IMPLEMENTATION OF BUSINESSS PROCESS RE-ENGINEERING (BPR) IN TECHNICAL VOCATIONAL EDUCATION AND TRAINING INSTITUTES: IN THE CASE OF JIMMA ZONE

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LETTER OF APPROVAL

This is to certify that the thesis prepared by Bruke Tigste entitled "Implementation of Business Process Reengineering in Technical Vocational and Education Institutes of Jimma zone". In addition, the paper is submitted in partial fulfillment of the requirements for the Degree of Master of Arts in Educational Leadership and Management complying with the regulation of the university and meets the accepted standards with respect to originality and quality.

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Abbreviation

BPR	Business Process Reengineering
BSC	Business Score Card
CSRP	Civil Service Reform Program
FDRE	Federal Democratic Republic of Ethiopia
MOE	Ministry Of Education
SPSS	Statistical package for Social Science
TVET	Technical Vocational and Education and Training
TQM	Total Quality Management
USA	United States of America
UK	United Kingdom
HRM	Human Resource Management

Abstract

The overall objective of this study was to assess the Implementation of Business Process Re-engineering in TVET Institutes of Jimma zone, and determine the major challenges in its implementation process. To achieve this purpose, descriptive survey research design was employed. The quantitative approach was mainly used by supplementing with qualitative methods. In the study all the 5 Jimma Zone TVET institutes were included through availability sampling. Moreover, by using availability sampling technique 194 TVET instructors, 5 deans, 73 administrative staffs and 1 Jimma Zone TVET head, a total of 276 respondents were participated. Data was collected using questionnaires as the main instrument while interview and document analysis were also used to supplement the qualitative data. In analyzing quantitative data percentage, frequency and t-test for independent Sample were used. The qualitative data was thematically analyzed. this obtained results exposed that most of planning activities were carried out for the sake of formality and found to be unrealistic to expect genuine result from the implementation of BPR; the implementation of BPR in Jimma zone TVET institutions were not considered to be effective as a result of lack of supports from the process owners, lack of resources, lack of formal and continuous supports. Hence, the implementation of BPR did not bring about the intended result although certain improvements were marked in terms of the reductions of the time required for the task accomplishment and workloads. The less effectiveness in BPR implementation was due to lack of leaders' commitment, employees' motivations, lack of continuous monitoring and support for the implementation of BPR was the major ones. Finally, possible recommendations were forwarded. Consequently, Jimma zone TVET institutes in collaboration with higher educational institutes such as Jimma University are recommended to strive and ensure the availability of necessary skill and knowledge within the experts by bridging any gap exists through short term trainings; Jimma zone TVET institutes' leaders are also advised to ensure the provision of adequate finance, appointment of qualified personnel, to conduct continues supervision and support. Furthermore, Regional Education Bureau, Zonal Education Department and Jimma zone TVET institutes are advised to continuously monitor organized system of follow up by preparing guidelines and implementing them as per the level of their responsibilities.

Keywords: BPR implementation; Jimma zone; TVET institutes.

CHAPTER ONE

1. THE PROBLEM AND ITS APPROACH

1.1. Background of the Study

Today, globalization along with key driving forces such as customers behavior, competition among businesses and change in the working environment have created tough environment for organizations that have been working with outdated philosophies and principles of work practices. Although those outdated philosophies and principles succeed to cope up the socio-economic challenges of that time, they cannot fit today's new environment. The new environment requires organizations to realize new working practices that can make up them to be responsive and flexible for the changing environment. In doing so, organizations utilize various types of management tools such as Total Quality Management (TQM), Restructuring, Business Process Reengineering (BPR), and so on.

In general, the concept of Business Process Reengineering is an American idea and began as private sector techniques to help organizations to fundamentally rethink how they do their work in order to dramatically improve customer service, cut operational cost and become world class competitors. A key stimulus for reengineering has been the continuing development and deployment of the sophisticated information systems and networks.

Most of author argued that, most of the work being done does not add any value for customers and this work should be removed, not accelerated through automation. Instead, organizations should reconsider their value, while minimizing the consumption of resources required for delivering their products or service. Recently some of the most successful business organizations in the world seem to hit up an incredible solution.

Some of the organization destroys moral and momentum of the employees built up their lifetime because of poor BPR implementation. In line with this, after the global recession of early 1980s, many organizations and firms across the world attempted to revitalize their performances Hammer and Champy, (1990).

Business Process Reengineering (BPR) has risen during the early 1990s as an approach mainly developed by Practitioners. It gained prominence in the work of writers such as Davenport, champy and Short (1990)**,** the concept is currently very topical and ubiquitous in many organizational, management and information technology.

In supporting this, Almashri and Zairi (2000), BPR creates changes in people.in supporting this idea; BPR is the fundamental reconsideration and radical redesign of organizational process in order to achieve drastic improvement in current performance of cost, service and speed .Hammer and Champy, (1993). They argued organizations should reconsider their processes so as to maximize customer value, while minimizing the consumption of resources required for delivering their products or services.

As Evans and Bermans (1990) reflected, customers wish to obtain quality products and service with minimum price and time. Meanwhile many governmental organizations stick to the traditional way of producing products and rendering services. This approaches breeds inefficacy and disappointments of organizations stakeholders and clients.

Some people considered BPR as inapplicable to a developing country context such that of Ethiopia such as, The Assa Abloy Southern Africa's Lean Implementation Project is another example of a successful BPR in developing countries (Kruger, 2008).

Berihun (2009) said that as soon as the current government came to power, it started rigorous reforms (first phase reforms from 1991 to 1995) in three fronts, Economic reform –from central planning to market economy, Political reform- federalism, and power and fiscal decentralization, Constitutional reform-enacting the Ethiopia constitution.

The question was whether Ethiopia has bureaucracy that is capable of doing these reforms or not the government employed private domestic and foreign consultants to study the implementing capacity and identified that Ethiopia bureaucracy is; very hierarchical with many non-value

Adding works /position/ staff, Nepotism and lack of transparency accountability, and corruption), lack of leadership capacity, Input based and not output based, i.e. output not measured.

Since 2000/01 the government of Ethiopia has been carrying out reforms in public sector so as to enable the organization to provide efficient service and effectively implementations of the strategies and development policies to this end.

Regarding to the first attempt of BPR in Ethiopia, Tesfaye (2009) described that as it was started in 2004, but was unsuccessful. Later, a new steering committee was created and trained in BPR (Tesfaye, 2009). The committee saw the second BPR attempt in 2007 yielding the successful results (Tesfaye, 2009). The most notable success story among the ministries was the ministers of Trade and Industry that had improvements in its efficiency and service provision by reducing cycle time for registration and for licensing service reduced from 43 days to 30 minutes (Tesfaye, 2009; Mengesha and Common, 2007).

As Smith (1995) indicates the major aspects of the BPR are the human element. However, the implementation phase of BPR points out the most challenging. Despite the government desire and commitment, BPR implementation was accompanied by doubt, skepticism and fear of losing the status quo or layoff. Matching the statuses of TVET institutes BPR should be considered to seek evolutionary changes. Considering the human resource and the technological capacities of Ethiopia BPR can bring incremental benefit and evolutionary transformation instead of dramatic and radical change for foreseeable future to come.

This current popular term in many TVET institutes, has been working and sustainability of the organization, which can be measured as the strategies and polices. Although the introduction of BPR in Ethiopia is recent phenomenon, as far as the researcher knowledge, there were no study that identifies the BPR implementation on TVET institutes and their magnitudes in my case study area. Therefore, a proper planning for BPR documents with adequate time frame is key factor in delivering a successful BPR on time.

Since BPR planning is the most serious, crucial and difficult thing on the success and failure factor in organizations. Jimma zone TVET institutes are one of the reasons of governmental institutes are engaged BPR to deliver service to society to the society retrenchment of the of the working. By the time, diversified, responsible team was engaged particularly the organization workers. The team was responsible and accountable for the proper implementation of BPR and make aware of the employees. Therefore, organization should ensure that their employee suitably motivated and technology required for the available, especially for radical change of BPR. However, this study could solve and indicate the problems, which occur on the implementation of BPR in TVET institutes.

According to the pilot interview from the head of jimma Zone Tvet institutes, in 2005 Generally speaking BPR in jimma zone TVET institutes is not implemented properly due to these problems such as management failures to change, misunderstanding of concept, misapplication of the term, employee's and leaders resistance, novelty of the task, dissatisfaction of workers and lack of knowledge about the issues etc. are mentioned by the zone TVET zone head.

Moreover, the implementation of BPR becomes the top gendas of TVET institutes undergoing BPR. In supporting this, Resistance change can be considered as the nature of human being which appears that, no one free from. Neither noted that scientists nor students playing on school playgrounds (senge in Carlson, 1996).

1.2. Statement of the Problem

It has been widely shared understanding that, Ethiopia has survived with very limited TVET institutes opportunity for many decades. However, more recently the doors are being widely open. In its desire to bring about national transformation in the shortest possible time, the Ethiopia government is working hard to realize its vision of making the country among the middle-income country in 2025. According to Nuffic (2011), the Ethiopian government recognizes the importance of education for national development, which aimed at expanding the education sector, improving quality and ensuring educational content to be harmonized with the country's economic needs, (NBE, 2009).

The Traditional working practices of Ethiopian TVET institutes were criticized as being fragmented across various units of the organization and each unit focused only on one task that leads to frustrate the customers from ups and downs to get services from various units' handoffs. In supporting this, Getaneh (2009) reported that Ethiopian institution criticized for their poor service delivery systems. The practice of Ethiopian TVET institutes is not efficient, effective. To alleviate like the above mentioned working practices, recently, the former Ethiopian ministry of capacity building tried to introduce transformation in Ethiopia in which works have to be done by all government organization through BPR.

Mike Robinson and Ullah (1996), described in their book, 'do it but it is properly because BPR is the worth doing things properly'. In such treatment is helpful if the possibility that applies BPR implementation properly, can give huge returns to most TVET institutes programs. In the past, there have been attempts to investigate the status of TVET provisions in Ethiopia by different groups and individuals. Among many others, the study made by Birhanu Dibaba (et al. 1992) came up with the major finding i.e. "there are no clear cut guidelines regarding plans, programs, and resources given to Technical and Vocational schools.

In supporting this Reyes (2001) claimed that, multiple layers of management , centralized and expensive systems as well as the accumulation of control procedures and regulation remains to be formidable obstacle in ensuring efficiency, economic and productivity of public sector organizations.

According to MOE (2008), TVET strategy is to create a competent, motivated, adoptable and innovative workforce in Ethiopia contributing to poverty reductions, social and economic development through facilitating demand driven, high quality technical and vocational education and training, relevant to sectors of the economy, at all levels and to all people.

Due to the above government policies and the researcher's experience, BPR is the only thing that create conducive environment and brings efficiency and effectiveness in the organizations and also energy for employees, managements, stakeholders and cooperation of the teams of the organizations and gets a better ways of doing things. In supporting this Shin and Jemella (2002) stated that successful BPR implementation enables organizations to improve their performance.

In supporting this, one of the Jimma Zone TVET officers said that, BPR is an innovation and have a potentially impact to bring a dramatic change for our institutes employees, instructors, leaders and students attitude but not apply effectively and efficiently and the Zone TVET head offices get a tremendous change such as little progress before spreading BPR in the zone TVET institutes it seen the result like punctuality of employees and time keeping but they did not celebrate on the bases of their achievements and merits of document, but a lot of tackles had been occurred during the implementation BPR in Jimma zone TVET institutes.

This is because, there was lack of knowledge about BPR regarding to process of planning and implementations. Moreover, at this time all the TVET Institutes are starting the BSC which is the continuation BPR is its infancy stage that is why the researcher is initiated to conduct the research. Though there is no survey researches that had been attempted to highlight the factors associated with BPR implementations in our Context particularly in Jimma Zone TVET institutes. This study intended to explore planning, failure and success, achievements and

challenges of TVET organization, employees and leaders with BPR from TVET context in Jimma zone.

In light of the above discussions, the following basic questions are being answered in the course of the study.

1. To what extent do Jimma Zone TVET institutes planned BPR?
2. To what extent do TVET Institutes of Jimma zone implemented BPR?
3. What are the major achievements in TVET institutes as a result of implementation of BPR?
4. What are the major challenges that affect in the implementation of BPR in TVET institutes?

1.3. Objectives of the Study

1.3.1. General Objective

The overall objective of this study was to assess the implementation of Business process re-engineering in TVET Institutes of Jimma zone and determine the major challenges in its implementation process.

1.3.2. Specific Objectives

The specific objectives of this study are:

1. To assess the extent to which TVET Institutes of Jimma zone planned BPR.
2. To identify the extent to which TVET Institutes of Jimma zone implemented BPR.
3. To show the major achievements in TVET institutes as a result of implementation of BPR.
4. To identify the major challenges that affects the planning and implementation of BPR in the TVET institutes of Jimma Zone.

1.4. Significance of the Study

The implementation of BPR is a National initiative and it has knocked the door of every public institution at all levels recently even though, it is not implemented in the private sector. The major purpose of this study was to assess the implementation of BPR in TVET institution in Jimma zone in Oromia regional state.

Therefore, the finding of the study will have the following benefits:

1. This study may motivate TVET Institutions, so that, it can support and guides the effort of change in the zone.
2. Employees of the organization, may get clear awareness of their BPR implementation and employee's performance, and help them to improve their task effectively and efficiently.
3. May help for those institutions that already implemented BPR to reconsider the planning.
4. It may help other researchers who conduct a study on this area and give them some bases.

1.5. Delimitation of the study

Conceptually the study covers in the planning, implementation, failures and success factors during the process of BPR. Hence, the research will not include the assessment of the organization of the initiatives to start the redesign or how the new processes have been developed. Moreover, geographically the study delimited within the context of the organization of Jimma Zone TVET institutes based on the assumption that did not cover how BPR projects have been implemented at educational level because limited time and resource for the study.

1.6. Limitation of the Study

As the subject, BPR is a recent phenomenon in Ethiopian TVET situations. No adequate works, reference books, and materials are in place. The time given for the research work was not enough to supplement the study exhaustively and hence, the study by no means claims to be conclusive. It would rather serve as a spring board for further studies in the area.

1.7. Definition of key Terms

BPR: 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.

Change management: that involves all human- and social-related changes and cultural adjustment techniques needed by management to facilitate the insertion of newly designed processes and structures into working practice and to deal effectively with resistance (Ahmad et al., 1999).

Core processes: are those that end up touching an external customers; they occur when an employee fills a customer's order, responds to a customer's complaint, or develops a new program or product (Linden, 1998, pp.8)

Implementation team members: individuals who actually implement the redesigned processes. They can be redesign team members or others, but not necessarily redesign team members (Linden, 1998, pp.151).

Process: is a set of interrelated steps that begins with an input or trigger and end with an outcome that satisfies the end user (Linden, 1998, pp.8).

Support processes: are internally focused, such as the process of recruiting, hiring, and training new employees (Linden, 1998, pp.8).

1.8. Organization of the Study

The research report divided in to five main chapters. The first chapter deal with the problem and its approach and it include background of the study, statement of the problem, objectives, and significances, delimitation, limitation of the study, operational definition of basic terms and organization of the study. Chapter two presents the review of related literatures. Chapter three deals with the research design, method, sources of data, sample and sampling techniques, instruments and procedures of data collection and method of data analysis and interpretation. Chapter four includes the data presentation, analysis and interpretation. Chapter five dealt with summary, conclusion and recommendations of the study.

CHAPTER TWO

2. REVIEW OF RELATED LITERATURE

The literature reviewed in this paper was obtained from the reputable published sources. The literature sources dated back to 1990s are mainly of the "fathers of BPR"; the researcher who promoted BPR awareness in the past. Their contributions were found fundamental and necessary to this paper. This literature (2001-2012) deals with definitions, needs for BPR, techniques, developments, barriers and challenges of BPR.

2.1. Basic Definition of Business Process Reengineering

The brief review of changes discussed so far helps to link BPR to the principles of scientific management school, total quality management and systems theory. As mentioned in the introduction part, the Ethiopian government has taken BPR as a panacea for the problems of inefficiency in the performance of the civil service organizations. Therefore, it is important to discuss the concept of BPR before we discuss its applicability to civil organizations in Ethiopia.

Some corporations began to practice BPR in the mid-1980s before Hammer and Champy developed the theoretical framework during the early 1990s. Many management consultants/scholars, during the 1970s and 1980s, had used operation management techniques to improve the efficiencies of the then business organizations by answering fundamental questions like "why do we do what we do? And why do we do it the way we do it?" These are the same fundamental questions that need to be investigated in today's practice of BPR. According to Hammer and Champy (1993: 32) defined BPR as "the fundamental rethinking and radical design of business processes to achieve dramatic improvement in critical measures of performance such as cost, quality service and speed."

Business reengineering is analyzing, simplifying and redesigning the business process to radically improve the cost and the quality of a product or service Laudon, (1998: 407). The previously discussed literature purports that the theoretical and the methodological foundations of BPR are *scientific management*, *systems analysis and design*, *operations management*, *computer technology* and others. BPR agrees with scientific management school in two aspects.

The first is the "rational thinking" that money is the only motivator of employees. For example, according to Hammer and Stanton (1995: 166), the "way to people's hearts and minds is not through their ears, but through their wallets" (emphasis mine). The second is the mechanistic thought that "reengineering is deterministic, not probabilistic." (Hammer and Champy, 1993: 14) excludes the environmental and human factors from the equation of organization design. However, for our further discussion, the fundamental issue to be noted is that system's theory is the foundation of BPR, because the characteristics of systems- input, processing and outputs- are essential at the time of reengineering a business process.

In general, some of the major principles of BPR, as discussed by Hammer and Champy (1993), are integrating horizontal activities end-to-end, organizing the process around the outcome, capturing information at the source, and putting the decision point where the work is performed.

Business Process Reengineering (BPR) is the fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical, contemporary measures of performance, such as cost, quality, service, and speed (Hammer and Champy, 1993:32). This definition comprises four keywords that need further discussion.

The four key words are: fundamental, radical, dramatic and process as each of this discussed and explained bellow.

Fundamental: Understanding the fundamental operations of business is the first step prior to reengineering. Business people must ask the most basic questions about their companies and how they operate: Why do we do what we do? And why do we do it the way we do?

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

Dramatic: Reengineering is not about making marginal improvements or modification but about achieving dramatic improvements in performance. This refers to achieving quantum leaps in performance, but not about incremental improvement.

Process: A process is a collection of activities that takes one or more kinds of inputs and creates an output that is of value to the customer. It is the transformation of a set of inputs, which can include actions, methods and operations, into outputs that satiety customer needs and expectations in the form of products, information, services or results? A process is any operational or administrative system which transforms inputs in to value-outputs-typically a sequence of tasks arranged into a procedure or set of work arrangements perhaps involving various machines, departments and people.

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 been the continuing development and deployment of sophisticated information systems and networks. The Business Process Reengineering method (BPR) is the fundamental reconsideration and radical redesign of organizational processes in order to achieve drastic improvement of current performance in cost, services and speed (Hammer, 1990; Thomas H. Davenport and J. Short, 1990; Hammer and Champy, 1993). Their 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 FIVE STEP APPROACH TO BUSINESS PROCESS REENGINEERING

Davenport (1992) prescribes a five-step approach to the Business Process Reengineering model:

1. Develop the business vision and process objectives: The BPR method is driven by a business vision which implies specific business objectives such as cost reduction, time reduction, output quality improvement. Identify the business processes to be redesigned: most firms use the 'high impact' approach which focuses on the most important processes or those that conflict most with the business vision. A lesser number of firms use the 'exhaustive approach' that attempts to identify all the processes within an organization and then prioritize them in order of redesign urgency.
2. Understand and measure the existing processes: to avoid the repeating of old mistakes and to provide a baseline for future improvements.
3. Identify IT levers: awareness of IT capabilities can and should influence BPR.
4. Design and build a prototype of the new process: the actual design should not be viewed as the end of the BPR process. Rather, it should be viewed as a prototype, with successive iterations. The metaphor of prototype aligns the Business Process Reengineering approach with quick delivery of results, and the involvement and satisfaction of customers.

II. What exactly is BPR in Ethiopia? What concrete procedures are taken to improve the public sector?

As soon as the current government came to power, it started rigorous reforms (first phase reforms from 1991 to 1995) in three fronts:

Economic reform – from central planning to market economy

Political reform – federalism, and power and fiscal decentralization

Constitutional reform – enacting the Ethiopian constitution

The question was whether Ethiopia has a bureaucracy that is capable of doing these reforms or not. The government employed private domestic and foreign consultants to study the implementing capacity and effectiveness of the bureaucracy. The consultants identified that

Ethiopian bureaucracy is characterized by Very hierarchical with many non-value adding works/ positions/ staffs Nepotism and lack of transparency and accountability, and corruption)

Lack of leadership capacity

Input based and not output based – i.e. output not measured.

It was difficult to undertake reform with this bureaucracy. The consultants recommended the establishment of new institutions. The "Ministry of Capacity Building" with the mandate of undertaking reforms in all public institutions (esp. education and the civil service) was established. Also "Anti-corruption Commission" with the mandate of avoiding unaccountable and untransparent procedures in public institutions was established.

Over time it was believed that an important condition to undertake the reforms was to implement BPR. It was identified that to solve the problems of hierarchical bureaucracy with many non-value adding works/staffs/positions, nepotism, etc; BPR is seriously implemented in all public institutions gradually. The reason why the Ethiopian government adopted BPR is that the current system has to be completely changed and redesigned and BPR can do this job. Services delivered by the public institutions are characterized by Long time taking, Costly (high transaction cost) Incompetence (not up to the needs of customers not responsive (many complaints, questions, comments etc from customers but no response) Not dynamic (the world is changing but our public institutions are stagnant) People have choices when they buy products from private firms. However, government services are one (no choice). At the same time it is people are democratic right to get appropriate and satisfactory services from public institutions. As a result of the implementation of BPR, painful practices in each public office were identified, and many non-value adding works/positions are avoided. For example, it was found that deputy head departments were actually doing nothing.

III. Examples of Improved service Delivery: Making Public Institutions Transparent, Efficient and Effective

The experiences of the Ministry of Trade and Industry (MOTI), the Ethiopian Investment Commission, and the Ethiopian Customs Authority are instructive examples of how institutions can be transformed to be more responsive, efficient and effective. These three public institutions

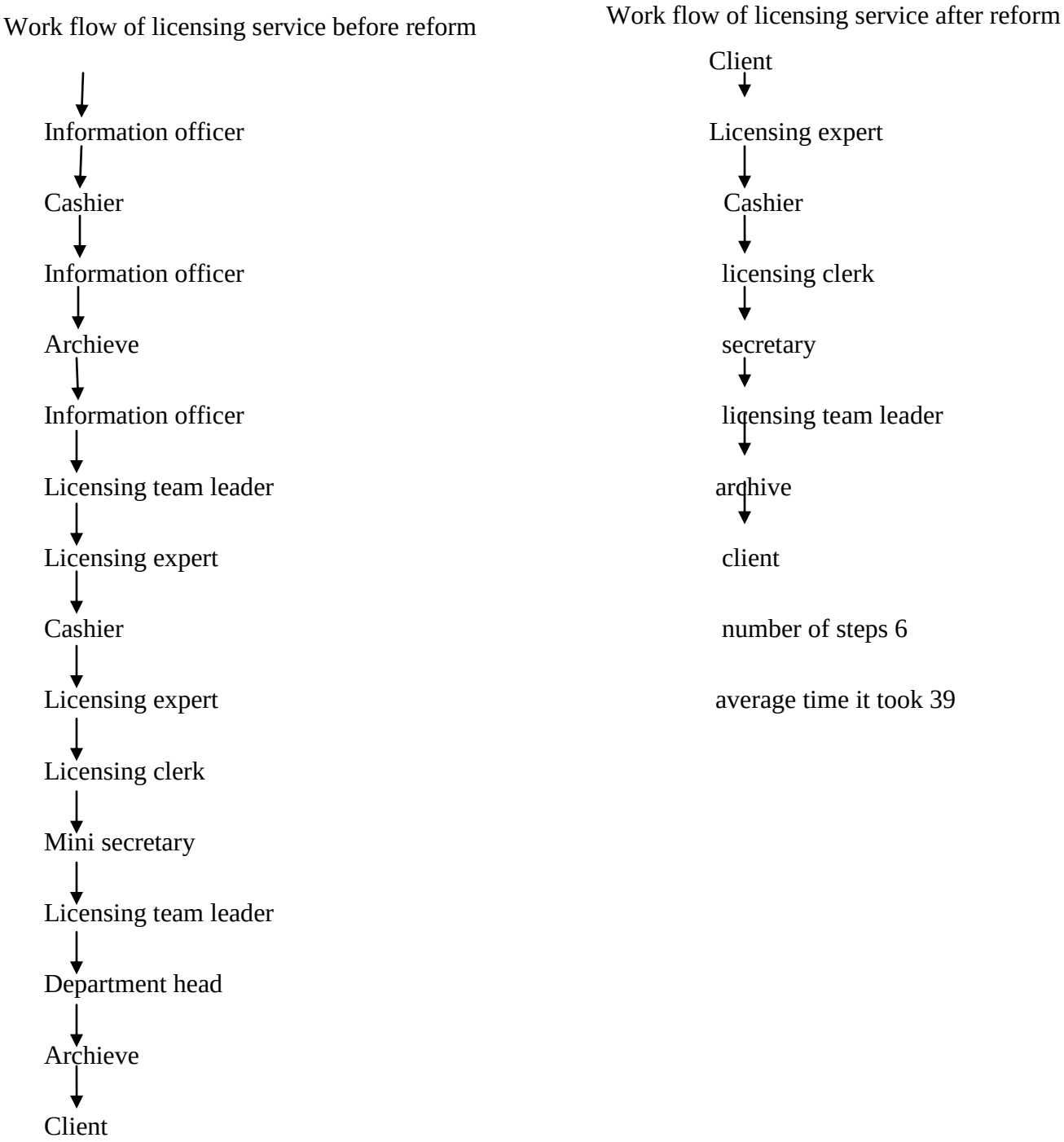
were taken as good examples in the IMF Country Report No. 06/27 for Ethiopia (2006). By way of highlighting the major achievements of the implementation of the Civil Service Reform Program, the following are worth noting:

a) The Ethiopian Investment Commission: It used to take 18 steps and 25 days on average for an individual business person to secure an investment license, where as now after the conduct of Business Process Reengineering (BPR) by the Commission it only takes an individual 4 steps and 2 days to get his/her investment license. The same service used to take 39 steps and 108 days for a company where as now (after BPR) it only takes 4 steps and 2 days. Securing main registration certificates used to take 18 steps and 28 days for an individual businessperson before the BPR where as now it only takes 4 steps and 2 days. The same service used to take 39 steps and 96 days for a company, whereas now it takes the steps and time as the individual business to secure registration certificates.

b) The Ministry of Trade and Industry (MOTI): It used to take 14 working steps (processes) and two and a half days to secure a trade license for an individual business person where as now (after the Ministry conducted BPR), it now only takes a business person 6 work steps and 34 minutes to get a trade license. This same service used to take a company 26 working steps and 35 days. After the conduct of the BPR, it only takes the same work steps and time as an individual business (6 work steps and 34 minutes, respectively).

c) The Ethiopian Custom Authority: Securing loading permits from Djibouti used to take 43 work steps (processes) and 2 days where as after the Authority has been re-organized and undertook BPR, it only takes 6 steps 15 minutes to get the service. Checking and fixing a container with a customer seal used to take 8 steps and two days before the BPR, whereas now it only takes 3 steps and 40 minutes to get the same service. Declaration acceptance, approval, examination, release of exported items and distribution of declaration used to take 8 steps and 2 to 15 days, where as now it only takes three steps and 26 minutes to get same service for a business entity.

Figure 1. Work Flow of Licensing Activities in reform



Source: progress report. Office of civil service reform program Feb 2005

Officials and resource persons in MOTI explained that the license and registration Department (LRD) is estimated to serve more than 20,000 clients a year and provides 31 types of Licensing and Registration services. Moreover, as the figures above show, apart from reducing unnecessary work chains, BPR has reduced the amount of time it takes for users to receive services, thereby inhibiting the scope for corruption.

As indicated in Figure 1, before the introduction of BPR, a client had to go through 14 steps and had to wait for at least eight days to get his/her license. Apparently the steps have been reduced to only six and the average time reduced to only 39 minutes. Likewise, as indicated in figure 2, before BPR a client had to go through 16 steps and had to wait for two days on average to get trade names registered. After BPR, the steps have been reduced to six and the average time has been reduced to 34 minutes. This is a spectacular reduction in work process and time in the Licensing and Registration services. This is an indication of the extent to which this particular department of MOTI had been operating inefficiently in the past. This inefficiency had also contributed to an unfavorable legal-business environment in Ethiopia and pinpoints hurdles the business community had been confronting for years. BPR has apparently brought untold satisfaction on the part of the clients. To get rid of the lengthy processes involved, clients used tom bribe clerks and some unit heads to get things done. This process has successfully closed the door for malpractices and corruption ingrained in the system over many years.

Experience or threat of losing market share makes BPR potentially appealing to senior executives who are attracted by the claims of a technique that promises to make a quantum leap beyond the performance gains delivered by the Japanese lead in JIT and TQM. On the other hand, it could be objected that the BPR focus is upon improving the operations of companies, to the possible neglect of the competitive advantages that can be gained from other sources, such as strategic planning and marketing.

This objection is partially disarmed by Hammer's insistence that management functions, including marketing, be integrated into processes of product development, etc. BPR could be

deployed to reengineer the processes through which corporate strategies are formulated and implemented, but it does not extend to identifying or creating markets or niches where big profits can be made. BPR is presented primarily an operations-led approach to strategic self improvement. It builds upon, as it aspires to leap beyond, 'the tactical process-oriented philosophies of JIT and TQM to bring the process philosophy into the broader realm of corporate strategy.

BPR has most relevance for securing and defending niches by continuously (re)engineering processes so that profit levels can be sustained even if there is a decision to increase costs (e.g. by enhancing the product or raising the marketing spend) or reduce prices in order to maintain market share. It is not an alternative to strategic management. BPR presents a novel challenge to organizational structures, processes and cultures. But its promise of greater productivity and shorter time to market is predicated on making major shifts in managerial practice and culture, the attainment of which is brushed aside in the BPR literature. Whilst advocating multidisciplinary integration of business processes, it is largely driven by the logic and language of computer science and production engineering. Perhaps for this reason, if no other, David Nadler, president of Delta Consulting Group is reported to have said that 'We have watched a number of re-engineering projects fail.

However, it also promotes the continuing contraction of employment as organizations (continuously) reengineer their processes. Those who remain are obliged to work at an ever quickening intensity and pace. For these elite, there is the prospect of eventual 'burnout' and disposal. For the mass whose jobs have been reengineered out of these companies, there is the increasingly restricted prospect of occupying the lowly paid, temporary jobs that service tomorrow's 'networkers' 'information brokers' and 'symbolic analysts.

This is the Achilles heel of BPR. Implicitly, employees are assumed to be BPR to be infinitely malleable. And any antagonism to BPR is interpreted as inertia rather than as warrantable resistance to change that can be dissolved by the persuasive powers of senior management. HRM specialists, in particular, may question whether the the ambitions of BPR are consistent

with the distinctive qualities of 'human resources'. More specifically, it might be asked to what extent the increased pressures that are fuelled by BPR are compatible with ideas of creativity, empowerment and fulfillment that differentiate human beings from other factors of production. From this perspective, it is not BPR's inflated sense of novelty so much as its shallow, techniques appreciation of the human dimension of organizational change that renders it vulnerable to failure and must be addressed, not least by HRM specialists. Two contrasting responses can be identified, depending upon how the distinctive identity concerns of HRM are formulated. If the responsibilities of the HRM specialist are construed primarily in terms of facilitating change programmes designed and initiated by others, then a relevant response to the alleged deficiencies of BPR would be to propose refinements that incorporate HRM techniques that are tailored to the adoption of BPR and/or overcoming resistance to its implementation. On the other hand, if HRM specialists aspire to some degree of professional (including ethical) autonomy, however partial and precarious, they may question whether the assumptions and ambitions of BPR are consistent with enhancing the qualities of creativity, empowerment and fulfillment that differentiate human beings from other factors of production. A major problem with the intent of BPR, as its critics have observed, is that its celebration of the idea of unbridled competitiveness as an unassailable good 'locks us into a frenzied cycle of growth with desperate environmental consequences...competition does not just exist as some transcendental condition but is the outcome of practices, of which BPR is the latest variant. It is as if a person were running on a treadmill being constantly encouraged to run faster to keep up with the wheel.

How are HRM specialists to respond to the challenges of BPR, including its contribution to unemployment and its intensification of work processes? Is their professional understanding of the distinctiveness qualities of the human resource to be applied to smooth the passage for a (technocratic) mode of change management that is divisive in terms of its effects upon employment, and which either disregards or trivializes the distinctiveness of the human resource? If so, the HRM specialist surely deserve the epithetic pimp of management - in the sense of procuring human resources for economic exploitation without regard for the moral basis of social and economic relations, or the demoralizing effects of treating human beings as

manipulable, expendable resources. For, instead of questioning and challenging the pressures to reduce human beings to commodities, HRM specialists contrive to use their specialist knowledge of the 'human resource' to represent its commodification as entirely normal and legitimate. Or are HRM specialists to develop and apply their expertise in ways that expose and explore the basic conflicts between a system driven by impersonal imperatives for profit and growth? In which case, the radical claims of BPR are questioned on the grounds that it is seen to 'hijack the notion of radicalism in the service of aims that are politically conservative' for example, by debasing the (radical) currency of empowerment as it is equated with the idea that those remaining in employment can be empowered (as if it empowerment were a gift to be bestowed by others) to ensure the smoother operation of a system that systematically exploits and oppresses in the name of individual freedom and opportunity.

Hammering the Human Resource

The marginalization and trivialization of the human dimension from expositions of BPR is remarkable, even by the standards of leading proponents of TQM. Making the transition from function-centered to process-oriented organizing practices necessarily depends upon the 'human resources' who enact, and are enacted by, BRP. Given the focus upon business processes, it is incredible how little attention is given by BPR to the human dimensions of organizing. This shortcoming is symptomatic of the way BPR's claims and prescriptions for change are even more abstracted from the practical realities of organizing and managing people than earlier recipes for improving business performance, such as Excellence and TQM. Little consideration is given to the issue of how BPR's (universal) remedies are to be reconciled with the (particular) conditions in which its prescriptions are to be applied. When examples are given, these are presented as unequivocal success stories.

For example, Hammer describes how Ford (North America) reduced its accounts payable staff from 500+ to 125 by redesigning the payment process and using ICTs in a way that dispensed with invoices altogether. Perhaps those who lost their jobs (or were redeployed) were entirely supportive and cooperative in this change. In this respect at least, the parallels between BPR and Taylorism are quite striking. Like Taylor, who rose to become Chief Engineer at the

Midvale Steel Company, Hammer, the computer scientist, is quick to transfer the language of computing, and recent developments in parallel processing, to the complex and frequently perverse world of human relations. In any event, Hammer unreservedly represents the reengineered process as a means of 'empowering' employees. When commenting upon the reengineering of insurance applications at US Insurer Mutual Benefit Life (MBL), for instance, he observes that 'empowering individuals to process entire applications ..... Has eliminated 100 field office positions, and case managers can handle more than twice the volume of new applications the company previously could process'. Here empowerment is equated with the integration of tasks made possible by the development of expert systems and relational data bases rather than with the expansion of discretion or even an increase in task variety. consequence of the reengineering.

Champions of BPR, like Taylor again, are willing to acknowledge that the radical changes envisaged by BPR may encounter some resistance. But they also assume that this resistance can be dissolved by effective leadership and commitment from top management. Hammer, for example, acknowledges that the disruption and confusion generated by reengineering can make it unpopular, though he is equally confident that any opposition can be effectively surmounted by top-level managers. The commitment of managers as champions of BPR is deemed to be sufficient 'to enlist those who would prefer the status quo'. So, despite an admission that 'the strain of implementing a reengineering plan can hardly be overestimated', Hammer is sure that employees can be convinced of its virtues; or, to put this more directly, where major job losses are involved, he is confident that strong leadership can persuade sufficient turkeys to vote for Christmas.

In a recent Harvard Business Review article that reviews the experience of BPR in 100 companies, with detailed consideration to its application in 20 companies, a rather less sanguine conclusion is reached. Once again, it is assumed that 'strong leadership from management' is necessary if BPR projects are not to be sabotaged by 'the psychological and political disruptions that accompany such radical change'. However, there is a greater appreciation both of the depth of this resistance and the scale of resources and length of time required to accomplish radical

organizational transformation: 'all the old support systems will become obsolete - from IT systems to employee skills. The new infrastructure should include programs like comprehensive training and skill development plans that require years, not merely months, for success; performance measurement systems that track how well the organization is meeting its targets and how employees should be rewarded based on those objectives; communication programs that help employees understand how and why their behavior must change Here there is some awareness of how employees, not just processes, must be reengineered or debugged if they are to run effectively in the systems. However, there remains the assumption that employees, including managers, are infinitely malleable; that the parallel development of HRM systems and strong leadership will dissolve resistance; and that the new systems will not themselves generate new problems and resistances.

What such assessments and prescriptions omit or, at best, marginalize is an appreciation of BPR's major implications for job losses and further intensification/degradation of the quality of working life for employees at all levels. Which does not mean that some features of the changes envisaged by process reengineering will not be welcomed. For example, despite the increased routinization and depersonalization of their work, 'case managers' at MBL (see above) may approve of the removal of supervisors or prefer the reduced fragmentation of tasks. But even those who, on balance, endorse such changes are also likely to have reservations about its implications for their future job security. They may also recognize, and resent, the extent to which the pace and accuracy of their work can now be continuously monitored, albeit indirectly, by information systems.

Hammer himself acknowledges that the reengineering of business processes has numerous implications for how businesses are managed. For example, he notes that the introduction of the new process of handling applications at MBL necessitated some major changes: 'MBL had to develop a culture in which people doing work are perceived as more important than those supervising work. Career paths, recruitment and training programs, promotion policies - these and many other management systems are being revised to support the new process design'.

However, despite the realization that new business processes can have knock-on effects upon the management of human resources, the implementation of changes necessary to support the new processes is presented as wholly unproblematic. Indeed, there seems to be an assumption of an elective affinity between so-called empowered employees, sophisticated systems of actual or potential surveillance and strong, and some might say demagogical, leadership in post entrepreneurial organizations, as exemplified by T.J. Rogers, CEO at US chip producer Cypress Semiconductor since 1983. Rogers has advocated the empowering techniques of networking and team working. But he also runs an IT-based monitoring system that allows him to 'peer down into the bowels of the organization' and target the performance of individual employees. Even sympathetic commentators have described his managerial style as idiosyncratic and military.

Because employees are not infinitely malleable, passive commodities who are indifferent to how they are managed, accomplishing the full and effective implementation of BPR is likely to prove more difficult than is contemplated by its advocates' faith in the persuasive powers of senior management. Where employee cooperation with the implementation of BPR is achieved under duress, it is likely that its impact will be sustained only by the same old coercive methods condemned by the new prophets of business management. Given the challenge BPR can present to established orders, processes and identities, attentiveness to the insights of HRM would seem to be pertinent. However, this would require the prophets of BPR to acknowledge the shortcomings of their own specialist training, work cooperatively and openly with other functions, and thereby re-assess the value as well as the plausibility of their prescriptions.

2.2. Who Needs Business Process Reengineering?

Hammer and Champy (1993:34) have identified three kinds of companies that undertake reengineering: first are organizations that find themselves in deep trouble. They have no choice. If a company's costs are an order of magnitude higher than the competitors or than its business model will allow; if its customer service is so weak that customers openly complain against it; if its product failure rate is twice, three times, or five times as great as the competitors; and if, in other words, it needs order-of-magnitude improvement, that company clearly needs business reengineering. Second are *organizations* that *are not yet in trouble but whose management has the foresight to see trouble coming?* These companies have the vision to begin reengineering in advance of running into adversity. The third type of organizations undertaking reengineering is *those that are in peak* condition**.** They have no discernible difficulties, either now or on the horizon, but their managements are ambitious and aggressive.

2.3. Fundamental Techniques and Tools for Getting Reengineering

According to Hammer & Champy (1993:102) how companies select and organize the people who actually do the reengineering is the key to the success of the endeavor. The following roles emerge, either distinctly or in various combinations, during the implementation of reengineering. In an ideal world, the relationship among these is as follows: the leader appoints the process owner, who convenes the reengineering team to reengineer the process, with the assistance from the czarand under the auspices of the steering committee.

The Leader: A reengineering leader is a senior executive who authorizes and motivates the overall reengineering effort. The leader is the primary or key ingredient for reengineering to happen. This is so because reengineering succeeds when driven from the topmost level of an organization. Therefore, the active engagement and commitment of top management is critical for the reengineering to happen. Without top-down leadership, reengineering failure is a foregone conclusion. Undertaking reengineering in this situation is a deceptive exercise and a fatal mistake. The likely attempt by other bodies (teams), in absence of the top level Leadership is a fatal exercise hence no reengineering will actually happen. The tools that the leader uses are

so essential in discharging his/her responsibilities and achieve the revolution required.

The Process owner: A Process owner is one responsible for reengineering a specific process. The owner should be a senior-level manager, who carries prestige and reputation, Credibility and clout (power/influence) within the organization. As leader's job is to make reengineering happen in the large, process owner's job is to make it happen in small, at the Individual process level. An owner along with leader assembles are engineering team. A process owner motivates, inspires, and advices the team. Process owner acts as the team's spokesman and liaison. Moreover, he works with other process owners to ensure that the processes are compatible and integrated.

The Reengineering Team /Design Teams: Reengineering teams are the second key ingredients next to the leader in making reengineering happen. Each process team in charge of one process at a time does the actual work of reengineering. Each member works as a team not as group and the size of the teams could be between five to ten people. They are experts that others have trust in them and act as key agent for conveying the others in the organization. Reengineering work is not a part time assignment rather a full time work. Hence, organizations should assign team members 100 percent to the project, do not stretch them with other assignment and commitments. This is one of the powerful signals for the organization for committing reengineering. The teams prepare high level maps of the current processes and identify the overall cycle time and satisfaction or frustration of the customers. They reinvent the business processes by producing breakthrough changes through breaking assumptions using whacko ideas, benchmarking etc. The teams are composed of insiders and outsiders. Insiders are people currently working inside the process undergoing reengineering.

2.4. Organizational Resistance to Change

The organizational issues are non-technical aspects of the system development, which might have an impact on the ultimate success or failure of a project, among them, organizational resistance to change (Clegg *et al.* 1997). George and Jones (2008) posited that change is necessary to maintain a competitive edge, but is not always a smooth process. Managing individual resistance is easier than organizational resistance because a tightly knit group may

have an overdeveloped sense of cohesiveness that encourages organizational inertia. Palmer (2004) concurred that the employees resist because of the uncertain future initiated by BPR changes among which are job loss, authority loss, and anxiety.

Al-Mashari and Zairi (1999, p.90) hypothesized the impact of organizational culture which fosters resistance to change in BPR. As mentioned by McNamara (2002), many people are affected by change, though some may not openly criticize their superiors, causing silent disgruntles within the company. An egalitarian culture, whereby all employees are treated equally, are informed and involved in projects, makes the positive changes take place with little resistance.

The employees should therefore be assisted in the transition period to the new working environment (Crowe *et al.* 2002; Liu and Seddon, 2009). Warne (2003) stated that managing the power, politics and organizational conflict inherent in Information Systems (IS) is increasingly recognized as being of critical importance to the successful IS development. Schniederjans and Kim (as cited in Abdolvand *et al*. 2008) concluded that organizational resistance is the most common impediment to the success of BPR.

It has been noted by Jeffcott (2006) that BPR in its attempt to overhaul the entire system of operations is often resented by the management. McNamara's model (2002) highlighted that people are afraid of the unknown and always contest change making the initiatives not come up to scratch. Doherty and King (1998a) underlined that BPR leads people to a feeling of job insecurity, marginality, exclusion, powerlessness, and cast-off from their organizations, being convinced that the new system does not require their input. The failure to embrace these changes and enrichments in the operation of aspects of a firm fails the entire purpose of BPR.

As organizations look at their corporate strategy and what inputs are required to be processed into outputs, they should embrace the role of BPR. This helps illustrate to hesitant firms and companies on the attitudes and cognitive distancing that may herald, accompany and eventually hinder BPR. Laudon (2006) highlighted that this is imperative to identify carefully organizational changes needed to make BPR work and manage these changes in order to avoid channel conflict from all affected parties. Warne (2003) stressed that the BPR professionals had

often been accused of ignoring issues such as ethics, human factors and social consequences. Al-Mashari and Zairi (1999, p.90) propounded that the "organization's culture influences the organization's ability to adopt to change". They put organization's culture forward as a determining factor in the success or failure of the BPR implementation.

The diligent literature review of the papers on resistance to organizational change had been undertaken by Sutevski (2012) who named 28 factors which cause resistance to organizational change previously identified by other researchers. Those include: threat of power on an individual or organizational level; losing, or, alternatively, increasing the control on the employees; economic factors; image, prestige and endangerment of reputation; threat of comfort, job security or interpersonal relations; reallocation of the resources; acquired interest to the new groups (as opposed to old ones); implication on personal plans; too much dependence on the others; misunderstanding the process; mistrust to initiators of change; different evaluation and perception; fear of the unknown; necessity to change habits; previous negative experience with BPR; weakness of the proposed changes; limited resources; bureaucratic inertia; selective information processing (ignoring undesirable information) by the employees; the uninformed employees; peer pressure; skepticism about the need of change; increasing workload; short time to performing change. Some of these or similar factors have been included in our research.

2.5. Features of Government Organizations

The practice of applying the BPR experiences of to Ethiopian Civil Service Organizations has blurred the differences in characteristics between profit making corporations and civil service organizations. The government organization and business organizations have different motives when implementing BPR. The three Cs – customers, change, and competition - are the driving forces in reengineering a corporation (Hammer and Stanton, 1995: 12). Behind all these "C"s, there are the underlying objectives of profit and survival. In contrast, the motives of a government to undertake BPR are to provide efficient and quality services to the citizens, to minimize budget deficits, to make the country competitive in attracting foreign investments, and others. According to Borins (2000), USA and Canada were the pioneers to borrow the techniques of BPR from the private companies and to apply it to their civil service organizations.

2.6. Business Process Reengineering (BPR): Theoretical Perspectives

As indicated previously, BPR is one of the management tool undertaken by organizations to respond to the changing environment. BPR is about beginning a new from scratch, i.e., starting over entirely by considering how activities in the organization put together. Thus, it entails the fundamental and radical redesign of the old/traditional business processes for the pursuit of new direction and perspective of the organization. As Grover et al. (1995) indicated, the impetus for this change comes both reactively to competitive; pressures and proactively to improve corporate responsiveness. Generally, Motwani et al. (1998) noted that BPR hailed as one of the current major drivers of change within organizations in order to survive in the changing environment of today.

The term "Business Process Reengineering was first introduced by Hammer (1990) and Davenport and Short (1990), and it thriving as a popular management tool for the past two decades. Supporting this, O'Neill and Sohal (1999) claimed Hammer (1990) and Davenport and Short (1990) as pioneers for BPR concept development during 1990. In connection with its introduction, as Tanoglu (2004) noted, during the beginning of 1990s, with globalization and extraordinary pace of development in the information technology (IT) area, three driving forces (customers, competition and change) resulted BPR. Following the introduction of BPR by Hammer (1990) and Davenport and Short (1990), various researcher called BPR as process innovation, business process redesign, business reengineering, or process reengineering (Revenaugh, 1994). Because of these nomenclature variations, Tanoglu (2004) claimed Hammer and Champy (1993) BPR definition as a widely accepted.

As hammer and Champy (1993) defined BPR: "…is the fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical, contemporary measures of performance, such as cost, quality, service, and speed."According to the Hammer and Champy (1993), the above definition comprises four keywords: *fundamental*, *radical*, *dramatic* and *process*. These four keywords of BPR implied that before redesigning the process understanding the "*fundamental*" business operation is necessary, while it ignores the underlying rules and assumptions of the old/traditional business processes to "*radically*"

redesign the process for "*dramatic*" performance of business "*process*" that can be measured in terms of speed, cost and quality.Having this insight, BPR has its own methodology that encompasses starting from determining whether the organization engage with BPR or not to the finalImplementation of redesigned processes and further revisions and improvements of processes. Thus, in order to carry out BPR project, a series of steps need to be followed. With respect to BPR methodology numerous researcher (e.g., Hammer and Champy, 1993; Linden, 1998; Attaran and Wood, 1999; Wu and Du, 2010) published various sets of methodology.

To grasp the concepts of BPR, it is worth mentioning to highlight some of BPR concept. According to Wu and Du (2010), to undertake BPR project, four basic phases followed. The first phase involves conducting need analysis to determine whether the organization to conduct BPR or not. In the second phase, organizations decided to engage with BPR need to make preliminary preparation in order to reconstruct concepts. This phase includes making reengineering objectives clear, forming of redesign team; establishing organization's vision; good communication with employees; and establishing the appropriate organizational culture. In the third phase, redesign team formed at the second phase begin reengineering of process.

As Wu and Du (2010) noted in third phase, the first step is to conduct an analysis of existing processes, identify problems in existing process; and the second step is the design of more effective new process. At the finally phase, newly design process piloted to test its performance and if necessary, revision and improvement made, in order to implement the process at organization wide. To ensure the success of BPR, this phase also includes reforming the original organizational structure, staffing, performance evaluation, and technological alignment of the newly designed process.

In connection with BPR implementation, Grover et al. (1995) conceptualized it as the ongoing process of preparing the organization for new system and introducing it to assure its successful use. Implementing the redesigned process is typically an intricate and complex process that involves strategy alignment, project planning and scheduling, and resource allocation. The earlier work of Hammer and Champy (1993) categorized the implementation phase into two points. One is the redesigned process tested and implemented, and the other point is the

alignment of organization's structure, management and measurement system, values and beliefs, and IT to new process.

More broadly, Linden (1998) mentioned appropriate sets of steps to be followed during implementation phase. The steps include: (i) developing a charter; (ii) establishing communication strategies; (iii) hold an all hand meeting to review the model; (iv) prepare a detailed implementation plan; (v) run pilot tests, revise the redesigned processes if needed; (vi) implement short-term changes; (vii) phase in long-term changes; and (vii) measure the performance of the new process. These steps of Linden (1998) stressed that an implementation plan should be developed to spells out the work that needs to be done, with timeframes, decision points, and resource allocations. Pilot testing provides a method for refining the process and building support for the full implementation. In addition, training and workforce issues are important for effective implementation plan.

Moreover, the steps stressed the importance of ongoing performance measurement and feedback to continually improve the new processes once it is in place. Generally, Attaran and Wood‟s (1999) outlined basic guidelines of BPR. Some of the researcher guidelines include the following: reengineering effort should be constructed by a clearly defined strategic vision; reengineering should focus on important cross- organizational business processes which are critical to the organization's vision; cost reduction is not the only goal of reengineering rather seeking opportunities for new sources of revenue growth could be an important driving for the reengineering efforts; and leadership plays an important role for the success of reengineering.

Due to the complex and intricate nature of BPR implementation, Wu and Du (2010) stressed the importance of careful thinking about the necessity of BPR to the organization prior to engage with BPR project; otherwise, it cannot bring new vitality to the organization, but also create chaos in the organization. Reviews suggest that organizations should adopt a suitable BPR to serve a frame work for the success of BPR.

2.7. BPR in Educational Sector

The motivation to undertake BPR project is usually the realization of breakthrough performance improvement. Lingus (1993, cited in Terziovskia et al., 2002) claimed that a "30-35% reduction in the cost of sales; 75-80% reduction in delivery time; 60-80% reduction in inventory; 65-70% reduction in the cost of quality; and unpredictable but substantial increased market share", were all possible through effective BPR. In general, as indicated previously, BPR in response of the three driving forces (change, competition and customer) used to redirect organizations to new working practices.

Many organizations in various industries (banking, manufacturing, services, and so on) used BPR as a panacea for organizational illness and to respond to high level of competition, changing environment and customer needs (Attaran and Wood, 1999; Minisha, 2004). Since educational institutions function similar to other types of business organization, they can use various management tools used by business organizations (Balaji, 2004). Thus, TVET institutions attempt (either voluntarily or under mandate) to adopt new management systems and processes that were originally designed to meet the needs of more efficient business organizations.

Specifically, Casey (1995) noted BPR as a thoroughly researched and well-crafted prescriptions punch list for evaluating how well educational institutes runs its business. Thus, for the pursuit of radical and fundamental change of work practices, Casey (1995) view suggests the applicability of BPR in educational institutions. As a justification, Sepehri et al. (2004) claimed that TVET schools, due to strong existing culture which does not seems to fit the present era, have faced financial and structural.

Despite the fact of BPR applicability in TVET institutes; arguments exist about its use in educational organizations. As Porter (1993) argued, BPR could not be applied to educational organizations in the foreseeable future and further states. Porter (1993) argument for this position is that BPR success will not occur because no one wants fundamental changes in teaching and research, because there is no demonstrated need, benefit, or support for such an effort in educational sector. Instead, the researcher claimed that administrative processes of TVET

institutes could be redesigned like other types of business organization. However, Stahlke and Nyce (1996) annoyed Porters (1993) position and they stressed that successful reengineering in educational institutes must begin with teaching and learning, rather than administrative processes.

As the researcher noted, addressing educational processes first will naturally force a reconsideration of such features as the student credit hour, faculty load, space utilization, the academic calendar, course scheduling, instructional resources like technology, and the design of student-faculty interaction. Although arguments exist about the use of BPR either for the academic or administrative processes of TVET schools, the educational quality in a TVET institutes is determined through the physical, virtual and human resource availability and how effectively they are being used (Iqbal, 2007).

In response, educational institutions in pursuit of improved performance used BPR in various countries. For instance, in Canada, Iran, Malaysia, New Zealand, Northern Ireland, Spain, Turku, United Kingdom (UK), and United State of America (USA), educational institution implemented BPR to enhance their efficiency, effectiveness and economic performance (Adenso-Diaz and Canteli, 2004; Allen and Fifield, 1999; Balaji, 2004; Casey, 1995; Kontio, 2007; McAdam and Bickerstaff, 2001; Sepehri et al., 2004; Sohail et al., 2006; Whalen and Wright, 1999). Therefore, these experiences highlighted that TVET institutions can adopt BPR to enhance their performances like other types of business organizations. However, whether BPR applied in academic or/and administration staff processes of TVET institutes. BPR implementation indicated as the most challenge prone endeavor.

2.8. BPR Implementation Barriers

BPR will have significant positive results for the organization, if correctly implemented. Several researcher (Attaran and Wood, 1999; Revenaugh, 1994; Terziovskia et al., 2003) indicated numerous organizations (Ford Motor, Wal-Mart, IBM Credit Co., and so on) who were achieved larger cost reduction, higher profits, improved quality and productivity, faster response to market and customer service through BPR. Assefa (2009) claimed that, in Ethiopia, the experiences of the Ministry of Trade and Industry (MOTI), the Ethiopian Investment Commission, and the Ethiopian Customs Authority were instructive examples of how institutions can be transformed using BPR to be more responsive, efficient and effective. Furthermore, in Ethiopia, as Debela and Hagos (2011) reported in their research findings, public organizations like Commercial Bank of Ethiopia and Ethiopian Revenue and Customs Authority have been successful in meeting their BPR objectives. However, despite the significant growth of BPR literatures and increasingly used by many organizations, not all organizations achieved the intended objectives of BPR. As Hammer and Champy (1993) estimated, about 50 to 70% of BPR projects fail to achieve dramatic results that the organizations intended to achieve.

Likewise, General Accounting Office (GAO) of United States (1997) noted that the implementation of a new process is typically the most failure-prone phase of BPR because of an organization's natural resistance to change. Linden (1998) also noted the biggest source of organizational disappointment with BPR change effort as implementation, or more specifically, lack of implementation. Thus, as more organizations undertaken BPR project, issues on BPR implementation becomes a major concern. As the definition of BPR highlighted, it is the implementation of radical and fundamental change in educational organization to achieve dramatic performance Improvements (Hammer and Champy, 1993). In connection with this definition, Cypress (1994, cited in Guimaraes, 1998) noted BPR as an attempt to change the way work is performed by simultaneously addressing all aspects of work that impact performance including the process activities, the people's jobs and their reward system.

As such, Grover et al. (1995) noted that the broad organizational focus and deliberate nature of BPR needs a planned change. Specifically, the researcher suggested preparation and deliberate actions support from management, technical competence, and mitigation of resistance to change as requirements for the success of B PR implementation. Along with the these suggestions of Grover et al. (1995), GAO (1997) claimed the factor for the failure of BPR as not lied in managing the technical or operational aspects of change, instead in managing the human dimensions of change. However, there are various reasons that make BPR project to fail. To understand thoroughly the issues involved on BPR implementation failure, this section reviewed the primary barriers for effective BPR implementation.

Attaran and Wood's (1999) article identified five primary obstacles to more effective BPR implementation. That are misunderstanding of the concept, misapplication of theterm, lack of proper strategy, management failure to change, and failing to recognize the importance of people. Underscoring the five primary obstacles of Attaran and Wood (1999) is appropriate. Such as BPR is not downsizing, automation, restructuring, or more of the same. It is dramatic revising of the organizations process and changing the way in which work is carried out. BPR requires creative thinking and new perspective on the part of management, and top management must change their ways of thinking and develop new skills. Employees play an important role in the success of BPR. Hence, employees fear about job displacement due to redesigned process and coping with their resistance needs to be alleviated. Thus, without an effective approach to deal with employees‟ resistance, BPR implementation is certain to fail.

The researcher also clarified the difference between success and failure as not depend on the company size or resources, but on appropriate planning and avoidance of pitfalls. The additional three primary obstacles are "lack of flexibility‟ in terms of existing rigid infrastructure of the organization; "lack of organizational communication‟ to loop feedbacks for employees to air their concerns; and "failure to test the process‟ to understand the impact of any process change. At the end, Attaran (2000) concluded that organization often fail to achieve BPR objectives because trivializing the concept and ignoring the pitfalls result dangers that makes BPR effort just another short-lived improvement.

On top of the above-mentioned, Al-Mashari and Zairi (1999) recognized implementation of BPR as complex and needs to be checked against several success and failure factors to ensure successful implementation by avoiding implementation pitfalls. In their review of both soft and hard factors that cause success and failure of BPR effort, they had identified five categories, namely change-management and culture, management competency and support, organizational structure, project planning and management, and IT infrastructure.

BPR could be considered as innovation, because it results new types of business processes by obliterating existing business processes; where innovation is an idea, practice, products, processes, services, policies or technology that is perceived as new by the organization whether other organizations previously used it or not (Klein and Sorra, 1996). As such, innovation implementation literatures, like BPR implementation, also identified barriers for successful implementation. The recent work of Klein and Knight (2005), attempted to describe six interrelated obstacles that organizations face during innovation implementation along with six allowing factors to overcome obstacles during implementation.

The six obstacles that initiate challenges during innovation implementation are unreliable and imperfectly designed innovation; innovation requires new knowledge use; little or no user input in adoption and implementation of innovation decisions; innovation requires individuals to change their roles, routines, and norms; time consuming and expensive nature of implementation; and organizational status quo maintenance.

To tackle with the aforementioned challenges, Klein & Knight (2005) suggested six key factors to shape the process and outcomes of innovation implementation. These are quality implementation policies and practices; strong and positive climate for innovation implementation; strong, convincing, informed, and demonstrable management support because in the absence these employees are likely to conclude that innovation as a passing managerial fancy; availability of financial resources; learning orientation; and long-term oriented managerial patience to achieve innovations benefits.

Since this study conducted on TVET institutes, it is worth mentioning challenging factors of BPR implementation specific to TVET institutes. In doing so, the work of Reyes (2001) reviewed. As the researcher noted, government activities are often so interrelated, cutting across not only divisions and units within an agency, but also tending to spillover to other agencies. Further, the researcher noted bureaucratic behavior and action as often based on laws and a series of incremental changes in rules derived from policies or legislation, which may be difficult to overhaul overnight. In these cases, BPR implementation in TVET institutes could be challenging, because, to redesign processes for dramatic performance, BPR requires breakdowns of old processes‟ assumptions and laws (Linden, 1998, pp. 67).

In addition, Reyes (2001) noted implementing BPR in public sector, which is reengineering fundamentals of "breaking away from the past", as a major obstacle. As the researcher justified in this case, the culture of bureaucracies have been so ingrained that any effort to modify it may receive resistance not only from bureaucrats, but politicians and interest groups as well. In this regard, the researcher noted that in government organizations, any deviation from the status quo considered as a threat, and seen as part of a hidden agenda that can be political in nature.

Another difficulty, as Reyes (2001) noted, to implement BPR in public organization is that substantial investments requirements of BPR in developing or even upgrading IT, because IT considered enabler of redesigned processes. In this case, the researcher reasoned that investing on IT might put government budgets under severe pressure considering the costs of hardware, consultants, constant upgrading and maintenance, as well as training and re-training of employees. Thus, the cost of BPR project impedes its implementation.

Political and pluralist bureaucratic environment factors also confronting BPR implementation in organization. As Reyes (2001) claimed, these factors refer to the environment of the political system, because success in government consists not just making the right decisions, but also of mobilizing political support for the decision. Thus, to implement BPR in public organization needs commitment and support of top management who have real power to change. Moreover, Reyes (2001) pointed a major issue that would have to be

addressed is that downsizing due to the redesigned processes. Wide scale removal of government personnel at any levels may invite the wrath of both politicians and of the public.

Thus, employees‟ resistance could be manifested when wide scale downsizing suspected due to BPR implementation. In general, BPR implementation in TVET institutes faces challenges due to existing laws or proclamations of a country. In addition, lack of financial resources and hidden political agenda manifested by bureaucrats diminish BPR implementation in organization .So far, literature reviews made regarding to the theoretical perspectives of BPR like its methodology, its applicability in TVET institutes with countries experience, and its implementation barriers. Hence, the aforementioned factors for the success and failure of BPR implementation suggest that BPR implementation phase constrained by various factors and suggest a need to be addressed for the success of BPR implementation.

2.9. Empirical Studies on BPR

As indicated previously, organizations use BPR for better performance improvement; and the driving factors to undertake BPR accounted to the "three C‟s" that are change, competition and customers (Hammer and Champy, 1993). Starting from the introduction of BPR at the beginning of 1990s issues on BPR increased and researchers' undertaken studies on it to date. Thus, in order to highlight literature gaps, this section first reviewed selected empirical studies on BPR implementation factors and then empirical studies conducted in Ethiopian context reviewed.

The study conducted by Grover et al. (1995) on the research area of BPR implementation attempt to identify numerous challenging factors of BPR implementation. As the researcher indicated, their research empirically sought to explore BPR implementation problems and the severities of problems how relates to BPR implementation success. To carry out this study, they have identified BPR implementation problems based on past theories and research related to the implementation of organizational change as well as field experience of reengineering experts. Further, the researcher explains problems in to six main groups, namely management support problems, technological competence problems, process delineation problems, project-planning problems, change-management problems, and project management problems.

The researchers used the identified problems in the survey instrument to by interview individual and distribute questionnaires' for TVET instructors and Administration staff. Grover et al. (1995) analysis of the results showed the importance of change management in BPR implementation success. As result also showed, addressing problems in technological competence and project planning are necessary, but not sufficient, conditions for reengineering success. Further, problems related to project management and training personnel for the redesigned process are highly related to project success. In

General, the findings of Grover et al. (1995) noted that BPR implementation as complex. Thus, to succeed with BPR implementation, the researchers suggest that organizational change to be essentially managed and balanced attention to be paid to those that are contextual factors (e.g., management support and technological competence) as well as factors that pertain directly to the conduct of the project (e.g., project management and process delineation).

With respect to BPR implementation education sector, Allen and Fiefield (1999) studied the applicability of BPR in educational institutions of UK along with factors that affect the change process of BPR. The factors are senior management approval, complex information requirements, institutional policies and entrenched values, academic freedom, inertia, business process improvement (conservative change programs), IT driven change, maintaining the status quo, failure to reengineer human resources, and organizational transformation.

The findings drawn from the study (Allen and Fiefield, 1999) are that the organizational culture and structure of educational institutions limit the degree of change sought from BPR and insufficient attention given to the human resources side of change management. As the researcher claimed, most part of implementing the project represents a limited approximation of BPR techniques. In other words, the project was not about radically changing the organization by obliterating existing processes, instead, it was process improvement. Thus, the radical change of BPR conflicted with the factors previously mentioned. Particularly, as Allen and Fiefield (1999) indicated, the power of academic departments, the professional status of academics and inertia.To study New Zealand's educational institute BPR implementation, Balaji (2004) conducted research using a case study strategy.

The main purpose of the study was to gain an in- depth insight of experience and understand the dynamics of process reengineering and implementation of the institute. As the researcher claimed, data gathered from semi- structured interview with member of the institute and further analyses revealed the use of internal staff to drive BPR efforts resulted in higher level of organizational commitment to manage the process in the institute.

Research carried out by Ahmad et al. (2007) showed critical success factors of BPR in Malaysia education institutions. The study used a case study based on open-ended interviews with top managers and BPR team members of three-selected private school in Malaysia. The findings highlighted that seven factors were critical for the successful implementation of BPR.

The factors are teamwork and quality culture, quality management system and satisfactory rewards, effective change management, less bureaucratic and participation, IT or information system, effective project management, and adequate financial resources. In general, their study provides important lessons as a condition for the success of BPR project in supporting this idea, Kontio (2007) undertaken case study research at Turku educational institutes describe reengineering process of human resource management related to organizing teaching and administrative tasks.

As the researcher confirmed, human resource management process has improved significantly by using BPR, but the overall process of the project took quite a long time. The research also confirms the essential role of management support for the success of BPR implementation. As the researcher finally concluded, the relative advantage of new processes was clearly better than the previous way of doing businesses at the educational institutes.

To this point, empirical studies on BPR implementation with respect to TVET institutes, except Grover et al. (1995) research, reviewed. Although BPR is a recent phenomenon used to reengineer governmental organizations of Ethiopia, some researchers have been engaged to study BPR in a context of Ethiopian public organizations. For instance, using mixed method research design, Mengesha and Common (2007), Debela (2009), and Debela and Hagos (2011) studied BPR design and implementation on selected public organizations of Ethiopia. However, based on the as far as the researcher knowledge, there was no empirical study

conducted on Ethiopian TVET institutes‟ BPR implementation success/failure factors. Hereunder, the aforementioned empirical studies conducted in Ethiopian case reviewed.

Research conducted by Mengesha and Common (2007) evaluated the implementation of public sector capacity reform in Ethiopia on two selected Ministries - Ministry of Trade and Industry (MOTI) and Ministry of Education (MoE). According to Mengesha and Common (2007) based on their finding claimed that in each organization very high levels of user satisfaction and spectacular improvements in performance recorded because of BPR. However, the researchers also noted that the change process in both organizations tended has been sluggish. As per the researchers‟ recommendation, appropriate rewards and motivational instruments required to enhance the momentum of change reform in TVET institutes of Jimma zone.

The study of Debela (2009) showed the relationship between BPR theory and practice in Ethiopian public organization. Although the research tried to present BPR theory and practice by public organization, the finding report lacks consistency. For instance, the researcher indicated that improvement in the performance of agencies attributed to IT use in processing customers request, while the researcher claimed that non-consideration of automation at the time of reengineering has made all the redesigned process to be incomplete an non exhaustive.

However, the Researcher recommended considerable points regarding to BPR applicability to improve service delivery in TVET institutes such as to recognize the differences between the characteristics of government organizations and profit making corporations in process design, to recognize the use of IT as vital for successful BPR implementation, to recognize human resource capacity as determinant for the success of BPR, and so on. Debela and Hagos (2011) study was the recent empirical study, which was conducted in four public organizations of Ethiopia, namely Ethiopian Revenue and Custom Authority, Ministry of Labor and Social Affairs, Commercial Bank of Ethiopia, and Development Bank of Ethiopia.

The researcher noted that in the selected four organizations encouraging results have been achieved in terms of efficiency, mission effectiveness, transparency, and minimizing corruption. However, the researcher claimed that the selected four organizations faced challenges in human, technological and material capacities in their BPR project implementation. Finally, Debela

and Hagos (2011) recommended that the government of Ethiopia might needs to exert greater effort to change the attitude of public servants and the political leaders, adopt a holistic and integrated approach in using reform tools, and consider mission differences.

2.10. The Challenges of Business Process Reengineering

According to Hammer and Stanton (1994:14-33) there are ten top mistakes that cause the reengineering effort fail. These are: to say you are reengineering without actually doing it; trying to apply BPR where it cannot fit; to spend too much time analyzing the existing processes; to attempt the reengineering without the requisite leadership; difficulty in coming up with new ideas; the attempt to go directly from process redesign to implementation; not reengineering quickly; limiting the range of reengineering effort, to adopt the wrong style of implementation; and failure to attend the concerns of the people. In addition to the top ten mistakes, there is also another challenge that faces the reengineering effort. That challenge is living through change: getting the people to let go of their old ways and embrace new ones.

Reengineering challenges all aspects of business. When a process changes perforce so do the jobs of the people who work in that process. But more than jobs and skill requirements change people's styles the ways in which they think and behave and their attitudes what they believe is important about their work must also be realigned to fit the new process. In effect, a new process requires new people, new measurement, new arrangement, and so on. In each of these cases, the transition from the old to the new was a painful experience for everyone involved. It should come as no surprise that people regard such a transition with much trepidation and anxiety, and that they find the experience itself to be unsettling and dislocating. Therefore, resistance is one of the challenges expected in the reengineering efforts.

2.11. BPR Critical and Success and Failure Factors

Yahiya (2002) put forwarded that most BPR endeavors fail because of a mis understanding of BPR. Most managers rush in for BPR intuitively instead of approaching it as an engineering discipline. The researcher pointed out the other failure factors, such as (1) poor approach of BPR mistaking it with total quality management (TQM), (2) unrealistic expectations, (3) lack of top management commitment, and (4) over reliance on IT.

Crowe et al. (2002) pointed out that the most outstanding cause of BPR failure is resistance to change. BPR is all about change, (Crowe et al.2002); palmer, 2004). Abdolvand et al. (2009) underlined that BPR should be rolled out after the meticulous examination to ensure the positive readiness indicators to the curtail failures. Al- Mashari and Zairi (1999, 100-101) listed the BPR failure factors related to change management systems and culture as follows: problems in the communications, organizational resistance, lack of organizational readiness for change, problems related to creating a culture for change, and lack of training and education.

Choi and Chan (1997) put forward some of the causes of BPR failure as (1) inability of the employees and the management to recognize the benefits of BPR in their organization, (2) over reliance on information technology to enable BPR, (3) depending heavily on outsiders to effect BPR and neglecting the employees, (4) lack of standard methodology, and (5) lack of an understanding BPR among others.

According to a study conducted by KPMG (as cited in Mcmarar,2002), BPR failures is caused by technical issues, in experience in scope and complexity of the challenges at hand, failures to define objectives, lack of communication systems that inform the management of problems project management failure to respond to challenges adequately, organizational resistance to change, lack of business ownership, significant cost over runs, significant schedule over runs, and package failure to meet expectations. Prosci (as cited in stoica et al. 2004, p.8). Highlight top management mistakes during large scale change as a major cause for failure; among them ignoring the impact of change on the employees. Malhotra (1998) established that 70% of BPR initiatives donot succeed because of unrelenting management binder and leadership, unrealistic

scope and prospect and resistance to change.

The BPR success factors have been put forward as:(1) team work and quality culture,(2) quality management system and satisfactory rewards, (3) effective change management, (4) less bureaucracy and more participation, (5) IT, (6) effective project management, and (7) adequate financial resources (Ahmad, Francis and Zairi, 2007; Al- Mashri and Zairi, 1999). Crabtree, Rouncefield and Tolme (2001, p.169) cited the proper and adequate requirement process as very important factor that can lead to the success.

2.12. Conclusion and Gap in Literature

Organizations required responding to changing environments through various management tools. In response, organizations use appropriate management tools to alleviate the changing environment and to increase their performance. Among the various management tools, BPR is one of the management tool undertaken by organizations. Its concept was first introduced by Hammer (1990) and Davenport and Short (1990) due to globalization and extraordinary IT development pace with three driving forces of customers, competition, and change.

Despite the increased use of BPR in various organization resulted enhanced performance, not all organization realized the promises of BPR. According to Hammer and Champy (1993) estimate, about 70 percent of BPR project failed. Several researchers (Al-Mashari and Zairi, 1999; Attaran, 2000) mentioned numerous failure factors of BPR. Such as BPR concepts misunderstanding, misapplications of BPR terms, management failure to change their values and beliefs, and so forth. Allen and Fiefield (1999) study indicates that factors that were not identified by other researchers, such as academic freedom and complex information requirements. The seven factors were teamwork and quality culture, quality management system and satisfactory rewards, effective change management, less bureaucratic and participation, IT or information system, effective project management, and adequate financial resources.

However, due to its recent introduction of BPR in Ethiopia, as far as the study of the researcher knowledge there is no study conducted on Ethiopian TVET institutes‟ BPR project. Among them, Debela‟s (2009), Debela and Hagos‟s (2011), and Mengesha and Common‟s (2007) studies acknowledged as steppingstone on the issues of B PR in Ethiopian public organization. Various organizations employed BPR in pursuit of improved.

CHAPTER THREE

3. RESEARCH DESIGN AND METHODOLOGY

This chapter presents the methodological aspects of the research, which includes research design, research method, study population, sample size and sampling techniques, data collecting instruments, data analysis and interpretations, validity and reliability check and also ethical considerations.

3.1. Research Design

In order to investigate the implementation of Business Process Re-engineering in Jimma Zone TVET institutes, Descriptive Survey Design was employed. This is because it enabled the researcher to collect and describe large variety of data related to implementation of BPR. As argued by Kumar (1999) descriptive research design was used to describe the nature of the existing conditions. Moreover, Seyom and Ayalew (1995: 17) agreed, "Descriptive survey method of research is more appropriate to gather several kinds of data on a broad size to achieve the objectives of the study".

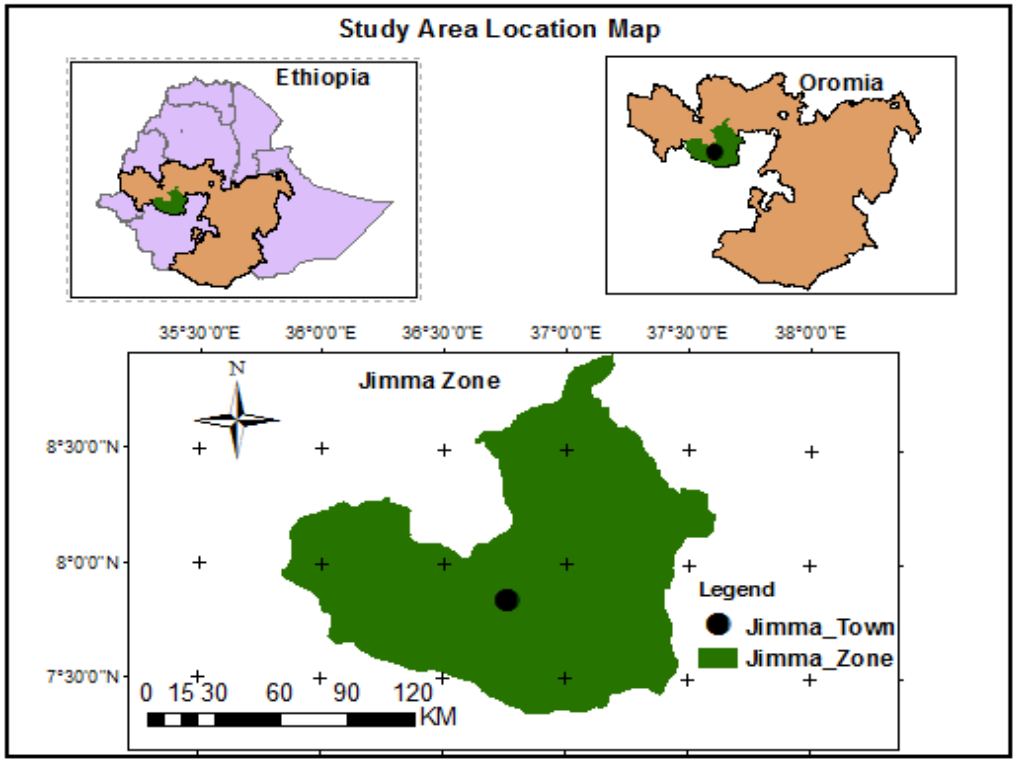
3.2. Research Method

In this study, both quantitative and qualitative approaches were used with more emphasis on quantitative approach as the leading method. Quantitative approach emphasized because assessing the implementation of Business process re-engineering in Jimma zone TVET can better understood by collecting large quantitative data's. Furthermore, the qualitative approach employed and incorporated in the study helps to validate and triangulate the quantitative data.

3.3. Research Site

Oromia is one of the nine regional states that constitute the Federal Democratic Republic of Ethiopia. It extends from 3040'N to 10035'N and from 34005'E to 43011'E. Based on Housing and population Census, the total population of the region is 27,158,471 in2007 (CSA, 2007). Presently, the region is divided into eighteen zones, including Jimma zone. Jimma zone is located between 7015'N and 8045'N and 35030'E 37030' E. It is bounded by four Oromia

zones: Illu Ababora in the West, East Wellega in the North East, West Shewa, in the north and south West Shewa in the East and SNNPR region inthe South.



3.4. Sources of Data

The sources of necessary information to conduct this study were primary and secondary. These are discussed hereafter.

3.4.1. Primary Source of Data

The study was conducted in Limmu Genet Institutes, Agaro institutes, Asendabo Institutes, Sheki (dedo) Institutes and Gatera Institutes which is located around Jimma Zone. Therefore, Deans of TVET institutes, Instructors, Jimma Zone TVET head and Administration staffs were included as a primary source of data. The respondents were chosen as primary sources of data because of the fact that they are directly involved in the planning and implementation of BPR process and hoped to have better exposure, experience and firsthand information regarding the issue under the study.

3.4.2. Secondary Sources of Data

To have relevant data, the researchers also interested to analyze secondary data from the documents particularly; annual report, minutes or verbal, suggestion box or suggestion agenda and BPR documents were expected to be consulted.

Table 1: Documents to be consulted

No	Documents	Repetition	Description
1	2004 and 2005 E.C Annual report	2	To investigate BPR implementation process
2	BPR studied documents	1	To recognize the planning process and delegation of duties for employees

3.5. Population, Sample Size and Sampling Techniques

3.5.1. Population of the Study

The study was conducted in Jimma zone TVET on the implementation of Business processing Re-engineering. Therefore, the total populations of the study were all instructors who teach in the five TVET (194), the deans of the institution (5), staffs (73) and Jimma Zone TVET heads (1), a total of 276 respondents were expected in this study.

3.5.2. Sample Size and Sample Techniques

In this study, all TVET institutes, which were located in the Jimma zones, would be selected because they are manageable, in addition including all the TVET hoped to be have reliable and validated data. However, the respondents were selected using different techniques. All the Deans from each TVET and the head of TVET Heads from the zone will be taken as the respondents of the study using available sampling techniques. The assumption behind that was the entire population is sufficiently small in number, and it helps the researcher to gain adequate and necessary information due to the planning and implementation of BPR in the TVET institutes. Accordingly, 5 TVET institutes Deans and 1 TVET head at zonal level were included in the study.

To determine the sample size of instructors and staffs from the total target population 194 and 73 respectively, of Jimma Zone TVET institutes, the researcher selected 100% of instructors and staffs, will be expected as representatives for this study using census survey sampling techniques was used to collect all the necessary data from the respondents because they are directly concerned with the issue of the study and the total number of the participants will be manageable and it is easy to reach all of them within specific time .The researcher believes that these are representatives' sample, manageable and sufficient to secure the validity of the data. Moreover, according to Levy & Lemeshows (2008), among the total population 10 – 30% of sample well satisfied and represent the study. Therefore, the sample size for this study was 194 instructors and 73 Administration staff from the whole TVET institutes. To represent equal proportion of sample instructors and Administration staff in each TVET institutes William (1977) formula was utilized. For detail information the sample size, sampling techniques and the data collection tools were described as summary in the following table 2 below.

Table 2: Summary of total population, sample size and sampling techniques

No	Name of TVET	Total Population				Sample size			
		Deans	JZ TVET Heads	Inst.	Staff	Deans	JZ TVET Heads	Inst.	Staff
1	Limmu Genet Institutes	1	1	31	21	1	1	31	21
2	Agaro college	1		65	17	1		65	17
3	Asendabo Institutes	1		42	11	1		42	11
4	Sheki (dedo) Institutes	1		26	14	1		26	14
5	Gatera Institutes	1		30	10	1		30	10
	TOTAL	5		194	73	5		194	73
Sampling Techniques						**Available**			Census sampling technique
Instrument of data collection								**Interview**	Questionnaires (open and close ended)

Source: Jimma TVET offices

NB: Ins. Mean's instructors, JZ TVET head Mean's Jimma Zone TVET head

3.6. Instruments of Data Collection

In order to collect the required data, three data collections tools were used, namely, questionnaires, semi structured interviews and document analysis.

3.6.1. Questionnaires

Questionnaire was preferred because it requires a little time and expense and permits collection of data from a large sample of respondents (i.e. 194 instructors and 73 staff Workers, total of 267 respondents). Thus, in the study was expected to prepared both open and close-ended questions. Questionnaires was formulated from the related literature of Business processing re-engineering, from the researcher experience and from the review of related literature, thus local made questionnaires was expected to be employed. Interviews

In addition to the close and open-ended questions, data was also collected through semi-structured interview. The semi-structured interview was prepared in English then was conducted with interviewee in Amharic; this is based on the assumption that it may help the researchers to reduce the barriers of communications. In general the semi structured interview was healed with the Deans from each TVET Institutes and Jimma Zone TVET head.

3.6.2. Document Analysis

As it explained earlier in the table 1 in the secondary sources of data, the relevant document that has relation with the planning and implementation of BPR was consulted. Particularly, documents like, two-year annual reports, minutes or verbal, the suggestion box, and like related material were investigated by the researcher's in order to triangulate and validate the data collected by the questionnaires and semi-structured interview.

3.7. Validity and Reliability checks

In order to check the validity and reliability of the research, the researcher conducted pre-test in one of Jimma Town TVET institutes with 20 instructors and 15 staff Administration in the mentioned TVET institutes. The pilot tested institutes were not included as sample when the actual research is conducted.

3.7.1. Validity of the Rresearch Iinstruments

Checking the validity and reliability of data collecting instruments before providing to the actual study subject was the core to assure the quality of the data (Yalew E., 1998, and Daniel M., 2004). To ensure the validity of instruments, initially the instrument prepared by the researchers and then develops under close guidance of the advisors. Moreover, others who had close relation with the subject under the study provide their suggestion to maintain its validity. The questionnaires were prepared in English and administered to TVET instructors and Amharic questionnaires were administered to staff workers, thus during pre-testing the questionnaires, ambiguous and unclear statement were omitted, certain statement would be modified and also some statements would be added as per the respondents responses.

3.7.2. Reliability of the Research Iinstrument

According to Amin (2005), reliability of the instrument refers to the degree to which, the said instrument consistently measures whatever it is measuring. Therefore, the reliability of the instrument was measured by using Cronbach alpha test. A reliability test is performed to check the consistency and accuracy of the measurement scales. As Table 2 shows the results of Cronbach's coefficient alpha is satisfactory (between 0.82 and 0.93), indicating questions in each construct are measuring a similar concept. As suggested by (Phyllis, Ross, & Brian, 2007) the reliability coefficients between 0.90-0.6 are generally found to be internally consistent or reliable.

Table 3: Reliability Coefficients of the implementation of BPR

No	***Implementation of BPR variables***	***Items***	***Reliability Coefficients***
1	Planning of BPR	7	0.93
2	Implementation of BPR	9	0.89
3	Major achievement of BPR	8	0.82
4	Challenges of planning and implementation of BPR due to organization	5	0.90
5	Challenges of planning and implementation of BPR due to leadership	5	0.92
6	Challenges of planning and implementation of BPR due to employees	5	0.84
Average Reliability Coefficient			***0.88***

3.8. Procedure of Data Collection

Before dispatching the questionnaire, two assistant data collectors were selected to gather data from the samples institutes. The assistants selected because they were conversant of the local languages and they are more familiar with the research areas. Their knowledge the local languages and familiarity of the research areas thought to facilitate the data collection process.

Furthermore, the researcher provided orientation for all respondents concerning the objective of the study and how the items will be answered. Then, questionnaires were dispatched to sample

instructors and staff Administrations. In addition, semi-structured interview will be also conducted with the Deans of each TVET institutes as well with the Jimma Zone TVEThead by the researcher himself. The researcher had initial contact with the interview to explain the purpose of the study. While the interview carried, the researcher used hand notes, tape recorders and even if photo camera if needed.

3.9. Method of Data Analysis

The data were analyzed both quantitatively and qualitatively. The analysis of the data was based on the responses collected through questionnaires, interview and document analysis. The data collected through closed ended questions was tallied, tabulated and filled in to SPSS version 16 and interpretation was made with help of percentage, mean, standard deviation and independent sample t-test. Because, the percentage was used to analyze the background information of the respondent, whereas, the mean and standard deviation are derived from the data as it was serve as the basis for interpretation of the data as well as to summarize the data in simple and understandable way (Aron et al., 2008). Apart from this, t- test was used to see statistically significant difference between the mean scores of the two independent variables. The existing response differences were tested at 0.05 levels of significance.

On the other hand, the data obtained from the document analysis, and semi structured interview was analyzed qualitatively. The qualitative analysis was done as follows. First, organizing and noting down of the different categories were made to assess what types of themes may come through the instruments to collect data with reference to the research questions. Then, transcribing and coding the data to make the analysis easy. Also the results were triangulated with the quantitative findings.

3.10. Ethical Considerations

First, the researcher went to the study area with the letter of entry which is prepared by Jimma University Institute of Education and Professional Development Studies, Department of Educational Planning and Management to Jimma zone TVET office and Institutes which are included in the study. Then, the study was carried out after getting permission from the selected sample Jimma zone TVET Institutes. Then, the researcher informed the respondents about the objectives of the study. i.e., purely for academic put.

CHAPTER FOUR

4. DATA PRESENTATION, ANALYSIS AND INTERPRETATION

This chapter presents the analysis and interpretation of the data gathered by different instruments, mainly questionnaire and semi-structured interview. The data gained from quantitative instruments is presented by the use of tables, percentage and t-test incorporating various statistical tools. Similarly, the qualitative data was organized according to the themes, analyzed and used to strengthen or to elaborate more that of the quantitative one. Because the research design is descriptive research design, thus the qualitative data is used to support the result obtained from the interpretation of the quantitative data.

As mentioned earlier, among various data collecting instruments, questionnaire and semi-structured interview are used to collect necessary or relevant information for this study. Thus a total of 270 questionnaires were distributed to TVET instructors and administration staff. But properly filled and returned questionnaires were 267 273 (99%). The other 3 questionnaires were lost or not included in the data analysis, due to the problems to be returned from respondents and some contained incomplete information. Among 6 interview respondents 6 (100%) are properly participated and gave necessary information on the issue under investigation. In general 99% of respondents are participated and gave necessary information on the issue raised through questionnaire and semi-structured interview. Therefore, the total response rate is sufficient and safe to analyze and interpret the data.

The overall results of the issue investigated as well as respondent's personal background or profiles are presented vividly hereunder.

4.1. General Characteristics of the Respondents

Table 4: Characteristics of Respondents

No	Variables	Category	Respondents							
			Instructors		Administration staff		Deans of the TVET		TVET Head of The Zone	
			No	%	No	%	No	%	No	%
1	Sex	Male	142	73	40	54.8	5	100	1	100
		Female	52	.26.8	33	45.2	-	-	-	-
		Total	194	100	73	100	5	100	1	100
2	Qualification	Diploma	30	15.5	21	28.8	-	-	-	-
		1st degree	64	32.9	9	12.3	5	100	1	100
		2nd degree	-	-	-	-	-	-	-	-
		Other	100	51.5	43	58.9	-	-	-	-
		Total	194	100	73	100	5	100	1	100
4	Experience	1-5 years	87	44.9	23	31.5	-	-	-	-
		6-10 years	63	32.5	18	24.7	-	-	-	-
		11-15 years	26	13.4	24	32.9	3	60	1	100
		16-20 years	14	7.2	6	5.5	2	40	-	-
		>20 years	4	2.1	2	2.7	-	-	-	-
		Total	194	100	73	100	5	100	1	100

In this part the characteristics of the respondents from five TVET institutes of Jimma Zone were analyzed in frequencies and percentage.

As the above Table 4: depicts instructors and administrative staff male respondents constituted 142(73%), 40(54.8%) respectively while the females make up only 52(26.8%), 33(45.2%) This implies that the participation of both sexes is not proportional. The participation of female respondents in the sample TVET institutes is low.

Respondent's academic qualification illustrated in Table 4: shows that 30(15.5%) & 64(32.9%) instructors were diploma and BA degree graduates respectively whereas 9(12.3) & 21(28.8%) administration staff respondents were diploma and BA degree graduates respectively. However, Deans and the head were first degree holders; it implies that the qualification standard set by MOE was not fully achieved. The standard states that the minimum qualification to teach at TVET institutes is first degree (MOE, 2006). Therefore from the above analysis one may conclude that BPR in Jimma Zone TVET institutes may not properly implement.

4.2. BPR Planning

Table 5: Planning of BPR

No	Variables	Respondents	X	SD	Av.mean	T-value	P-value
1	Organizational major problems were identified/assessing the organization	Instructors	3.67	1.325	3.71	-0.86	0.39
		Administrators	3.83	1.307			
2	Prioritizing the need of the organization	Instructors	3.65	1.328	3.68	-0.66	0.51
		Administrators	3.77	1.310			
3	Determine the quality expected from the implementation of BPR	Instructors	3.62	1.342	3.67	-1.06	0.29
		Administrators	3.81	1.266			
4	Develop organization BPR document after reaching to the common agreements	Instructors	3.64	1.328	3.68	-0.68	0.49
		Administrators	3.76	1.321			
5	Develop the goal, mission and vision of the organization	Instructors	3.05	1.386	3.06	-0.17	0.86
		Administrators	3.09	1.726			
6	The documents described the role and responsibilities of core processor and the officers	Instructors	3.63	1.243	3.66	-0.52	0.59
		Administrators	3.73	1.076			
7	Providing training regarding BPR to the whole staff/employees in the organization	Instructors	3.62	1.342	3.62	-0.76	0.44
		Administrator	3.76	1.290			
Overall mean			**3.58**				

(Note: X=mean, SD=standard deviation-value at α=0.05 and degree of freedom=182)

As can be seen from the table 5, two important patterns observed. That is item 5 was rated moderately while the rest items rated as having high effect on BPR planning. The t-test were calculated the significance level for the items, the result indicate that no statistical significance difference in perception between instructors and administrators.

More specifically, as indicated in item 1 on Table 5, the two respondent groups were asked to point out their views regarding Organizational major problems were identified/assessing the organization. The responses of instructors and administration staff on the item show individual mean values of (M=3.67, SD=1.33) and (M=3.83, SD=1.31) respectively with a mean difference 0.16. The t-test result with p-value 0.39 greater than 0.05 indicates that there is no statistically significant difference in perception between instructor and administrator towards the item. The average mean value of the two groups was 3.71, all indicating 'high level' on BPR planning. Therefore, this reflects that Organizational major problems were identified/assessing the organization highly affects BPR planning.

Regarding item 2 on table 5, the level of effect of prioritizing the need of the organization was also rated by each group of respondents. The responses indicated that the average mean score was 3.68 rating it as 'high' with individual mean scores M=3.65, SD=1.33 and M=3.77, SD=1.31 for instructors and administration staff respectively, with a mean difference of 0.12. The t-test result with p-value 0.51> 0.05 shows that there is no statistically significant difference in perception between the two groups of respondents towards the item. Thus this shows that prioritizing the need of the organization highly affects BPR implementation.

On table 5, item 3, concerning the quality expected from the implementation of BPR rating of 'high' were revealed by both groups of respondents. When we look at the scores, the two groups had individual mean scores of M=3.64, SD=1.34 and M=3.77, SD=1.26 respectively, with a mean difference of 0.13. The t-test result with p-value of 0.29 greater than 0.05 proves that there is no statistically significant difference between the two groups of respondents towards the item. While the average means score 3.67that rated having high on the implementation of BPR.

Item 4 on Table 5, shows respondents' view regarding develop organization BPR document after reaching to the common agreements, used as BPR planning. This had an average mean value of 3.68, with individual mean values of M=3.64, SD= 1.32 and M=3.76, SD= 1.31 for instructors

and administration staff respectively, with a mean difference of 0.12. The t-test result with p-value of 0.49> 0.05 proves that there is no statistically significant difference between the two groups of respondents towards the item. Both groups rated the item as 'highly'. Thus, from this finding we can conclude that both groups of respondents indicated that developing organization BPR document after reaching common agreement highly the implementation of BPR.

With regard to item 5, on table 5, concerning developing goal, mission and vision of the organization, the two groups were asked to rate its level of moderate. The average mean obtained from the respondent were, 3.06, rating it as a 'moderate' with individual mean scores of (M=3.05, SD=1.388) and (M=3.09, SD= 0.941) from instructors and administration staff respectively with a mean difference 0.04. The t-test result with p-value of 0.86 > 0.05 indicates that there is no statistically significant difference between the responses of instructors and administrator towards the item.

Item 6 on table 5, also depicted the respondents' opinion regarding the documents described the role and responsibilities of core processor and the officers on planning BPR. Both groups revealed a mean score of M=3.63, SD=1.243 and M=3.73, SD= 1.076 respectively rating as a 'high' with a mean difference of 0.10. On the other hand, the average mean value of the groups was 3.66 rating it as 'high'. Hence, the documents described the role and responsibilities of core processor and the officers also have high effect on the implementation of BPR. T-test was employed to check the existence of statistically significant difference and the test revealed the significance level p-value (0.59) is greater than alpha table value (0.05) this indicated that there is no statistically significant difference between the perceptions of instructors and administrator towards the item.

The last item 7, on Table 5, was about providing training regarding BPR to the whole staff/employees in the organization and high on the implementation of BPR. The average mean score for both groups was 3.62 indicating a rating of 'high level' of effect on implementation of BPR with individual mean scores of M=3.62,SD= 1.34 and M=3.76,SD= 1.29for instructors and administration staff respectively, with a mean difference 0.14. T-test was employed to check the existence of statistically significant difference and the test revealed that there is a no statistical significant difference between the perceptions of the two groups of respondents. The p-value

(0.44) is greater than alpha value (0.05). That means both instructors and administrator argued that providing training regarding BPR to the whole staff/employees in the organization highly the implementation of BPR.

In general, the average mean for all indicators in the table 5, was M= 3.58 which rated with BPR planning highly implementation of BPR in TVET institutes of Jimma. These findings indicate that high level of agreement on planning of BPR in TVET institutes of Jimma zone. T-test was employed to check the existence of statistically significant difference on the perception of both respondents and the test revealed that there is a no statistical significant difference between the perceptions of instructors and administration staffs were observed.

4.3. BPR implementation

Table 6: Views on BPR implementation

Variables	**Alternatives**	**Instructor**		**Administration staff**	
		No	**%**	**No**	**%**
How often the core processor give instruction to help employees perform the task they assigned	Always	61	31.4	32	45.7
	Sometimes	85	43.8	22	31.4
	Never	48	24.7	16	22.9
Up-to-date teaching -learning/working material are available timely to accomplish your task	Yes	81	41.7	26	37.1
	No	113	58.2	44	62.9
Employees are empowered to make decision pertaining to their work	Yes	90	46.4	11	15.7
	No	104	53.6	59	84.3
Employees are engaged to discuss their performances to evaluate results	Yes	78	40.2	34	48.6
	No	116	59.8	36	51.4
Do you involved in weekly evaluation meeting session to improve defects in your work	Yes	72	37.1	29	41.2
	No	122	62.9	41	58.6
How often does your institution apprising your job performances	Always	41	21.1	18	25.7
	Sometimes	91	46.9	23	32.9
	Never	62	31.9	29	41.4
Is their rewards schemes in your institution after BPR implementation	Yes	112	57.7	32	45.7
	No	82	42.3	38	54.3
How often the organization deliver services properly to the customers	Always	66	34	24	34.3
	Sometimes	82	42.3	29	41.4
	Never	46	23.7	17	24.3
How often the officers as well the core processor communicate through reporting mechanism	Always	58	29.9	27	38.6
	Sometimes	87	44.8	37	52.9
	Never	49	25.3	6	8.6

As reveled in item 1 of table 6, respondents were requestedhow often the core processor give instruction to help employees perform the task they assigned, accordingly 85(43%) of instructors and 22(31.4%) administration staff replied by saying sometimes respectively, 61(31.4%) and 32(45.7%)of instructors and administration staff respectively replied by saying always, and 48(24.7%) and 16(22.9%) of instructors and administration staff respectively replied by saying never. Based on the majority of respondents response it can be conclude that core process owner give inadequate instruction to help employees perform the task they assigned. The interview held with College deans substantiates this idea.

One of the TVET institutes dean said that:

> "…*because of work load of core processor it was difficult to help each employee to do their task accordingly*…"

Concerning item 2 of table 6, respondents were asked whether Up-to-date teaching -learning/working material are available timely to accomplish their task or not, accordingly 113(58.2%) and 44(62.9%) of Instructors and administration staff reported as no, and the remaining 81(41.7%) and 26(37.1%) of instructors and administration staff reported as yes. From the majority of the respondents response it can be concluded that there was no Up-date teaching -learning/working material are available to timely accomplish their task.

Regarding item 3 of table 6, respondents were asked whether employees are empowered to make decision pertaining to their work or not, accordingly 104(53.6) and 59(84.3%) of instructors and administration staff respectively replied by saying no, and the remaining 90(46.4%) and 11(15.7) of instructors and administration staff replied as yes. Thus, from the majority of respondent's response it is possible to conclude that employees were not adequately empowered to make decision relating their work. This is due to lack of commitments of top management to transfer power to lower level.

In response to item 4 of table 6, respondents were asked whether employees are engaged to discuss their performances to evaluate results or not, accordingly 116(59.8%) and 36(51.4%) of instructors and administrators reported by saying no, and 78(40.2%) and 34(48.6%) of instructors and

administration staff replied agreed by saying yes. Thus from the majority of respondents response one can conclude that Employees are not engaged to discuss their performances to evaluate results.

As it can be seen from item 5 of the same table 6, respondents were asked to what extent they are involved in weekly evaluation meeting session to improve defects in their work, relation to this 122(69.2%) and 41(56.8%) of instructors and administration staff were replied as no and 72(37.1%) and 29(42.1%) of instructors and administrators were replied by saying yes. Therefore based on the majority of respondent's response it can be concluded that employees were not involved in weekly evaluation meeting session to improve defects in their work.

As depicted in item 6 of the same table 6, respondents were requested how often does your institution apprising your job performances, accordingly 91(46.9%) and 23(32.9%), 62(31.9%) and 29(41.4%) and, 41(21.1%) and 18(25.7%) of instructors and administration staff responded as sometime, never and always respectively. Thus from the majority of respondents response it can be concluded that TVET institutes of Jimma zone were not apprising of job performance of its employees in regular manner.

In item 7 of the same table 6, respondents were asked whether there is rewards schemes in their institution after BPR implementation or not, accordingly 112(57.7%) and 32(45.7%) of instructors and administration staff were responded as yes and, 82(42.3%) and 38(54.3%) of instructors and administration staff were replied by saying no. Based on the majority of respondent's response it can be said that there is rewards schemes in their institution after BPR implementation without appraising of job performance.

Regarding item 6 of table 6, respondents were asked How often the organization deliver services properly to the customers, accordingly 82(42.3%) and 29(41.4%), 66(34%) and 24(34.3%), 46(23.7%) and 17(23.7%) of instructors and administration staff were replied sometimes, never and always respectively. Thus from the responses of the majority of respondents it can be concluded that service delivery in TVET institutes of Jimma Zone were unsatisfactory.

Concerning item 9 of table 6, respondents were asked how often the officers as well the core processor communicate through reporting mechanism, accordingly 87(44.8%) and 37(52.9%) ,58(29.9%) and 27(32.6%) , 49(25.3%) and 6(8.6%) of instructors and administration staff were

replied by saying sometimes, always and never respectively. Thus from the response of the majority of respondents it can be concluded that officers as well the core processor were not communicating exhaustively through reporting mechanism.

4.4. BPR achievements

Table 7: Views on BPR achievements

No	Items	Respondents	X	SD	Overall X	T-value	P-value
1	Due to implementation of BPR in my institution the time that my work/task demands is reduced	Instructors	3.86	1.04	3.83	-0.26	0.79
		Administrator	3.80	1.22			
2	Employees feel comfortable with the new working environment created by BPR	Instructors	3.21	1.10	3.07	1.12	0.25
		Administrator	2.93	1.11			
3	Staff members are motivated with BPR progress	Instructors	3.00	1.18	3.21	-1.59	0.11
		Administrator	3.43	1.33			
4	Empower workers to be decision makers	Instructors	3.62	1.03	3.69	-0.61	0.6
		Administrator	3.76	1.13			
5	Contributing to the improvement of quality of teaching –learning/training	Instructors	3.53	1.22	3.54	-0.47	0.63
		Administrator	3.56	0.94			
6	Minimizing work load	Instructors	4.04	0.88	3.97	0.72	0.46
		Administrator	3.90	0.95			
7	It enhances creativity and innovation	Instructors	2.66	1.04	2.58	0.01	0.61
		Administrator	2.51	1.13			
8	Maximizing organizational profits by satisfying the need of the customers in the organization	Instructors	3.56	1.00	3.6	0.02	0.65
		Administrator	3.64	1.03			

(Note: X=mean, SD=standard deviation-value at α=0.05 and degree of freedom=182)

As illustrated in item 1 of Table 7, instructors and administrative staffs with the (X=3.86, SD=1.04) and (X=3.80, SD=1.22) respectively agreed that Due to implementation of BPR in their institution the time that their work/task demands is reduced. The overall X=3.83 indicates the agreement of the majority of respondents with the issue. Therefore from the responses of the majority of the respondents, it can be concluded that due to implementation of BPR in TVET institutes of Jimma Zone the time of employees work/task demands is reduced. The p-value (0.79) indicated there is no significance difference between instructors and administrators views on regarding the issue.

Concerning item 2 of table 7, respondents were asked to rate whether Employees feel comfortable with the new working environment created by BPR or not, accordingly instructors and administration staffs with the (X=3.21, SD=1.10) and (X=2.93, SD=1.11) respectively were not sure that Employees feel comfortable with the new working environment created by BPR. The overall X=3.07 indicates the uncertainty of the majority of respondents with the issue. The data obtained from interview held indicates that sometimes some employees complained about BPR structure. This is happened due to big responsibilities lies on individual worker. This implies that, Employees feeling of comfort with the new working environment created by BPR was low. The p-value (0.25) indicated there is no significance difference between instructors and administration staff views on regarding the issue.

One TVET institutes dean said that:

> "*…some workers didn't get comfort with BPR structure in our institute because of the loss of their previous authority …*"

With regard to item 3 of the same table 7, respondents were asked to rate whether Staff members are motivated with BPR progress or not, accordingly instructors and administrative staffs with the (X=3.00, SD=1.18) and (X=3.43, SD=1.13) respectively were not sure about Staff members are motivated with BPR progress. The data obtained from interview held indicates that some employees were not interested with the progress of BPR. This is happened due to fear of job security in the organization. This implies that, motivation of Staff members with BPR progress was low. The p-value (0.60) indicated there is no significance difference between instructors and administration staff views on regarding the issue.

Concerning item 4 of the same table 7, respondents were asked to rate whether workers Empowered to be decision makers or not, accordingly instructors and administration staffs with the (X=3.62, SD=1.03) and (X=3.76, SD=1.13) respectively agreed that workers were empowered to be decision makers. The overall X=3.69 indicates the agreement of the majority of respondents with the issue. Therefore from the responses of the majority of the respondents, it can be concluded that BPR implementation empowered workers to be decision makers in TVET institutes of Jimma Zone. The p-value (0.6) indicated there is no significance difference between instructors and administration staff views on regarding the issue.

Regarding item 5 of the same table7, respondents were asked to rate whether BPR Contributed to the improvement of quality of teaching –learning/training or not, accordingly instructors and administration staffs with the (X=3.53, SD=1.22) and (X=3.56, SD=0.94) respectively agreed that BPR implementation Contributed to the improvement of quality of teaching –learning/training. The overall X=3.54 indicates the agreement of the majority of respondents with the issue. The data obtained from interview held substantiate the response of instructors and administration staff. The p-value (0.63) indicated there is no significance difference between instructors and administration staff views on regarding the issue.

One TVET institutes dean said that:

> "…*after implementation BPR in our institutes, most of the students/ customers got satisfied with our services*…"

In item 6 of table 7, respondents were asked to rate whether BPR implementation Minimize work load or not, instructors and administrative staffs with the (X=4.04, SD=0.88) and (X=3.90, SD=0.95) respectively agreed that BPR implementation Minimize work load. The overall X=3.97 indicates the agreement of the majority of respondents with the issue. Therefore from the responses of the majority of the respondents, it can be concluded that BPR implementation Minimize work load. The p-value (0.46) indicated there is no significance difference between instructors and administration staff views on regarding the issue.

Regarding item 7 of table 7, respondents were asked to rate whether BPR implementation enhances creativity and innovation, instructors and administration staffs with the (X=2.66, SD=1.04) and

(X=2.51, SD=1.13) respectively were not sure that BPR implementation enhances creativity and innovation. The overall X=2.58 indicates the uncertainty of the majority of respondents with the issue. The data obtained from interview held indicates that rarely some employees encouraged engaging in creativity and innovation. This implies that the motivation of most employees toward creativity and innovation was low, this is happened due to lack of commitment. The p-value (0.61) indicated there is no significance difference between instructors and administrators views on regarding the issue.

In item 8 of the same table7, respondents were asked to rate whether BPR implementation Maximizing organizational profits by satisfying the need of the customers in the organization, instructors and administration staffs with the (X=3.56, SD=1.00) and (X=3.64, SD=1.03) respectively were agreed that BPR implementation Maximizing organizational profits by satisfying the need of the customers in the organization. The overall X=3.60 indicates the agreement of the majority of respondents with the issue. Therefore from the responses of the majority of the respondents, it can be concluded that BPR implementation maximizing organizational profits by satisfying the need of the customers in the organization. The p-value (0.65) indicated there is no significance difference between instructors and administration staff views on regarding the issue.

4.5. Challenges of BPR

Table 8: Challenges due to organization

No	Variables	Respondents	X	SD	T-value	P-value
1	Structural rigidity of the organization	Instructors	3.34	0.96	1.40	0.14
		Administrators	2.52	1.01		
2	Culture of the organization	Instructors	3.38	1.00	1.01	0.1
		Administrators	2.53	1.02		
3	available resources or allocation of adequate fund for BPR	Instructors	1.64	1.17	0.87	0.06
		Administrators	1.83	0.72		
4	Lack of educated human power	Instructors	3.76	1.62	0.14	0.89
		Administrators	3.73	1.85		
5	defining the mission, vision and objectives of the organization regarding to BPR	Instructors	2.21	1.10	-1.83	0.6
		Administrators	2.42	1.28		

(Note: X=mean, SD=standard deviation-value at α=0.05 and degree of freedom=182)

As illustrated in item1of Table 8, the mean score of instructors (3.34, 0.96) and administration staffs (2.52, 1.01) indicates that, Structural rigidity of the organizations were moderate problem in implementing BPR in TVET institutes of Jimma zone. The data obtained from open ended and interview held indicates that majority of TVET institutes in the study area had structural rigidity to implement BPR in their organizations. The t-test revealed that the significance level (p=0.14) is greater than 0.05 this shows there is no significance difference between instructors and administration staff views regarding Structural rigidity of the organization were challenge due to organization.

Concerning item 2 of table 8, respondents were asked to indicate their level of agreement regarding Culture of the organization were challenges due to organization or not, accordingly

instructors and administration staff with(X=3.38, SD=1.00) and(X=2.53, SD=1.02) respectively indicated that Culture of the organization were moderate problem in implementing BPR in their respective organizations. In this regard, the significance level (p=0.21) is greater than 0.05, this implies that there is no significant difference among the two groups of respondents.

In item 3 of the same Table 8,respondents were asked to indicate their level of agreement regarding available resources or allocation of adequate fund for BPR were challenges of BPR due to organization or not, accordingly, the mean score of each groups(X=1.64, SD=1.17) and(X=1.83, SD=0.72) fall between 1.5 and 2.49. This indicates that available resources or allocation of adequate fund for BPR implementation was low in the TVET institutes of the study areas. The data obtained from open ended question and interview conducted reveals that, majority of TVET institutes had lack of adequate budget. The significance level (p=0.06) is greater than 0.05, this indicates that there is no significance difference between the opinions of instructors and administration staff.

In item number 4 of Table 8, respondents were asked to indicate their level of agreement regarding Lack of educated human power were challenges of BPR implementation due to organization ,Accordingly, the mean score of each groups of respondents fall between 3.50 and 4.49. This indicates that of lack educated human power were extremely high in TVET institutes of Jimma Zone. The data obtained from open ended question and interview conducted reveals that, majority of TVET institutes had lack of qualified man power. The significance level (p=0.89) is greater than 0.05, this indicates that there is no significance difference between the opinions of instructors and administrators.

As depicted in item 5 of the same table 8, the mean score of instructors and administration staff were accepted that the capacity of defining the mission, vision and objectives of the organization regarding to BPR were poor. This implies that TVET institutes in the study area were not in a good position to define the mission, vision and objectives of the organization regarding to BPR. The significance level (p=0.6) is greater than 0.05, this indicates that there is no significance difference between the opinions of instructors and administrators.

Table 9: Challenges due to leadership

No	Variables	Respondents	X	SD	T-value	P-value
1	Lack of commitments	Instructors	3.55	1.09	-1.03	0.78
		Administrators	3.51	1.10		
2	Poor communication to the management challenges	Instructors	1.98	1.16	-1.23	0.36
		Administrators	2.01	1.02		
3	Lack of conducting training and educations	Instructors	3.87	0.98	0.12	0.08
		Administrators	3.94	0.92		
4	Failure to define objectives	Instructors	3.57	1.17	-1.33	0.28
		Administrators	3.92	1.07		
5	High bureaucratic ideology	Instructors	2.11	1.13	-1.14	0.18
		Administrators	2.01	1.16		

(Note: X=mean, SD=standard deviation-value at α=0.05 and degree of freedom=182)

As can be observed in item 1of Table 9, instructors and administration staff were requested the degree to which Lack of commitments of leadership tackle the effective implementation of BPR in TVET institutes of Jimma zone. To this end instructors and administration staff that luck of commitment were high among leadership of TVET institutes of Jimma Zone with the mean and standard deviation of(X=3.55, SD=1.09) and(X=3.51, SD=1.10) respectively. In this regard, the t-test revealed that the significance level (p=0.78) is greater than 0.05 this shows there is no significance difference between instructors and administration staff views regarding Lack of commitments of leadership toward BPR implementation.

The data corresponding to item 2 of Table 9,instructors and administration staff mentioned that Poor communication to the management were not the problem of BPR implementation in the TVET institutes of Jimma Zone with the mean and standard deviation of(X=1.98, SD=2.01) and(X=2.01, SD=1.02) respectively. This implies there is good communication between the staffs and management. The significance level (p=0.36) is greater than 0.05, this indicates that there is no significance difference between the opinions of instructors and administrators.

As depicted in item 3 of Table 9, the rating of instructors and administrators(X=3.87, SD=0.98) and(X=3.94, SD=0.92) respectively disclosed their agreement over the degree to which leader's

unable to conduct training and educations for the staffs to reduce challenge of BPR implementation in their respective organizations. This implies there is gap of knowledge and skills to implement BPR in TVET institutes because of lack of training and education. The significance level (p=0.08) is greater than 0.05, this indicates that there is no significance difference between the opinions of instructors and administration staff.

In items 4 of the same Table 9, respondents were asked to indicate their level of agreement regarding leadership Failure to define objectives, accordingly, the mean score of each respondent fall between 3.50 and 4.49. These indicate that, TVET institutes leaders highly lack knowledge of BPR implementation strategy to define the objective. The significance level (p=0.28) is greater than 0.05, this indicates that there is no significance difference between the opinions of instructors and administrators.

As can be seen in item 5 of the same table 9, instructors and administrators members were asked the degree to which TVET college leadership exhibit High bureaucratic ideology ,To this end instructors and administration staff confirmed low practices of bureaucratic ideology in their organization with the mean(X=2.11, SD=1.13) and(X=2.01, SD=1.16) respectively. This implies High bureaucratic ideology of leadership in the TVET institutes of Jimma Zone were not the problem in implementing BPR. The significance level (p=0.18) is greater than 0.05, this indicates that there is no significance difference between the opinions of instructors and administration staff.

Table 10: Challenges due to employees

No	Variables	Respondents	X	SD	T-value	P-value
1	Lack of commitments	Instructors	3.62	1.03	-0.51	0.32
		Administrators	3.71	1.11		
2	Less team work habit	Instructors	3.54	1.01	-1.23	0.14
		Administrators	3.67	1.02		
3	Not considering the organization changes like their own changes	Instructors	3.78	1.23	-1.24	0.70
		Administrators	3.82	1.41		
4	Recognizing BPR as downsizing only	Instructors	3.94	1.43	-0.79	0.61
		Administrators	3.86	1.44		
5	Sticking themselves with time signature and reporting as main duties in their organization	Instructors	3.43	1.00	0.51	0.15
		Administrators	3.25	1.02		

(Note: X=mean, SD=standard deviation-value at α=0.05 and degree of freedom=182)

As illustrated in item1of Table 10, the mean score of instructors and administration staff(X=3.62, SD=1.03) and(X=3.71, SD=1.11) respectively indicates that, Lack of commitments of employees were a big problem in implementing BPR in TVET institutes of Jimma zone. The data obtained from open ended and interview held indicates that majority of employees are not interested with the new structure of the organization as a result of BPR implementation this create lack of commitments toward its implementation. The significance level (p=0.32) is greater than 0.05, this indicates that there is no significance difference between the opinions of instructors and administration staff regarding Lack of commitments employees toward BPR implementation.

In item 2 of the same Table 10, respondents were asked to indicate their level of agreement regarding less team work habit of employees, accordingly, the mean score of each group of respondents fall between 3.50 and 4.49. That is, the majority of respondents indicate less team work habit of employees were high. This implies that team work habit was not developed in the TVET institutes of Jimma Zone; as a result it was tackling the effective implementation of BPR in the study area. The significance level (p=0.14) is greater than 0.05, this indicates that there is no significance difference between the opinions of instructors and administration staff regarding team work habit of employees.

In item number 3 of Table 10, respondents were asked to indicate their level of agreement regarding Not considering the organization changes like their own changes, instructors and administration staff with the (X=3.78, SD=1.23) and (X=3.82, SD=1.41) respectively indicates that employees not considering the organization changes like their own changes. As a result BPR implementations in Jimma Zone TVET institutes were challenged by employees' attitude toward unable to consider organizational change as their own. The significance level (p=0.7) is greater than 0.05, this indicates that there is no significance difference between the opinions of instructors and administration staff regarding employees not considering the organization changes like their own changes.

As it can be described in item 4of Table 10, respondents were asked to indicate their level of agreement regarding Recognizing BPR as downsizing only, instructors and administrative staff with the (X=3.94, SD=1.43) and(X=3.86, SD=1.44) respectively indicates that employees in Jimma Zone highly recognizing BPR as downsizing only. The significance level (p=0.61) is greater than 0.05, this indicates that there is no significance difference between the opinions of instructors and administration staff regarding Recognizing BPR as downsizing only.

In item 5 of the same Table10, respondents were asked to indicate their level of agreement regarding employees sticking themselves with time signature and reporting as main duties in their organization accordingly, the mean score of each groups fall between 2.50 and 3.49. This indicates that employee sticking themselves with time signature and reporting as main duties in their organization were moderate problem in implementing BPR in Jimma Zone TVET institutes. The significance level (p=0.15) is greater than 0.05, this indicates that there is no significance difference between the opinions of instructors and administration staff as to the perception of BPR as downsizing only. In general, the result obtained from questionnaire, observation checklist, document analysis, and interview carried out, it is possible to conclude that, the major challenges that affect the implementation of BPR in Jimma Zone TVET institutes, shortage of finance and budget from concerned bodies ,lack of skilled manpower ,lack of commitments and lack of adequate knowledge to define the objective.

CHAPTER FIVE

5. SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

These parts of the study deals with the summary of the major findings, general conclusion drawn on the bases of the findings and recommendations which are assumed to be useful to enhance the implementation of Business Process Re-engineering in TVET institutes of Jimma Zone are forwarded for all concerned body.

5.1. Summary of the Findings

In light of the above data analysis and interpretation of findings, the following four basic research questions were addressed in the course of the study:

1. To what extent do Jimma Zone TVET institutes planned BPR?
2. To what extent do TVET Institutes of Jimma zone implemented BPR?
3. What are the major achievements in TVET institutes as a result of implementation of BPR?
4. What are the major challenges that affect in the implementation of BPR in TVET institutes?

The major findings that addressed the basic research questions are presented as follows:

- The study found that during the planning phase of the BPR, the major problems of the organizations were properly assessed (M=3.71) while the organizational priorities were thoroughly prioritized during BPR planning. Both the instructor and administration staff (M=3.83, SD=1.13) agreed with no statically significant difference.

- The study revealed out that, during the planning process of BPR in the TVET institutions, those expected qualities of the BPR implementation were adequately determined (M=3.67, SD=1.34). The result of the present research shown that, the document of BPR of the TVET institutions were designed after common agreement among the concerned bodies were gained adequately (M=3.68, SD=1.26). The study result indicated that, both instructors (M=3.05, SD=1.3) and administration staff (M=3.09, SD=0.9) indiscriminately agreed that (P=.04), the goal, mission and vision of the organizations were moderately taken into consideration during the planning of BPR.

- The study found out that, the roles and responsibilities of the core process owners and officers were adequately identified during the planning and on the document of BPR (M=3.66, SD=1.23) besides all those who took part in the planning of BPR were given with adequate training prior to the BPR planning (M=3.62, SD=1.34). The study found out that instructor provided by core processor owner to the employees were inadequate (sometimes=43.8 %, Never=24.7%), due to the work loads of they had.

- The majority of the participants (55%) indicated that, no up to date teaching learning materials were available to them. However, there was a variation between instructors and administration staff. This study found out that, through were attempts of the discussions with employees on the results of their performance (42.4%), the discussion were not inclusive of all employees (57.6%), moreover, though there were discussion on performance of employees on a weekly basis (43.1%), they were not involve all the participant (56.9%).

- The study found out that, the reward schemes were introduce after BPR implementation, were not equally implemented in the TVET institutions. The interview result indicates that, in two of the institutions reward schemes were not yet implemented while in the rest of the institutions the reward systems were introduced with their all limitations. The level of the service delivered to the customers by the TVET institutions was also unsatisfactory.

- The result of the study indicated that, due to the implementation of BPR time required for the tasks accomplishment moderately reduced in the TVET institutions (M=3.83). The result of the study indicated that, employees were moderately motivated (M=3.21) with the new procedures of the task accomplishment introduced by the BPR implementation.

- The result of the study indicate that shortage of human power was one of the big challenges (M=.74) followed by structural rigidity (M=3.4), and organizational culture (M=3.3).

- The result of the study shown that, leadership factors such as lack of commitment (M=3.53), lack of training (M=3.71), failure in defining objectives were found the major challenge. The study also found out that, employees lack of commitment (M=3.67), low of team spirit (M=3.61), recognizing BPR as downsizing (M=3.9), were major employee related challenges.

5.2. Conclusions

Based on the findings of the study, the following conclusions were made:

1. It is clear that, for every activity that aimed at bring essential change in an organization need thorough planning; the effective implementation of BPR, by large, among other things, influenced by the quality of its planning. Due to this, the planning process should thoroughly assess the major problems of the organization, the priorities to be addressed; the quality and the quantity of expected out comes besides clearly identifying the stakeholders' responsibilities. In line with this idea, the planning process for the BPR implementation in Jimma zone TVET institutions was not satisfactorily carried out. Findings revealed that, most of planning activities were carried out for the sake of formality. In this context, it might be unrealistic to expect genuine result from the implementation of BPR.

2. The effective implementation of BPR largely determined by its planning, the commitment of leaders and employees, the availability of necessary resources, monitoring and support etc. It is only with the placement of such factors, that may expect improvement in an organization. On the basis of this idea, the implementation of BPR in Jimma zone TVET institutions was not considered to be effective. This could be attributed to lack of supports from the process owners, lack of resources, lack of formal and continuous supports for the implementation are but the few.

3. Moreover, the implementation of BPR in Jimma zone TVET institutions did not bring about the intended result although certain improvements were marked in terms of the reductions of the time required for the task accomplishment and workloads. Hence, the poor stance of its planning process coupled with lack of necessary organizational ingredients is identified as influencing factors for its implementation. On top of that, those fundamental and dynamic changes expected of BPR were not adequately gained.

4. Though, methodologically difficult to conclude that BPR in Jimma zone TVET was failed, one can be certain that it was not up to the expectation, this was due to lack of leaders commitment, employees motivations, lack of continuous monitoring and support for the implementation of BPR were the major ones.

5.3. Recommendations

The main purpose of this study was to assess the implementation of Business Process Re-engineering in Jimma zone TVET institutes through a systematic way. Accordingly, the following recommendations were forwarded.

1. Planning is not for ritual nor for formality alone, rather it must be done genuinely with the intension of bringing about genuine results. This in turns needs necessary skills and knowledge of planning. Accordingly, Jimma zone TVET institutes in collaboration with higher educational institutes such as Jimma University are recommended to strive and ensure the availability of necessary skill and knowledge within the experts by bridging any gap exists through short term trainings.

2. The realizations of effectiveness of organizational change programs such as BPR cannot be achieved without the commitment of leadership in terms of providing necessary resources, guidance and assistance to employees, strong monitoring and evaluation and so forth. In this regard, leaders at Jimma zone TVET institutes need to ensure the provision of adequate finance appointment of appropriately qualified, ensure continues supervision and support system.

3. Moreover, since organizational change program are related to changing the organizational culture, they need continuous follow up until they are routed in to the culture of the organizations. Therefore, Regional Education Bureau, Zonal Education Department and Jimma zone TVET institutes are recommended to provide continuous and organized system of follow up by preparing guidelines and implementing them as per the level of their responsibilities.

4. The need for encouragement and commitment in discharging ones responsibility is expected from every individual operating in the system to bring the implementation of BPR at least up to the standard.

5. Conducting, another detailed research on the implementation of BPR and its impacts in the service provision to the customers is also recommended.

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APPENDIXES

JIMMA UNIVERSITY

COLLAGE OF EDUCATION AND BEHAVIORAL SCIENCE

DEPERTMENT OF EDUCATIONAL PLANNING AND MANGEMENT

Questionnaire for Instructors and Administrative Staffs

The purpose of this questionnaire is to collect the necessary information for the study entitled "The Implementation of Business processing re-engineering (BPR) in TVET institutes in case of Jimma Zone, Oromia Regional state". More specifically, it seeks to have your views and opinion about the planning, implementation, achievements and challenges of BPR in TVET institutes in Jimma Zone. The information you provide will only utilized for the purpose of this research and your personal information will be confidential. You are thus, kindly requested to complete the questionnaire by reading the instruction and each item in the questionnaire carefully before you give your response.

General Direction

- Do not write your name
- Put **(x)** mark in the boxes/tables for your responses to close ended questions.
- Use the space provided to express your opinion for the open ended questions.

Section 1 Background of Respondents

1. General information

1.1. Name of TVET _____

1.2. Current position in the TVET A. instructor ☐ B. Administration staff ☐

2. Socio- demographic characteristics

2.1. Age _____

2.2. Sex A. Male ☐ B. Female ☐

2.3. Educational Background A. Diploma ☐ B. BA/BSC ☐

C. M.A /MSC ☐ D. Level _____

D. Others specify _____

2.4. Experiences (in year) _____

1. Planning of BPR

In the implementation of BPR, the initial step is planning. The following are major areas that the instructors, the staffs and the institution leaders are expected to involve in the preparation and planning of BPR. Please indicate your level of agreement/views on the degree of your involvement in BPR planning by putting "**X"** mark on one of the box provided to each possible expectation.

Key: (5) -Strongly agree; (4) -Agree; (3) - Partially agree; (2) -Disagree (1) - strongly disagree

No	**Planning items regarding to BPR**	Scales				
		SA 5	**A 4**	**PA 3**	**DA 2**	**SDA 1**
1.	Organizational major problems were identified/assessing the organization					
2.	Prioritizing the need of the organizations					
3.	Determine the quality expected from the implementation of BPR					
4.	Develop organization BPR document after reaching to the common agreements					
5.	Develop the goal, mission and vision of the organization					
6.	The documents described the role and responsibilities of core processor and the officers					
7.	Providing training regarding BPR to the whole staff/employees in the organization					

If other please specify it _____

_____

_____

2. Implementation of BPR

The following are major areas that that are expected to be implemented in BPR. Please indicate your views regarding each items by putting "**X"** mark on one of the box provided to each possible expectation. Therefore, you are differently to respond in accordance's to the implementation schemes.

No	Items related to implementation of BPR	Variables	Put your Response here using "X"
1.	How often the core processor give instruction to help employees perform the task they assigned	Always	
		sometimes	
		Never	
2.	Up-to-date teaching -learning/working material are available timely to accomplish your task	Yes	
		No	
3.	Employees are empowered to make decision pertaining to their work	Yes	
		No	
4.	Employees are engaged to discuss their performances to evaluate results	Yes	
		No	
5.	Do you involved in weekly evaluation meeting session to improve defects in your work	Yes	
		No	
6.	How often does your institution apprising your job performances	Always	
		Sometimes	
		Never	
7.	Is their rewards schemes in your institution after BPR implementation	Yes	
		No	
8.	How often the organization deliver services properly to the customers	Always	
		sometimes	
		Never	
9.	How often the officers as well the core processor communicate through reporting mechanism	Always	
		Sometimes	
		Never	

If other please specify it _____

_____

_____

3. Major achievements because of BPR

The following are believed to be some of major achievements due to the implementation of BPR. Therefore, you are expected to indicate your views on the degree of achievements in the implementation of BPR by putting "**X"** mark on one of the box provided to each possible expectation.

Key: (5) - Strongly agree; (4) -Agree; (3) - Partially agree; (2) - Disagree (1) - strongly disagree

No	***Items related to major achievements due to the implementation of BPR***	**Scales**				
		SA 5	**A 4**	**PA 3**	**DA 2**	**SDA 1**
1.	Due to implementation of BPR in my institution the time that my work/task demands is reduced					
2.	Employees feel comfortable with the new working environment created by BPR					
3.	Staff members are motivated with BPR progress					
4.	Empower workers to be decision makers					
5.	Contributing to the improvement of quality of teaching – learning/training					
6.	Minimizing work load					
7.	It enhances creativity and innovation					
8.	Maximizing organizational profits by satisfying the need of the customers in the organization					

If other please specify _____

_____

_____

4. Major challenges in planning and implementation of BPR

The following are some of the major factors that believed to affect the implementation of BPR. These challenges are related to organization, leadership and employees. Please, indicate your level of agreement by putting "X" mark in one of the boxes provided for each possible factors.

Key: (5) Strongly agree; (4) Agree (3) Partially agree
(2) Disagree (1) strongly disagree

No	Items for Each Challenges	Scales				
		SA 5	A 4	PA 3	DA 2	SDA 1
4.1.	**Challenges due to organization**					
1	Structural rigidity of the organization					
2	Culture of the organization					
3	Lack of available resources or allocation of less fund for BPR					
4	Lack of educated human power					
5	Improper defining the mission, vision and objectives of the organization regarding to BPR					
	Challenges due to leadership					
1	Lack of commitments					
2	Poor communication to the management challenges					
3	Lack of conducting training and educations					
4	Failure to define objectives					
5	High bureaucratic ideology					
	Challenges due to employees					
1	Lack of commitments					
2	Less team work habit					
3	Not considering the organization changes like their own changes					
4	Recognizing BPR as downsizing only					
5	Sticking themselves with time signature and reporting as main duties in their organization					

If other please specify_____

In your view what should be done to minimize the various challenges and solve the various problems that are facing the implementation of BPR.