, 20 of them were addressed by questionnaire.

The total number of customers who were included in this research study is represented by **n**. The sampling fraction that would use to select every members of the sample size is represented by **K**. Therefore, $N= 200$, $K= N/n$ where,

$$n= 20\% \text{ the total population}$$

$$K=N/n$$

$$N=100 \times 20\% \quad n=20$$

$$K=100/20 \quad K=5$$

Every 5th customers and stakeholders were selected as a member of sample until the desire sample size was met.

1.7.3 TYPES OF DATA

Both primary and secondary data were used in order to make the study complete and achieve its stated objectives. Primary data were collected by using questionnaire and interview. Secondary data were gathered from EAEDPC. Besides, books pertaining to BPR were referred.

1.7.4 DATA COLLECTION METHOD

Questionnaires were distributed to BPR team members, selected professional workers and selected customers. The questionnaire were open ended as well as closed ended. In

addition interviews were conducted with BPR team members. On top of these, secondary data related to the BPR project were collected and analyzed.

1.7.5 DATA ANALYSIS TECHNIQUES

To analyze the quantitative data collected descriptive technique were used. And qualitative data analysis technique was used to analyze interview questions and answers for open ended questions.

1.8 ORGANIZATION OF THE STUDY

This paper is presented in four chapters. The first chapter holds introduction, statement of the problem, objective of the study, significance of the study, scope of the study, research design and methodology and organization of the study. The second chapter deals with related literature review. The third chapter deals with presentation, analysis and interpretation of data. The last chapter presents summary and conclusions and recommendations. Besides, list of bibliography, questionnaires, and interview questions list are attached as appendices.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Business Process Reengineering: Overview

Business Process Reengineering is a new management science that was developed in the 1990s. It is a change tool that was designed intended to fit for the current business world. The main proponents of reengineering were [Hammer](#) and [Champy](#), in a series of books including Reengineering the Corporation, Reengineering Management, and The Agenda, they argue that far too much time is wasted passing-on tasks from one department to another. They claim that it is far more efficient to appoint a team who are responsible for all the tasks in the process. In "The Agenda" they extend the argument to include suppliers, distributors, and other business partners.

In a book called "Reengineering the corporation", these proponents state that "The book you are holding describes a conceptually new business model and an associated set of techniques that American executives and managers will have to use to reinvent their companies for competition in a new world.", (Hammer and Champy 1993: 1).

The widely known internet based Wikipedia, [the free encyclopedia](#), quoting the United State General Accounting Office's (GAO) business process reengineering assessment guide, clearly states the general overview of BPR as follows.

"Business process reengineering (BPR) began as a private sector technique to help [organizations](#) fundamentally rethink how they do their work in order to dramatically improve [customer service](#), cut [operational costs](#), and become world-class [competitors](#). A key stimulus for reengineering has known to be the continuing development and deployment of sophisticated [information systems](#) and [networks](#). Leading organizations are becoming bolder in using this technology to support innovative business processes, rather than refining current ways of doing work.

"Business process reengineering is one approach for redesigning the way work is done to better support the organization's [mission](#) and reduce [costs](#). Reengineering starts with a high-level assessment of the organization's mission, strategic goals, and [customer needs](#). Basic questions are asked, such as 'Does our mission needs to be redefined? Are our strategic goals aligned with our mission? Who are our customers?' An organization may find that it is operating on questionable assumptions, particularly in terms of the wants and needs of its customers. Only after the organization rethinks what it should be doing, does it go on to decide how best to do it."

"Within the [framework](#) of this basic assessment of mission and goals, reengineering focuses on the organization's business processes—the steps and procedures that govern how resources are used to create [products](#) and [services](#) that meet the needs of particular [customers](#) or [markets](#). As a structured ordering of work steps across time and place, a business process can be decomposed into specific activities, measured, modeled, and improved. It can also be completely redesigned or eliminated altogether. Reengineering identifies, analyzes, and redesigns an organization's core business processes with the aim of achieving dramatic improvements in critical performance measures, such as cost, quality, service, and speed." Reengineering, the above statements tell us that, is about critically analyzing the way jobs are done in the current status. An organization decides whether to get in to BPR after this analysis. The same [encyclopedia mentioned above, when mentioning about the nature of processes in an organization before BPR, sates it as follows:](#)

"Reengineering recognizes that an organization's [business processes](#) are usually fragmented into sub processes and tasks that are carried out by several specialized functional areas within the organization. Often, no one is responsible for the overall performance of the entire process. Reengineering maintains that optimizing the performance of sub processes can result in some benefits, but cannot yield dramatic improvements if the process itself is fundamentally inefficient and outmoded. For that reason, reengineering focuses on redesigning the process as a whole in order to achieve

the greatest possible benefits to the organization and their customers. This drive for realizing dramatic improvements by fundamentally rethinking how the organization's work should be done distinguishes reengineering from process improvement efforts that focus on functional or incremental improvement."

2. 2 Historical development of BPR

The same [encyclopedia mentioned above, when stating historical development of BPR says:](#)

"In 1990, [Michael Hammer](#), a former professor of computer science at the [Massachusetts Institute of Technology](#) (MIT), published an article in the [Harvard Business Review](#), in which he claimed that the major challenge for managers is to obliterate non-value adding work, rather than using technology for automating it. This statement implicitly accused managers of having focused on the wrong issues, namely that technology in general, and more specifically information technology, has been used primarily for automating existing processes rather than using it as an enabler for making non-value adding work obsolete.

"Hammer's claim was simple: Most of the work being done does not add any value for customers, and this work should be removed, not accelerated through automation. Instead, companies should reconsider their processes in order to maximize customer value, while minimizing the consumption of resources required for delivering their product or service. A similar idea was advocated by [Thomas H. Davenport](#) and J. Short in 1990, at that time a member of the [Ernst & Young](#) research center, in a paper published in the [Sloan Management Review](#) the same year as Hammer published his paper.

"This idea, to unbiasedly review a company's [business processes](#), was rapidly adopted by a huge number of firms, which were striving for renewed [competitiveness](#), which they had lost due to the market entrance of foreign competitors, their inability to satisfy customer needs, and their insufficient cost structure. Even well established management thinkers, such as [Peter Drucker](#) and [Tom Peters](#), were accepting and advocating BPR as a new tool for (re-)achieving success in a dynamic world. During the following years, a

fast growing number of publications, books as well as journal articles, were dedicated to BPR, and many consulting firms embarked on this trend and developed BPR methods. However, the critics were fast to claim that BPR was a way to dehumanize the work place, increase managerial control, and to justify downsizing, i.e. major reductions of the work force, and a rebirth of Taylorism under a different label."

2. 3 Significance of BPR

According to Hammer and Champy (1993:32), 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. This definition contains four key words.

Key word: Fundamental

The first key word is "fundamental." In doing reengineering, businesspeople must ask the most basic question 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 this fundamental questions forces people to look at the tacit rule and assumptions that underlie the way they conduct their business. Often these rules turn out be obsolete, erroneous, or inappropriate.

Key word: Radical

The second key word in our definition is radical. Radical redesign means getting to the root of things: not making superficial change or fiddling with what is already in place, but throwing away the old. In reengineering, radical redesign means disregarding all existing structures and procedures and inventing completely new ways of accomplishing work. Reengineering is about business reinvention-not business improvement, business incensement, or business modification.

Key word: Dramatic

The third key word is dramatic. Reengineering is not about making marginal or incremental improvement but about achieving quantum leaps in performance. If a company falls 10 percent short of where it should be, if its costs come in 10 percent too high, if its quality 10 percent too low, if its customer service performance needs a 10 percent boost, that company does not need reengineering. Reengineering should be brought in only when a need exist for heavy blasting. Marginal improvement requires fine-tuning; dramatic improvement demands blowing up the old and replacing it with something new.

2.4 Criticisms on BPR

Some authors criticize Business Process Reengineering. Koonth and Weichrich (2004) suggest that “The reengineering effort to be effective, should not only focus on the operational system, but also on the human resources system, the technology system and the interrelations among the various managerial action.”

2. 5 Principles to follow in conducting BPR

There are principles that need to be followed while conducting BPR. Linden, (1994:80), in his book “Seamless Government”, states the key reengineering principles as follows. He says, “From successful reengineering experience, from concurrent engineering, lean production, and time based competition, we can list the following values and design principles for government reengineering project.

“Organize around outcomes not functions

This principle is obvious to any consultant-or marketing person, reference librarian, city planner, or other professional helping professions. When a client asks me whether I suggest total quality management, self managing teams, intensive customer training to the front-line employees, or any other organizational approach, my answer is generally the same: it depends on what outcome you are trying to achieve. That it, TQM and other

approaches are to an end. Before deciding on the means, the client has to clarify the desired end. It is an obvious, if somewhat overlooked truism in the helping professions, that you start at the end. Once the desired result is clear, you can organize around it.... Asking 'what deliverables do my customers want?' is another way to state the first principle: organize around outcome, not function.

The shift in assumptions:

Old assumptions: Those who perform the same function should work together. We can't control the results of our work, so we can't be accountable for those results, only for the activities we directly perform.

New assumption: Those who work in the same process should work together. We can't control the results of our work when we aren't organized for results; if we organize around outcomes, we will find out that we can control the results far more than we imagined.

“Substitute Parallel for Sequential Processes

Anyone who has successfully cooked a multi-meal dish for a group understands this principle. You can't get all the dishes ready at the desired time if you cook them individually. The experienced chef knows when the food needs to be served and plans backward, working on several different dishes at once.

Unfortunately most bureaucracies don't support the principle of using parallel processes. They still work sequentially. ...In reengineering, substituting parallel for sequential process has several clear advantages. The more steps in a process, the greater the likelihood of errors, delays, and information falling through the cracks. When each unit works on one aspect of a product or a process and then sends it on to the next unit, there is little ownership and a lot of finger pointing when errors occur. A parallel process speeds up the outcome and allows errors to be caught much sooner.

The shift in assumptions:

Old assumptions: To maintain quality control and fix accountability, work must be performed one step at a time.

New assumption: A consumer society won't wait for sequentially produced programs and services. Bright people, supported by appropriate technology and seamless work process, can perform many things in parallel.

“Bring down stream information up stream

Our third principle-bring down stream information upstream- leads to something near and dear to most people in organizations: no surprise. It also leads directly to our first principle, focus on outcome. It is far easier to focus on outcomes if all down stream information is brought upstream.

The shift in assumption:

Old assumptions: Information is time specific, is produced in sequence, and can only be accessed at the relevant point in the sequence (or ‘We’ll find out when we get there’).

New assumption: Information can be accessed any time, any place: it’s most valuable up front’

“Capture information once, at the source

Every time information is passed through another person, it runs the risk of being distorted, as in the childhood game of telephone, which demonstrates how a message, whispered from one child to the next nearly comes out at the end resembling the words the first child spoke.

The fourth principle- capture information at once, at its source-is a long-sought goal of many chief executives, who despair that they typically receive information late, with few options and little time to decide.

The shift in assumption:

Old assumptions: Information must be captured frequently, to assure control and accuracy.

New assumption: Information must be captured once to streamline the process and ensure accuracy.

“Provide a single point of contact for customers and suppliers whenever possible

As convenience and speed become more important to consumers, the principle of providing single point of contact becomes essential in service delivery. A single point of contact requires several important organizational shifts: from specialist to generalist positions (backed up by specialist and on-line systems); from departments that hoard information to process teams that share it freely; from adversarial relations with hundreds of suppliers to close, long-term relationships with a small number of suppliers; from clear and rigid lines separating departments and functions to fluid situations in which employees may work on in other departments, at a supplier’s location, at home, or at the site of the customer; and from a control orientation to a service orientation for the front line employee who deals directly with the customers.

The shift in assumption:

Old assumptions: Organizations should be organized by distinct functions, for the convenience of the departments.

New assumption: Organizations should be organized by process. Customers and vendors should deal with one person representing the entire process, for the convenience of the customers.

“Ensure a continuous flow of the main sequence

Quick turnaround and prompt service are becoming more important to government bureaucracies as well as to business. Stalk and Hout (1990) identify two keys to quick turnaround and prompt service. To compress time, it’s necessary to (1) organize around the sequence and (2) maintain a continuous flow of work.

The principle of organize around the main sequence means focusing on those activities that directly add value to the end user. All other activities should be eliminated, reduced, and/or done “off-line” (separate from the main sequence). There are different ways to define the term *value adding*; perhaps the most common one has to deal with those activities that a customer or an end user would pay for, (Harrington, 1991).

Some non-value adding steps will always be needed, of course. Our principle states that such activities must be separated from the main value-adding sequence, so that the process moves along smoothly.

The shift in assumption:

Old assumptions: To maintain quality control, slow down the process. All applications must go through the same process (one size fits all).

New assumption: Speed and user-friendliness are key customer needs that can be met without sacrificing quality (one size fits only a few).

“Don’t pave cow-paths; first reengineer, then automate

To make major, even radical improvements in work processes, you can’t begin with technology. Bringing in new generations of the most advanced technology can be very helpful. It’s not usually helpful, however, until the end of the redesign process. First the work must be reengineered, and then it can be automated. The advocates of business processes re-engineering use paving cow-paths to describe our misuse of advanced technology. Like the early streets of Boston, we have laid vast amount of computerization over outmoded work methods.

The shift in assumption

Old assumptions: Advanced technology increases productivity.

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

2. 6 Ingredients in a BPR project

As a change model, BPR project requires its own ingredients. According to Hammer and Champy (1993:101), these ingredients are leadership and the reengineering team.

When mentioning about the importance of leadership, they say, “It is an alterable axiom of reengineering that it only succeeds when driven from the top most level of an organization. No matter how hard they try people on or near the front lines are in no position to launch and sustain such a major venture. First, they the breadth of the perspective needed to see entire process from start to finish rather than from their narrow experience and purview.” (Hammer,1996:34). When further explaining, Hammer says “In our experience, the quality of organization’s leadership is an absolute predictor of its reengineering success. Companies with strong leadership will succeed because they will do what it takes to insure that all the other necessary components of reengineering are in place. Without such determined leadership, the effort will fail.The reengineering leader makes reengineering happen. Without a leader, an organization can do some ‘paper studies,’ can even come up with new process design concepts; but absent a leader, no reengineering will actually happen. Even if it gets started, a leaderless reengineering effort will run out of steam or hit the wall by the time it is ready to implement.”

About reengineering team they mentioned that “reengineering ... do not work alone but as teams. The team as a whole, rather than each of its members, must possess the desired attributes. It is to the team, rather than to its members, now we turn our attention.” When elaborating role of a reengineering team, Hammer and Champy state that “the actual work of reengineering- the heavy lifting-is the job of the reengineering tea members. These are the people must produce the ideas and the plans and who are often asked to turn them in to realities. These are the people who actually reinvent the business. ... Reengineering involves innovation and discovery, creativity and synthesis.”

2. 7 Steps to follow in conducting BPR

The United States General Accounting Office Business Process Reengineering Guide (USA GAO BPRG, 1997) puts three broader phases of BPR, each of which has other detailed issues. The phases mentioned are the phase of

- Deciding to pursue reengineering
- Developing new processes
- Implement the new processes.

Under the phase of deciding to pursue reengineering are stated

- Reassessing missions and strategic goals
- Identifying performance problems and setting improvement goals
- Decide whether to engage in reengineering or not.

The main issues in this step are “deciding whether reengineering is in order and a compelling argument for investing time and resources, agency's missions and priorities, reassessing how well the agency's products, services, and delivery modes align with the needs of its customers and stakeholders, defining and mapping the business processes that are key to meeting customer and stakeholder needs.” To be more specific, this includes, reassessing the following:

Under the phase of Developing new processes are stated

- “Managing the reengineering project ,i.e., creating appropriate governance structure, specially forming study team(s)
- Analyzing the target processes and developing feasible alternatives
- Completing sound business cases for implementing the new processes.”

The main issues in this phase are “establishing an executive steering committee and project sponsor to support the reengineering project, establishing an owner for the process to be reengineered , forming a qualified, trained, well-led team to reengineer the target process and its supporting structure, establishing a clear team charter that defines project goals, resources, constraints and deliverables, selecting and following a reengineering methodology to guide the project, mapping and analyzing the target in

enough detail to identify the costs and causes of performance breakdown, designing alternative processes and test their effectiveness through simulation and/or limited pilots, assessing the impact of potential barriers to implement the alternative processes, selecting a feasible process alternative with a high return on investment.”

Under the phase of implementing the new processes the following are the main issues.

- “Following comprehensive implementation plan
- Addressing change management issues
- Making sure that the new process is achieving the desired results.”

The detailed issues in this phase are “establishing transitional team and developing a comprehensive plan to manage implementation, managing training and workforce deployment issues, conducting pilot tests of the new process prior to full implementation, preparing and following change management strategy, encouraging staff to accept new ideas and adopt the new process, preparing staff, managers, and executives for change in their roles and career expectations, measuring the performance of the new process, determining if the new process is achieving the desired results, using performance measurement as a feedback loop for continuously improving the new process.”

2.8 Possible mistakes that can be committed in BPR

The most commonly known mistakes committed in reengineering are identified by Hammer and Stanton (1996:14) and mentioned in their book, “The reengineering revolution”.

"The first", they say, "of these mistakes to say you are reengineering with out doing it. ...If you are not really committed to a reengineering effort, then saying you are reengineering won't make a dime's worth of different. With the term suddenly fashionable, many people have simply taken last year's proposal that didn't make it through the budget cycle and slapped a reengineering label on it in order to get it approved.

"Since the term 'reengineering' is so accessible, a large number of unrelated ideas have been inappropriately labeled reengineering. Some are simply incremental quality improvements, some focus on functional rationalization, and others concern the implementation of new computer system.

"The second commonly made mistake is a variation of the first-trying to applying reengineering where it cannot fit.

"You cannot reengineer an organizational unit because an organizational unit is not responsible for a whole process. Typically, an organizational unit performs only a small set of tasks. If you limit your focus to the unit, you won't have the breadth of vision necessary to really make radical change, since you are confined on both ends. You are restricted by the demands of the people whose work proceeds and follows yours, and so the scope for changing your own work is limited.

"Identifying your business is an indispensable part of reengineering, but it is one that people often skip entirely or do poorly. This is almost forgivable, because process identification is almost certainly the most intellectually challenging component of the entire reengineering enterprise. Identifying your process requires that you think in terms of process, and that something with which few business people have any experience. People are accustomed to thinking in terms of their activities, their departments, the managerial hierarchy above them. They are not given to thinking in terms of end-to-end cross functional processes.

"The third and perhaps, the most commonly made error in reengineering is to spend far too much time analyzing existing process. Before organizations can create new designs, they do need to understand their current processes. However, too many people confuse *understanding* with conducting a full-scale *analysis*.

"Understanding means achieving a high-level, goal-oriented overview of an existing process, Analysis on the other hand, involves the detailed documentation of virtually every aspect of the current process. The distinction here is one of mechanism and detail. Understanding focuses on the “what” and the “why” of the process; what it does, and why it tries to accomplish what it does.

"A fourth common mistake is to attempt reengineering with out the requisite leadership. Strong, committed, executive leadership is the absolute sine qua non for reengineering. Only a senior executive who deeply believes in the reengineering cause can actually make it happen. People at lower level of the organization, no mater how smart or well-intentioned, do not have the perspective needed to see whole process and their shortcomings, not the clout to institute the kinds of far reaching changes that reengineering requires. Reengineering never precedes bottom-up. It is a top down-down phenomenon. And without top-down leadership, reengineering failure is a foregone conclusion. However, the failure may not occur right away.

"The fifth mistake is timidity in redesign. Reengineering requires bold imaginative thinking about process redesign and how work is done, and many people worry that coming up with these new ideas is the hardest part of reengineering.In many organizations, there are numbers of breakthrough ideas already in circulation, part of the company’s underground culture. The people with these ideas are only waiting for an officially proclaimed major change effort (i.e., reengineering) to surface and share their concepts.

"Mistake number six occurs when you attempt to go from a new process design to directly in to implementation. No matter how smart you are, or how much experience you may have had with reengineering, there no way that the design you create is going to identical to the design that you implement. It is impossible to invent a new process design that will work effectively and achieve the performance breakthroughs that you need, without some trail and error. No matter how clever your idea is, something will go amiss.

The situation is always more complex than you realize at first. The technology does not live up to expectations.

"Another blander, the seventh one on our list, is not reengineering quickly enough. From the time you start thinking about a process until you have some concrete business benefit to show for it should never be more than twelve months. This time constraint does not mean that the whole new process will be fully implemented within a year. Nor does it mean that the process has to have been rolled out through out the organization. It simply means that enough of the process is operating at a higher performance level so that you can point to it as proof that the new design will actually will work in the new world.

"Mistake eight occurs when you limit the reengineering effort, placing parts of the organization off-limits. If you radically redesign your process but refuse to change the compensation plan, the structure of the organization, or job titles, then you will certainly fail. It is inevitable. Whenever you change a process, you change the nature of the work that people do, requiring them to learn new skills. The way people are measured, paid, and offered incentives must also change; people working in new ways must managed in new was.

"The ninth route to failure is to adopt the wrong style of implementation. ... Reengineering cannot be carefully planned like a traditional project. Reengineering begins with a vision, a mandate, a concept, not with detailed specifications. The shape of the he outcome does not emerge until one is well in to it. Reengineering is a virtue in to the (at least partially) unknown.

"The final common mistake is failing to attend to the concerns of the people in the organization. Reengineering can behave too much like real engineers, and that behavior can have serious consequences for reengineering implementation.... Engineers are creative people, and they often have great emotional investment in their design. Reengineers are also creative people and have similar feelings.... In reality, however, it

doesn't matter how elegant efficient, and original the process design may be; the first (and only) question most people will ask is: What's in it for me? If you concentrate exclusively on the logical and design issues, without considering the personal concerns of the people who actually do the work, the reengineering effort inevitably will sink under the weight of individual self interest"

As to being successful or not in implementing BPR Daniel Tekle (June 2005) observed that "in all organizations BPR was not properly implemented. This does not mean that they have not achieved positive results. ... In general those selected organizations have made the following mistakes while they reengineer their core processes in their respective organizations:

1. Spent a lot of time analyzing the current situation.
2. No bench mark or insufficient benchmarking.
3. Not involving all side reengineering team.
4. Trying many reengineering projects at a time.
5. Lack of proper methodologies."

2. 9 Characteristics of an organization that conducted BPR

In an organization that conducted BPR, there are factors that can clearly reveal the changes. Each of these factors as mentioned by the writers (Hammer and Champy, 1993:67), is explained below.

Work units change –from functional departments to process teams

Companies that reengineer are, in effect, putting back together again the work that Adam Smith and Henry Ford broke in to tiny pieces so many years ago. Once it is restructured, process teams-groups of people working together, to perform an entire process- turn out to be the logical way to organize the people who perform the work. Process teams don't contain representatives from all the functional departments involved. Rather, process teams replace the old departmental structure.

Jobs change –from simple tasks to multiple dimensional work

People working on process teams will find their work far different from the jobs to which they have been accustomed. Assembly-line work, whether it is of the white- or black collar variety, is highly specialized-the repetitious performance of one task. The job may require some training-how to insert a particular component in to a particular printed circuit board, for instance. ... But when they doing task work, neither the assembly line worker nor the mechanical engineer needs to know-or even cares much about-the whole process of, say, building a computer or developing a camera design... They share joint responsibility with their team members for performing the whole process, not just a small piece of it.

People's role change –from controlled to empowered

A task oriented, traditional company hires people and expects them to follow the rules. Companies that have reengineered don't want employees who can follow rules; they want people who will make their own rules. As management invests teams with the responsibility of completing an entire process, it must also give them the authority to make the decisions needed to get it done.

Focus of performance measures and compensation shifts-from activity to results

Worker compensation in traditional companies is relatively straightforward. People are paid for their time. In a traditional operation-whether it is an assembly line manufacturing machines or in a clerical office processing paperwork-an individual employee's work has no quantifiable value. ...When work is fragmented in to simple tasks, companies have no choice but to measure workers on the efficiency with which they perform narrowly defined work. The trouble is that increased efficiency of narrowly defined tasks does not necessarily translate in to improved process performance.

Job preparation changes –from training to education

If jobs in reengineered processes require that people not follow rule, but rather that they exercise judgment in order to do the right thing, then employees need sufficient education so that they can discern for themselves what the right thing is. Traditional companies typically stress employee training-teaching workers how to perform a particular job or how to handle one specific situation or another. In companies that have reengineered, the emphasis shifts from training to education-or to hiring the educated. Training increases skills and competence and teaches employees the “how” of a job. Education increases their insight and understanding and teaches the “why.”

Advancement criteria change from performance to ability

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

Values change-from protective to productive

Reengineering entails a great shift in the culture of an organization as in its structural configuration. Reengineering demands that employees deeply believe that the work for their customers, not for their bosses. They will believe this only to the extent that the company’s practices of reward reinforce it.

Managers change-from supervisors to coaches

When a company reengineers, one complex process becomes simpler while once simple jobs grow complex.

Process teams consisting of one person or many don’t need bosses; they need coaches. Teams ask coaches for advice. Coaches help teams solve problems. Coaches are not in the action, but close enough to it so they can assist the team in its work.

Organizational structures change –from hierarchical to flat

When a whole process becomes the work of a team, process management becomes part of the team's job. Decisions and interdepartmental issues that used to require meetings of managers and manager's managers now get made and resolved by teams during the course of their normal work. Pushing decisions about work down to the people doing it means that manager's traditional roles are diminished. Companies no longer require as much managerial "glue" as the used to in order to hold work together.

Change wise Abate Zewdie (2006) advises that "Organizations must change their priorities from a traditional focus on planning and control to emphasize their focus on speed, innovation, flexibility, service and cost."

2. 10 Role of Information Technology in BPR

Information technology (IT) has enabling role in a company that reengineered its process. Regarding this issue, (Hammer and Champy, 1993:85-90), advocate that "A company that cannot change the way it thinks about information technology cannot reengineer." They further elaborate role of IT as follows.

"Information technology plays a crucial role in business reengineering, but one that is easily miscast. Modern, state of the art, information technology is part of any reengineering effort, an essential enabler.... since it permits companies to reengineer business processes. But, to paraphrase what is often said about money and government, merely throwing computers at an existing business problem does not cause it to be reengineered. In fact, the misuse of technology can block reengineering altogether by reinforcing old ways of thinking and old behavior patterns.

"The fundamental error that most companies commit when they look at technology is to view it through the lens of their existing processes. They ask "How can we use these new technological capabilities to enhance or streamline or improve what we are already doing?" Instead, they should be asking, "How can we use technology to allow us to do things that we are not already doing?"

Another writer, Linden, in his book "Seamless Government," (Linden, 1994:116) mentions about the relationship between reengineering and use of IT. He says "To make major, even radical improvements in work processes, you can't begin with technology. Bringing in generations of the most advanced technology can be very helpful. It is not usually helpful, however, until the end of redesign process. First the work must be reengineered, then it can be automated. ... If work is currently designed in an awkward manner, automating awkwardness is no answer."

2. 11 Challenges in BPR project

BPR is a change tool. So it involves change. Therefore, "achieving reengineering success", says the Training and Coaching Manual prepared by Ministry of Capacity Building (TCM MCB, 2006:82), "is a challenge and the challenge is hard and tough." The manual states that the difficulties are "Getting people to let of their old ways and embrace new ones, and the challenge in unlearning the old part, learning the new one." Taking the scenarios after reengineering as a new world of work, the manual states that "The concrete problem in getting people to the new world is the reaction of people against the new world. This is called resistance to change. Resistance to change has many forms. Examples:

- Slowly killing the effort by getting delaying to act, slow down;
- Rumors; for instance, reengineering is cover, but the secret is down sizing and massive lay offs;
- Reengineering is tough, work load increases;
- Claiming that they would lack skills.

“Principle one- Resistance is natural and inevitable. Expect it. The real cause of reengineering failure is not the resistance, but the management's failure to deal with it. ...if there is no sign of significant reaction happening, it shows that change is not dramatic to the new world. It is incremental improvement that did not change the status quo.

Principle two- Resistance does not always show its face. ...In finding it, consider the following expressions, manifestations; slow down the effort; delaying to act, decide, respond; simple denial manifested in different form.

Principle three- Resistance has many motivations. Some of these reasons are, misunderstanding, personal self interest, fear of unknown, lack of skills to cope up with new world of work, different assessment of the change.

Principle four- Deal with the root of the resistance, not on symptoms. The best way of finding solution is first understand the reason for the resistance and manage that.

Principle five- There is no only one way to deal with resistance; manage it. The approaches (strategies) are different based on its context. Incentives, information, intervention, introduction and involvement are approaches to deal different kinds of resistances. “

CHAPTER THREE
DATA PRESENTATION, ANALYSIS AND INTERPRETATION

In this chapter data collected from staff members of **EAEDPC** and customers by questionnaire and data collected by interviewing BPR team members are presented and discussed.

3.1 General Characteristics of the Respondents

This part of the paper presents general characteristics of the respondents.

Table 1: Gender, Age, and Educational Background of the Respondent

Item		Employee Respondents	
		Number	Percent (%)
Gender	Male	26	83.87
	Female	5	9.67
	Total	31	100
Age	18-30	1	3.22
	31-43	10	32.25
	44-56	20	64.51
	57 and Above	-	-
	Total	31	100
Education level	Certificate	2	6.45
	Diploma	12	38.70
	B.A/BSC	14	45.16
	M.A, above	3	9.67
	Total	31	100

Table 1 summarizes the gender of the respondents. From the total employees responded, 26 (83.87%) of them were male while the rest 5 (9.67%) were female. This clearly indicates that the gender distribution of the respondents was unbalanced, because the number of female employees in the center is very few. Concerning age, out of the employee respondents 1 (3.22%) of them were between age 18-30. The rest 10 (32.25%) and 20 (64.51%) of them were between 31-43 and 44-56 of age respectively. Education

wise, 14 (45.16%) of them had B.A/BSC degree, 12 (38.7%) of them had diploma, and the rest 3 (9.67%) and 2 (6.45%) of them had M.A or above and certificate respectively. From the background of these respondents, the researcher is confident that their responses can be taken as reliable.

Table 2: Customers Profile (Form of business, Length of time in business, Number of employees)

Item		No. of Respondents	Percent%
Form of Business	Sole proprietorship	2	10
	Partnership	15	75
	Share company	1	5
	Non-governmental organization	2	10
	Total	20	100
Length of time in the Business (In Year)	Less than 5	7	35
	5	7	35
	Greater than 5	6	30
	Total	20	100
No. of Employees	A. 0-20	11	55
	B. 21-40	1	5
	C. 41-60	3	15
	D. 61-80	3	15
	E. >80	2	10
	Total	20	100

As the above table shows respondent customers are engaged in different kinds of business. 15 (75%) of them are in sole proprietorship type of business. The rest 2 (10), 2 (10), and 1 (5%) of them are in sole proprietorship, non-governmental and share company type of business (Organization) respectively. Employment wise, 11 (55%) of them had a maximum of 20, 3 (15%) of them a maximum of 80, another 3 (15%) of them a maximum of 60, 1 (5%) of them a maximum of 40 and 2 (10%) of them more

than 80 employees respectively. Each of them being in different kinds of business for different number of years and having their own number employees, 65% of them have been in business for at least five and more years indicating that they have been contacting with the center for this long. For this reason the responses obtained from these customers is reliable to take and get in to conclusion about the center's BPR implementation.

3.2 Analysis of the Major Findings

3.2.1 Responses of staff members

In the following tables where mean is calculated, the values are assigned as: very high 5; high 4; medium 3; low 2 and very low 1.

Table: 3 Responses for close ended questions by staff members

S no	Items	Total No. Respondents	Percent (%)
1	Did the leader communicate the staff about the need and objective of the BPR study at the outset of it?		
	Yes	26	83.87
	No	5	16.13
	Total	31	100
2	Were the needs and objectives of the BPR study clear to you?		
	Yes	27	87.10
	No	4	12.90
	Total	31	100
3	Do you see changes after implementation of the BPR?		
	Yes	14	45.16
	No	17	54.84
	Total	31	100
4	Do you know your customers better now, than you did before BPR?		
	Yes	20	64.52
	No	11	35.48
	Total	31	100

As the table shows, in item one 26 (83.87%), 27 (87.1%) and 20 (64.52%) of the respondents mentioned that the leaders had communicated about the need and objectives of the BPR study. This indicates that as item two shows 27 (87.1) of them pointed that the BPR objectives were clear to them; and on item four 20 (64.52) of them indicated that they know their customers better now than what they used to before BPR, while 11 (35.48) of them mentioned that this was not so. The responses indicate that this is one step forward, because as indicated by United State General Accounting Office's (GAO) business process reengineering assessment guide, "Reengineering starts with a high-level assessment of the organization's mission, strategic goals, and customer needs. Basic questions are asked, such as 'Does our mission needs to be redefined? Are our strategic goals aligned with our mission? Who are our customers?' An organization may find that it is operating on questionable assumptions, particularly in terms of the wants and needs of its customers. Only after the organization rethinks what it should be doing, does it go on to decide how best to do it." However, knowing customers alone is not the end. After all these efforts, as respondents indicated in item three as to the over all changes, which should have been dramatic and radical according to the definition given by Hammer and Champy, many of them 17 (53.45%) said that they do not see changes (changes in doing their daily activities) after implementing BPR . It is only 14 (45.18%) of them who indicated the presence of change.

Table: 4 Responses for close ended questions (with change indicators) by staff members

S.no	Raised questions and Change indicators	Total No of respondents	Percent (%)
1	How many times did the leadership communicate the staff about the BPR study?		
	A. Once	6	19.35
	B. Twice	9	29.03
	C. Three times	12	38.70
	D. Four times	4	12.90
	Total	31	100
	Mean	2.54	
2	Currently, what regulations, policies, manuals and rules do you use?		
	A. All of them new	1	3.22
	B. Many new, few old	15	48.38
	C. Many old, new few	13	41.93
	D. All of them old	2	6.45
	Total	31	100
	Mean	2.48	
3	The center has repeatedly attempted to assess the change in satisfaction level of the customers of the center.		
	A. Strongly agree	1	3.22
	B. Agree	13	41.93
	C. Neutral	-	-
	D. Disagree	10	32.25
	E. Strongly disagree	7	22.58
	Total	31	100
	Mean	2.25	

This table summarizes respondents of responses of staff members for questionnaire of closed ended questions. The question raised was about communication by the leaders to find out whether the staff were clear about the objectives of the BPR and the whole process of it. As to clarity of the objectives of the BPR study and the leadership's effort to communicate about the BPR, item one shows that 9 (29.03%) and 12 (38.7%) of the respondents said that communication was made two and three times respectively.

It can be seen that efforts were made to make workers on board about the BPR project. Responses about implementing new laws and regulations, item two, are seen to be different. Answers are given to all the choices. This can not be so. The response indicates that staff of the center has no similar understanding about the issue; and further it can be said that there is no change in rules and regulations. Since one of the indicators for the presence of radical and fundamental changes is seen in changes with regard to rules and regulations, this response further leads to conclude that there are no changes in the center's way of doing its business. As to conducting customers' satisfaction survey, item three indicates that while 13 (41.93%) of them indicated that survey was conducted, 10 (32.25%) and 7 (22.58%) indicated that survey was not conducted respectively.

In general the result of these responses indicate that the communication made by the leaders to make staff on board for the BPR implementation, the application of new rules and regulations after the BPR study and conducting customers satisfaction survey was at lower rate.

Table: 5 Response about quality (fitness) of the redesigned Process by staff members

S.No	Principle Item	Strongly agree	Percent (%)	Agree	Percent (%)	Neutral	Percent (%)	Disagree	Percent (%)	Strongly disagree	Percent (%)	Total	Percent (%)	Mean
1	Work units changed from functional departments to process teams	4	12.9	15	48.4	6	19.4	5	16.1	1	3.2	31	100	3.51
2	Jobs changed from simple task to multiple dimensional work	2	6.5	10	32.3	12	38.7	5	12	2	6.5	31	100	3.16
3	People's role changed from controlled to empowered	2	6.5	8	25.8	9	29	9	29	3	9.7	31	100	2.90
4	Focus of performance measures and compensation shifted from activity to results	1	3.2	6	19.4	10	32.3	13	41.9	1	3.2	31	100	3.09
5	Job preparation changed from training to education	1	3.2	6	19.4	10	32.3	13	41.9	1	3.2	31	100	3.09

S.No	Principle Item	Strongly agree	Percent (%)	Agree	Percent (%)	Neutral	Percent (%)	Disagree	Percent (%)	Strongly disagree	Percent (%)	Total	Percent (%)	Mean
6	Advancement criteria changed from performance to ability	2	6.5	8	25.8	8	25.8	13	41.9	-	-	31	100	1.96
7	Values of the center changed from protective to productive	2	6.5	6	19.4	10	32.3	10	32.3	3	9.7	31	100	2.8
8	Managers are changed themselves from supervisors to coaches	2	6.5	5	12	12	38.7	10	32.3	2	6.5	31	100	2.83
9	Organizational structure of the center has changed from hierarchical to flat	1	9.7	12	38.7	3	9.7	10	32.3	3	9.7	31	100	3.06

Table 4 summarizes responses of employees about changes in the center after implementing BPR based on given characteristics of reengineered processes. To these change indicator questions 31 workers gave their answers.

As to the change in work units from functional departments to process teams, item one, 15 (48.4%) of them mentioned their agreement while the rest 6 (19.4%), 5 (16.5%), 4 (12.9%) and 1 (3.2%) were neutral, disagreed, strongly agreed, and strongly disagreed respectively. Mean wise this response is 3.51, was medium. Concerning change of Jobs from simple task to multiple dimensional work, item two, 12 (38.7%) of the respondents were neutral. 10 (32.3%) of them agreed. The rest 5 (12%), 2 (6.5%) and 2 (6.5%) mentioned their disagreement, strong disagreement and strong agreement respectively. Mean wise this was 3.16 which was also medium.

The other characteristic was the change of people's role from controlled to empowerment, item three. As to the change with regard to this principle, 9 (29%) were neutral and another 9 (29%) gave their disagreement. 8 (25.8%) of them agreed. The rest 3 (9.7%) and 2 (6.5%) of them strongly agreed and strongly disagreed respectively. This response, mean wise, (2.9) was low. Next characteristic was about the shift of the focus of performance measures and compensation from activity to results, item four. While 13 (41.9%) and 10 (32.3%) of them mentioned their disagreement and neutrality respectively, the rest 6 (19.4%), 1 (3.2%) and 1 (3.2%) of them agreed, strongly agreed and strongly agreed respectively. The mean of this response, 3.09, was medium. On item five, change of job preparation from training to education was the other characteristic. To this characteristic, 13 (41.9%) and 10 (32.3%) of them mentioned their disagreement and neutrality respectively. The rest 6 (19.4%), 1 (3.2%) and 1 (3.2%) of them agreed, strongly agreed and strongly agreed respectively. The mean for this response was 3.09 which is medium. Next characteristic was the change of advancement from performance to ability. Item six. 13 (41.9%) of them disagreed. 8 (25.8%) were neutral and another 8 (25.8%) agreed. The rest 2 (6.5%) strongly disagreed. With regard to change of the center's value from protective to productive, 10 (32.3%) and another 10 (32.3%) agreed

and remained neutral respectively. While the rest 6 (19.4%) agreed, the rest 3 (9.7%) and 2 (6.5) strongly disagreed and strongly agreed. Mean wise this response was 1.96, which is very low. The seventh item was the question about change of values of the center from protective to productive. To this question 10 (32.3%) and another 10 (32.3%) responded agreeing and as neutral respectively. The rest 6 (19.4%), 3 (9.7) and 2 (6.5%) responded agreeing, disagreeing and strongly disagreeing respectively. The mean of this response was 2.8 which low.

Another characteristic was about managers. Item eight. Did managers change themselves from supervisors to coaches? To this principle 12 (38.7%) were neutral. 10 (32.3%) disagreed and 5 (12%) agreed. The remaining 2 (6.5%) and 2 (6.5%) strongly agreed and strongly disagreed respectively. The last but not list characteristic was about the change of organizational structure from hierarchical to flat, item 9. 12 (38.7%) of them agreed that the structure was changed from hierarchical to flat. 10 (32.3%) of them disagreed. The remaining 3 (9.7%), 3 (9.7%) and 3 (9.7%) remained neutral, strongly agreed and strongly disagreed. The mean, 2.8, indicates that the change of managers from supervisors to coaches was low.

Of the nine BPR characteristics questions responses of employees in neutrality were many and with significant percentage. This neutrality has to be weighted against the supposed to be required change in BPR. According to Hammer and Champy reengineering is not about making marginal or incremental improvement but about achieving quantum leaps in performance. Marginal improvement requires fine-tuning; dramatic improvement demands blowing up the old and replacing it with something new. From the pioneers' recommendation point of view the rate of change brought by conducting BPR has to be more than 50%. If the change brought is this much it will, with no doubt, be visible and sensible by every one in the organization. In the case of EAEDPC, therefore, it can be concluded that employee respondents were neutral to many questions because changes of the center were not dramatic, and as a result were not visible and sensible.

In general responses given by the employee respondents about the change in accordance with the given characteristics, does not indicate that EAEDPC has been successful in its BPR implementation.

Analysis of open ended questions

The selected staff members of EAEDPC who responded to the above closed ended questions were also given open ended questions. The questions were focused on the changes and achievements the center earned in implementing BPR and its impact on the satisfaction of customers of the center.

To this end respondents gave their different opinions. Some of their responses were “I can’t see any change; no change based on BPR principle; it is hard to find motivated workers in the center; there is no good vision for the center; currently the situation is below where it was; there is big failure in the BPR; the center is struggling but it is impossible to create it without motivated workers; few things are changed but the majority of the process is as it is; implementation of BPR is not successful; work process has been shortened; most of the work is theoretical, not according to BPR principles, because BPR is not internalized; no change at all; do not agree; the management does not know about BPR; it is discouraging; there are some changes in service delivery; internal customers are ignored; customers comments are being collected; office arrangements are made; customers satisfaction is not conducted yet; more attention is given to customers than before.” These opinions, in general, indicate that either there are no changes or the changes are not visible for the workers. This is not also motivating to them. For the question raised about the challenges the leaders faced and the reasons for not implementing BPR properly the employees indicated that many of the employees of the center were not beneficiaries from the change. As pioneers of BPR say the crucial answer for the question “what is in it for me” was not addressed. was not properly addressed.

3.2.2 Responses of customers

Twenty customers of the center were addressed by questionnaire. Analysis of the major findings of these respondents is presented as follows. It has two parts, one for close ended questions and another for open ended questions.

Table 6 Responses for close ended questions by customers

S. No	Item	Total No of respondents	No of respondents			
			Yes	%	No	%
1	Do you know or have you been informed that starting in the year 2000, EAEDPC has been trying to change the way it executes its responsibilities by conducting Business Process Reengineering?	20	19	95	1	5
2	Recently, have you seen changes in the center's way of doing its business and in handling cases of its customers (your cases)	19	6	31.6	13	68.4
3	What do you say about the quality of products (services) you get from the center? Have you observed changes towards meeting your needs?	20	7	35	13	65
4	Are the ways the center addresses your needs convenient to you?	20	8	40	12	60
5	Have you ever been consulted to give suggestions as to how the center should change its service giving practices?	20	6	30	14	70
6	Do you feel that there may be areas where the center needs to make further improvements?	20	19	95	1	5

Table 6 indicates customers' responses about their getting information and participation in the BPR implementation, their opinions about changes in ways of doing daily activities, their perceptions about changes in the products and services produced/rendered and in meeting their needs, their opinions about conveniences of addressing their needs and areas where to make further changes in EAEDPC.

To item one, being informed about the center's BPR, while 19 (95%) of them said yes 1 (5%) of them said no. Related to this, about getting consulted as to the center's BPR, item five, indicates that 6 (30%) of the said yes while 14 (70%) of said no. In item two, for the

question about their observations in changes as to the way the center does its business, 6 (13.5%) of the said yes and 13 (84.42%) of the said no. One respondent did not respond to this question. Item three was about the quality of the products and services of EAEDPC. Two this question 7 (35%) of them said yes while 13 (65%) of the said no. The fourth item was about whether EAEDPC addresses their needs or not after it has implemented its BPR study outcomes. To this question 8 (40%) of them said yes while 12 (60%) said no. Customers' opinions about the need for further improvement in the center related to its services giving practices was item five. To this question 19 (95%) said yes while 1 (5%) said no.

Responses to item one indicate that the customers of EAEDPC had the information that the center had conducted BPR. However, since the response they gave to item five indicates that they were not consulted, it is possible to conclude that the center had not tried to address their needs by consulting them. Their responses and opinions of the majority of the respondents about all the rest of the five items of table 6 indicate that no major change is seen in the way the center conducts its daily activities and handles cases of customers; no changes in producing and rendering new products and services and meeting their needs; the way the center conducts its business is not convenient to the customers; they feel that there are areas where the center needs to make further improvements.

Table 7 Responses for change indicator questions by customers

S. No	Item	No of Respondents	Percent (%)
1	For how long have you known Ethiopian Alternative Energy Development and Promotion Center (EAEDPC)?		
	For less than five years	6	30
	For five years	6	30
	For more than years	8	40
	Total	20	100
2	What are the services (products) you get (require) from EAEDPC?		
	Training	8	40
	Technical support	2	10
	New products	4	20
	Market information	3	15
	All	3	15
	Total	20	100
3	How frequent is your contact with the center?		
	Every month	7	35
	Twice a month	1	5
	Once in six months	-	-
	Once in a year	-	-
	Unknown	12	60
	Total	20	100
4	When was the last time you came to the center Requesting service?		
	Few months a go	10	55.6
	Six months a go	-	-
	A year a go	1	5.6
	More than a year a go	7	38.9
	Total	18	100
		No of	Percent

S.No	Item	Respondents	(%)
5	When you compare the time (the length time it took you when you came the last time to the agency) with the time that it used to take you a year ago, how do you evaluate it?		
	Very short	3	15
	Short	2	10
	Long	-	-
	Very long	-	-
	No change	15	75
	Total	20	100
6	How do you rate the value adding changes in the center?		
	Radical	1	5
	Moderate	10	50
	No change	2	10
	Worse than before	7	35
	Total	20	100
7	To get the products (services) you require, how many people do you have to go to or		
	One	1	5
	Two	5	25
	Three	2	10
	More than three	12	60
	Total	20	100
8	How do rate the center's convenience in meeting your needs after the BPR?		
	Radical	2	10
	Moderate	9	45
	No change	2	10
	Worse than before	7	37
	Total	20	100
9	How do you rate your satisfaction by the services or products of the center?		
	Radical	-	-
	Moderate	10	50
	No change	2	10
	Worse than before	8	40
	Total	20	100

As indicated on table 8 above on the first item, 8 (40%) of the customers know or are having contact with EAEDPC for more than 5 years, while the rest 6 (30%) know it for five years and the rest 6 (30%) know it less than 5 years. Concerning their needs or what they require from the center, 8 (40%) of them indicated that they require training, 4 (20%) of them indicated new products, 3 (15%) indicated market information, the other 2 (10%) of them indicate technical support, while the rest 3 (15%) indicated all the mentioned ones. As to the frequency of their contact with the center, 12 (60%) of them said they come to the center once in a year. The rest 7 (35%) come every month and 1 (%) comes twice a month respectively. Of these respondents the last time they came to the center were 10 (55.6%) few months ago, 7 (38.9%) came more than a year ago, and 1 (5.6%) came a year ago. These attributes of the respondents make their responses to be valid to get to conclusion.

On this table are analyzed the working environment in the center in the eyes of these respondents. With regard to length of time it takes for customers to get what they want from the center, item five, 15 (75%) of them mentioned that it takes them very long, while 13 (15%) and 2 (10%) of them said very short and short respectively. In item six they were asked to rate the changes in the center after BPR 10 (50%) indicated moderate, 7 (35%) indicated worse than before, 2 (10%) indicated no change, and 1 (5%) indicated radical. An indicator of a good BPR is designing processes to reduce the number of people customers contact when they come or call for their needs. Linden indicates “As convenience and speed become more important to consumers, the principle of providing single point of contact becomes essential in service delivery. A single point of contact requires several important organizational shifts: from specialist to generalist positions (backed up by specialist and on-line systems);” As item seven indicates customers’ responses about the number of people they meet or contact, 12 (50%) of them said more than three, 5 (25%) of them said two, 2 (10%) said three and 1 (5%) said one. In items eight and nine customers were also asked to indicate their opinions on how convenient the center was for them and to indicate their satisfaction rate by the center after the center’s BPR implementation. As to being convenient to their needs, 9 (45%) indicated

moderate, 7 (37%) indicated worse than before, 2 (10%) and 2 (10%) indicated radical and no change respectively. Concerning their satisfaction rate by the center after its BPR, 10 (50%) indicated moderate, 8 (40%) indicated worse than before and 2 (10%) indicated no change.

These customers who very well know EAEDPC and had contacts with it, indicated that it takes them long time to get what they want from the center; the majority of these respondents indicated that there is no value adding change in the center and still some indicated that things are worse than before; majority of the respondents also confessed that they contact more than two people to get what they want when they contact the center; as to the center being convenient to them, slightly more number of them indicated that it is moderate, while still significant number of them that it was worse and no change; as to their general satisfaction half of them indicated it to be moderate, while the rest half of them indicated it to be worse than before and no change.

In general what the responses of these customers on table 8 indicate is that the center has not met its customers' needs in its BPR implementation. According to definition of BPR its changes are not dramatic and radical.

Analysis of open ended questions

These same customers gave their opinions for open ended questions which were part of the questionnaire. These open ended questions were focused on the time it takes them to get what they want from the center and their opinions about further changes the center needs to make. Some their direct responses are: "immediate as well as lengthy time; fast as well as delay and no response; it takes long time. There is still lengthy process; very long time; months and some times a year; short time; below one week; Capacitating regions; adopting new technologies; delegating authority, decentralization, clarity of roles responsibilities, motivation of employees; improve management; staff development; ways of response to requests should be improved; there must be change from the top management. Chain of command should be reduced; more training technology transfer and more mandate to regions." Many of these opinions do not justify EAEDPC's success of implementing BPR.

Table 8 Responses by customers about the center’s service delivery improvement after BPR according to a given scale.

Question No	Criterion	No of respondents	Responses as per the Scale						
			Strongly agree						Strongly disagree
			1	2	3	4	5	6	7
1	When the center promises to do something by a certain time, it does so	20	2	2	2	12	1	1	--
2	When you have a problem the center shows a sincere interest in solving it	20	1	--	2	5	10	2	--
3	The center performs the service right the first time	18	3		4	1	9	1	--
4	The center provides its services at the time it promises to do so	17	2	3	1	2	7	2	--
5	The center keeps customers informed about when services will be performed		3	2	10	2	2	--	--
6	Employees in the center give you prompt service	18	--	2	2	2	4	8	
7	Employees in the center are always willing to help you	18	--	1	3	2	2	9	1
8	Employees in the center are never too busy to respond to your request	18	--	--	3	4	1	9	1

To these service delivery improvement indicator questions respondents gave different answers. Significant number of them responded inclining to disagreement about availability of these quality service indicators in the center. Including those who gave their response to scale 4 (which indicates neutrality), 70% to question one, 85% to question two, 55% to question three, 64% to question four, 77.8% to question six, 77.8% to question seven, and 83.3% to question eight gave their responses inclining to disagreement. It is only to question 5 where 78.9% of them inclined agreement. In general these responses coupled with the above tables and responses for open ended questions indicate that the center’s customers are not satisfied by the services and products they get from the center.

3.2.3 Responses of BPR team members for interview questions

Interviewing the BPR team members was conducted on one to one basis. They indicated that one core and four support processes were addressed in the study. For the question raised to them about reasons or problems to get in to BPR, the members of the team mentioned no specific problems or need or reasons were identified by the center itself. This is because the BPR study was initiated by Ministry of mines and energy. Team members were pooled from the center at the ministry level and were given instructions to conduct the study collaborating with other experts from other institutions. So the BPR study was not self initiated to overcome identified and encountered problems. This being the case of getting in to BPR, as to setting objectives at the outset of the BPR study, almost all of the interviewees indicated that the center had set objectives while starting its BPR. Setting objectives is one of the necessary components in BPR which is an indicator of the magnitude of the change desired by conducting BPR. The question raised to them was about changes made to legislations, regulations, policies, and rules that would be required to implement the new processes. All of the interviewees indicated that the center identified changes to legislations, regulations, policies.

However, as understood during further discussion, no new legislations, regulations, policies has been deigned and implemented yet. Besides these one of the activities that should have followed BPR implementation was conducting customers' satisfaction survey in order to check the changes in satisfying them. This is because it is satisfying the needs and expectations of the customers which are at the heart of this change effort. In this case, to the question weather the center has conducted customers' satisfaction survey to identify customers' satisfaction after BPR implementation, answers of interviewees were inconsistent. Almost 45.45% of them indicated that survey was conducted while 54.54% contradicted it. Both answers can not be correct. Those who said survey was conducted could not indicate the survey results. As a result, it can be concluded that no survey was conducted, and this further leads to an- other conclusion which is that the center could not tale about its effectiveness in satisfying the customers' needs and expectations by implementing BPR.

As to the problems encountered during implementing BPR, what the team mentioned as the main one was that the answer for the question “what is in it for me” of the employees was not answered.

The other question raised to BPR team members was to rate the success of the center in achieving its desired objectives by implementing BPR. The majority of them said its success is satisfactory. On the other hand they were asked to rate the satisfaction rate of the customers after BPR is implemented. For this question majority of them said customers’ satisfaction is below satisfactory. These two responses are contradictory. With out making customers satisfaction level at least satisfactory, the center can not claim to be successful in its BPR implementation; or it can not say that it has achieved its desired objectives, because there can not be success disregarding customers.

On top of these, to the BPR team members six factors (BPR principles), against which changes after BPR can be compared, were forwarded to mention their rate of agreements or disagreements. These factors were: Work units changed from functional departments to process teams; Jobs changed from simple task to multiple dimensional work; People’s role changed from controlled to empowered; Advancement criteria changed from performance to ability; Values of the center changed from protective to productive; Managers are changed themselves from supervisors to coaches. The majority of the interviewees were neutral, i.e., they could not say weather changes have come or not as per the mentioned factors. Those who mentioned their disagreements were many also. The responses of the neutral interviewees incline towards disagreement because had they observed changes, which should have been dramatic and radical, they would have indicated so.

In general responses given by BPR team interviewees to the questions raised to them do not indicate that the center has been successful in its BPR implementation.

CHAPTER FOUR

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter summarizes the main findings of the study and forwards recommendations based on the conclusion.

4.1 Summary of the Findings

With regard to gender of respondents, 26 (83.87%) of the 31 employee respondents were male while 5 (9.67%) of them were female. Of the BPR team members interviewed, 12 (85.71%) of them were male while 2 (14.28%) were female.

Age wise, 1 (3.22%) of the 31 employee respondents was between 18-30; 10 (32.25%) of them were between the age of 31-43; the rest 20 (64.51%) were between age 44-56. As to BPR team members their age distribution was that 2 (14.28%) of them were in the range of 31-43 while the rest 12 (85.71%) were in between 44-56.

Concerning educational levels of employee respondents 14 (45.16%) of them were with B.A/BSC degree, 12 (38.7%) of them were with diploma, and the rest 3 (9.67%) and 2 (6.45%) of them were with M.A or above and certificate educational levels respectively.

Profile of customer respondents was seen from their type of business, the length of time they stayed in business and number of people they employed. In this case, there fore, 15 (75%) of them are in sole proprietorship type of business. The rest 2 (10), 2 (10), and 1 (5%) of them are in sole proprietorship, non-governmental and share company type of business (Organization) respectively. Employment wise, 11 (55%) of them have a maximum of 20, 3 (15%) of them a maximum of 80, another 3 (15%) of them a maximum of 60, 1 (5%) of them a maximum of 40 and 2 (10%) of them more than 80 employees respectively.

The questions this research tries to answer were to find out the reasons (identified problems) to inter in to the BPR project? What were the problems that affect the BPR implementation process of EAEDPC, the mechanisms (strategies) sought to overcome the problems and what the working environment looks like after implementing BPR. The general objective of the research being to assess the BPR implementation practices of EAEDPC, the specific objectives were to identify the problems encountered while implementing BPR in EAEDPC, to identify and the strategies followed to overcome the problems/resistance, and to assess the new working environment in relation to the overall changes sought.

As the findings depicted in chapter three indicate, specifically in responses for interview questions, EAEDPC did not initiate its own BPR project. Rather the initiative was taken by the ministry to which the center is accountable to. As a result the center did not identify its own processes and did not form its own governance structure for the BPR. Even though not directly related to EAEDPC, stretched objectives were set in the study as the team members indicated in their response. Customers in their response indicated that they were not involved or their opinions were not taken as input to the BPR. But the leadership of the center did communicate the employees about the progress of the study. Employee respondents have confirmed this.

In conducting BPR one of the important factors is the rate of change. Many of employee respondents and interviewed BPR team members indicated that there are some changes in the center. However, no one could show the real changes in a specific way. Especially the rate of change as was expressed in the stretched objectives not assessed whether it is realized or not. This point when specifically seen from customers' point of view indicates that there are no real changes. This is because of the 20 of the respondents mentioned that they have not seen changes in handling their cases in the center after BPR, and 13 of them said they saw no changes in getting quality products and services from the center. On the other hand, about the convenience of the center's way of addressing their cases, 12 of them confirmed that the ways the center handles their cases are not convenient to

them.9 of these respondents indicated that there are still areas where the center needs to make further improvements. In knowing their customers 20 of the 31 respondents assured that they do know better after BPR while the rest 11 indicated they do not. As to the overall change in the center after BPR 17 of the 31 respondents indicated that there is no change whereas 14 indicated that there is change.

These customers' responses coupled with the response which indicates that no customers' satisfaction survey was conducted, leads to conclude that the changes in EAEDPC is not as desired.

On the other hand, as to change in the center with regard to the working environment in the center after BPR, respondents have expressed what they have observed. For example 15 of the 31 staff respondents indicated that work units have changed from functional departments to process teams, and 10 of the same number of respondents agreed that works changed from simple tasks to multiple dimensional work. However, 9 of the 31 respondents did not accept that people's role have changed from controlled to empowered way of doing their jobs while the other 9 responded that they are neutral. Responses to other change indicator questions do not show that the working environment changed.

On top of these, responses of customers to other questions and specifically responses to customers' satisfaction measurement scale indicated that there are no changes in satisfying customers of the center.

4.2 Conclusion

After completion of analysis of the BPR implementation of EAEDPC, the student researcher has reached at the following conclusion.

4.2.1 Deciding to pursue BPR and managing it

EAEDPC has conducted and implemented BPR. One core and four support processes were addressed in the study. However the initiative to get in to conducting BPR was not that of itself. The initiative was taken by ministry of mines and energy to whom the center is accountable to. The center sent its experts to participate in the teams established by the ministry. As a result it was not the responsibility of the center to form the necessary governance structure to the study and manage the study process. However as per the instructions given to it by the ministry, it has communicated findings by the team concerning itself to its employees. Its missions were revised and stretched objectives, objectives to be attained by conducting BPR, were also set. Respondent employees confirmed that these objectives were clear to them. As table 6 indicates customers, even though they had the information that EAEDPC had conducted BPR, they were not consulted and their opinions were not taken as input in the study.

4.2.2 Implementing the new process

The desired changes achieved by conducting BPR should be testified by people who use or implement the new designed processes and by people, customers, who are beneficiaries from the improved processes.

Responses of many of staff members indicated that the changes obtained in implementing BPR were moderate. Change of works from functional departments to process teams, change of jobs from simple task to multiple dimensional works, change of people's roles from controlled to empowerment, focus of performance measures from activity to results, changes of jobs from training to education, change of advancement criteria from performance to ability, change of managers from supervisors to coaches and change of the center's organizational structure from hierarchical to flat were in moderate state. In other words though there are some changes in some aspects of the centers processes, there are no change in some of them. In those aspects, even, where changes are testified by employee respondents, the changes are not radical and dramatic as was prescribed by BPR proponents.

Responses of customers are different from that of employee respondents. Responses of customers to many of the questions indicate that there are no changes in the center. They mentioned that they have not seen changes in the ways the center conducts its daily activities. They indicated that the quality of products and services the center produces and renders are not changed in meeting their needs. They indicated that the way the center handles their cases is not convenient to them and they further indicated that there are areas where the center needs to make changes.

In addition to these their response to questions related to BPR principles, majority of the respondents did not agree with presence of changes. They indicated that the changes the center claims are low. Even significant number of respondents indicated that there are no changes; in some areas it is even worse.

In conclusion, therefore, even though EAEDPC has conducted BPR sending its experts as representatives to be members at the task force formed at Ministry of mines and energy level, the changes it claims are not radical and fundamental. As a result its customers are not able to see changes in the way their cases are handled by the center and they are not satisfied. In general three issues are found to be reasons for failing to properly implement BPR. The first reason is that many of the employees were not beneficiaries from the change. They expected salary increment when the structure of EAEDPC was changed. However, only few got the chance because the salary change was based on the changed structure. The answer from the question “what is in it for me” was neglected. The second reason was the role of the leaders. Even though new processes were designed and attempts were made to communicate to employees, the BPR project was not conducted and lead by the center. It was an imposed one. As a result the leaders of the center were not motivated to make it theirs and exert their full energy to implement it. Besides, since leaders of the center were changed during implementation stage, it had its negative effect in effectively executing the study outcomes, not disregarding the shortcomings of the study itself. The third reason was with regard to rules and regulations. Though new processes were designed, no new rules and regulations were in place. The center was

obliged to use the old rules and regulations to implement the new processes. Applying new processes using old rules and regulations is incompatible. So in conclusion, it is possible to say that the center has not succeeded in its BPR implementation.

4.3 Recommendations

The ultimate objective of conducting BPR is bringing about radical and dramatic changes in order to serve customers in a better, satisfying and sustainable ways. If the center has the commitment to bring about this, the following are recommended.

1. The center must understand that it has not been successful in its BPR implementation. So it should be ready to admit this.
2. It is strongly recommended that the center should conduct survey so as to identify the changes and impacts so far occurred internally as well as its effect in satisfying its customers.
3. The center should be ready to identify and admit the reasons and problems why it has not been successful in implementing BPR.
4. Decide what change tools and strategies it should use or apply to bring about overall changes in the center to satisfy customers' needs. The survey it should conduct coupled with the problems it identifies as reasons for its failures should serve it to determine what change tools it should use in redoing its effort to change the center.
5. The center should convince itself that it has to conduct BPR or other change tools to change it self. It should know that in BPR, a study conducted by another body and imposed on it will not enable it to bring about the change it desires.

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Appendices

Appendix 1

1. Questionnaires to be filled by staff members

**St. Mary's University College
Faculty of Business
Department of Management**

Questionnaire to be filled by staff members of Ethiopian Alternative Energy Development and Promotion Center (EAEDPC)

Dear respondents,

This questionnaire is prepared by a student at St. Mary's University College Faculty of Business, Department of Management for senior essay to partial fulfillment of Bachelor of Arts degree in Management. The questionnaire is prepared to assess EAEDPC's implementation of BPR.

Reminders

1. Respondents are not required to write your names.
2. Please put a "√" mark in the boxes provided for questions that require so.
3. Please be brief and precise in providing personal opinions in spaces provided.
4. Be notified that your answers to the questions will not be disclosed or used for purposes other than the study objectives.

Thank you in advance for your cooperation.

Part One: General characteristics of the respondents.

1. Would you please indicate some details about yourself?

Gender: Female Male

Age: 18-27 28-37 38-47 48-58

Educational level:

Certificate: Diploma B.A M.A and above

Work experience:

1-10 11-20 21-30 Above 30

2. For how long have you been working in Ethiopian Alternative Energy Development and Promotion Center?

1-10 11-20 21-30 Above 30

Part Two: Questions directly related to the study.

1. Did the leader communicate the staff about the need and objective of the BPR study at the outset of it?

Yes No

2. Were the needs and objectives of the BPR study clear to you?

Yes No

3. How many times did the leadership communicate the staff about the BPR study?

Ones Twice Three times Four times

5. Do you see changes after implementation of the BPR?

Yes No

6. Currently, what regulations, policies, manuals and rules do you use?

All of them new Many new and few old Many old and few new

All old

7. Do you know your customers better now, than you did before BPR?

Yes No

8. The center has repeatedly attempted to assess the change in satisfaction level of the customers of the center.

Strongly agree Agree Neutral Strongly disagree

9. If yes, what are the changes you have found out Strong so far?

10. Would you evaluate the changes in your job according to the following criterion?

Criterion	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Work units changed from functional departments to process teams					
Jobs changed from simple task to multiple dimensional work					
People's role changed from controlled to empowered					
Focus of performance measures and compensation shifted from activity to results					
Job preparation changed from training to education					
Advancement criteria changed from performance to ability					
Values of the center changed from protective to productive					
Managers are changed themselves from supervisors to coaches					
Organizational structure of the center has changed to hierarchical to flat					

11. How do you explain the changes and achievements of the center after implementing BPR, other than the above mentioned criterion?

Appendix 2

2. Questionnaires to be filled by customers

St. Mary's University College
Faculty of Business
Department of Management

Questionnaire to be filled by customers of Ethiopian Alternative Energy Development and Promotion Center (EAEDPC)

Dear respondents,

This questionnaire is prepared by a student at St. Mary's University College Faculty of Business, Department of Management for senior essay to partial fulfillment of Bachelor of Arts degree in Management. The questionnaire is prepared to assess EAEDPC's BPR implementation, particularly in meeting its customer's requirements and needs.

Reminders

6. Respondents are not required to write your names.
7. Please put a "√" mark in the boxes provided for questions that require so.
8. Please be brief and precise in providing personal opinions in spaces provided.
9. Be notified that your answers to the questions will not be disclosed or used for purposes other than the study objectives.

Thank you in advance for your cooperation.

Part One: General characteristics of the respondents

3. Would you please indicate some details about the company?

● Form of business:

Sole proprietorship Partnership Share company Ngo Others

● For how long has the company been in this business it currently is running?

For less than five years For five years For more than five years

● How many employees does the company have? -----

Part Two: Questions directly related to the study.

1. What is the type of business you are in?

2. For how long have you known Ethiopian Alternative Energy Development and Promotion Center (EAEDPC)?

For less than five years For five years For more than five years

3. What are the services (products) you get (require) from EAEDPC?

- Training
- Technical support
- New developed sample products
- Market analysis information
- All

4. How frequent is your contact with the center?

Every month Twice a month Once in six months
Once in a year Unknown

10. Do you know or have you been informed that starting in the year 2000, EAEDPC has been trying to change the way it executes its responsibilities by conducting Business Process Reengineering?

Yes No

6. Recently, have you seen changes in the center's way of doing its business and in handling cases of its customers (your cases)?

Yes No

7. Can you tell how long it takes you or the center requires meeting your needs /requirements?

8. When was the last time you came to the center requesting service?

Few months a go six months a go A year a go
More than a year a go

9. When you compare this time (the length time it took you when you came the last time to the agency) with the time that it used to take you a year ago, how do you evaluate it?

Very short Short Long Very long
No change

10. What do say about the quality of products (services) you get from the center? Have you observed changes towards meeting your needs?

Yes No

11. How do rate the value adding changes in the center?

Radical Moderate No change Worse than before

12. To get the products (services) you require, how many people do you have to go to or talk to?

One Two Two Thre More than thre

13. Are the ways the center addresses your needs convenient to you?

Yes No

14. How do rate the center's convenience in meeting your needs after the BPR?

Radical Moderate No change Worse than before

15. Have you ever been consulted to give suggestions as to how the center should change its service giving practices?

Yes No

16. Do you feel that there may be areas where the center needs to make further improvements?

Yes No

17. If yes, would you indicate some of these areas?

18. How do you rate your satisfaction by the services or products of the center?

Very satisfied Satisfied Unsatisfied Very unsatisfied

19. Please rate the center's service delivery improvement after BPR according to the following scale.

C r i t e r i o n	Strongly disagree				Strongly agree			
	1	2	3	4	5	6	7	
When the center promises to do something by a certain time, it does so								
When you have a problem the center shows a sincere interest in solving it								
The center performs the service right the first time								
The center provides its services at the time it promises to do so								
The center keeps customers informed about when services will be performed								
Employees in the center give you prompt service								
Employees in the center are always willing to help you								
Employees in the center are never too busy to respond to your request								

Appendix 3

3. Interview questions prepared to BPR team members.

**St. Mary's University College
Faculty of Business
Department of Management**

**Interview checklist to BPR team members of
Ethiopian Alternative Energy Development and Promotion Center
(EAEDPC)**

1. How many processes are there in the center? Core and support?

Are all processes reengineered in the study?
2. What derived the center to get in to conducting BPR?
3. What were the methodologies used in conducting the BPR study?
4. What methodologies did you use to involve the participation of the center's stakeholders and customers?
5. Did the leadership communicate the staff of the center? On which part of the study was the communication made? And how frequent was it?
6. After implementing the BPR study outcomes has the center conducted customer satisfaction survey to gauge changes in satisfaction of customers?
7. If yes, what were the outcomes? If not, why not?
8. How do you explain the achievements gained in the desired change of the center so far? What are the manifestations of the changes?
9. What problems and challenges were encountered in the BPR implementation process?

10. How did you overcome the challenges and problems?
11. How do you describe the general working environment that exists after implementing BPR?
- In terms of employees working attitude and satisfaction?
 - In terms of creating conducive situation to meet strategic objectives?
 - In terms of meeting customers' requirements?

DECLARATION

I the undersigned declare that this senior essay is my original work, prepared under the guidance of ato Zellalem Tadesse. All sources of materials used for the manuscript have been duly acknowledged.

Name: Amarech Girma

Signature: -----

Place of submission: St. Mary's University College.

Date of submission: June 20, 2010

This senior essay has been submitted for examination with my approval as a university college advisor.

Name: Zellalem Tadesse

Signature: -----

Date: June 20, 2010