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BUSINESS PROCESS REENGINEERING AND ORGANIZATIONAL PERFORMANCE OF THIRD PARTY LOGISTICS SERVICE PROVIDERS IN ETHIOPIA: THE CASE OF COMET TRANSPORT S.C.

BY

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Abbreviations

- **3LSP**: third party logistics
- **BPR**: business process reengineering
- **EFTC**: Ethiopian Freight transport corporation
- **GDP**: Gross Domestic Product
- **KPI** : Key Performance Indicator
- **ROA** : Return on Asset
- **SPSS** :Statistical Package for the Social Science
- **TAT**: Turnaround Time
- **TDT**: Truck Down Time
- **TKM:** Total Ton Km
- **TQM:** Total Quality Management

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Abstract

This study is about Business Process Reengineering and Organizational Performance of Third Party Logistics Service Providers in Ethiopia a case study of Comet transport. The research aimed to identify the impact of implementing BPR on the efficiency and effectiveness of 3PLS providers to be assessed by evaluating presence of significant increase on firm level performance. As BPR promises to bring about dramatic changes in firm performance outcomes, specific operational and financial performance indicators were selected for evaluation. As the study was a case study, Comet Transport Share Company was selected as a study unit and 12 years of performance data was compiled along with other pertinent information gathered through interview. Besides, BPR implementation report and other relevant documents were analyzed. Extensive literature survey was undertaken to underpin relevant performance indicators appropriate and fit to evaluate the performances of third party logistics service providers. The performance data compiled for the study was analyzed by SPSS statistical package and student t test comparisons was made pre and post BPR performance indexes. On the bases of performance data in between (2002 and 2014) E.C. Key operational and financial performance measure indexes namely Average truck turnaround time, Average Tariff per ton per km, Load factor, Labor productivity, Return on assets, profitability ratio ,cost to revenue ratio, Km travelled per year, freight ton per km, number of trucks available for operation throughout the year, truck down time throughout the year, Actual capacity utilization and other drive indexes ; Comet has exhibited significant improvement both on operational efficiencies and effectiveness as asserted by increase financial index. With 95% certainty, the study asserted the dramatic increase in all mean performances especially in revenue, profitability, reduction in cost to revenue ratio, truck availability, tone KM coverage, tonnage lifting , load factor and other indexes utilized to measure performances. Poor performance was observed with regard to reducing truck down time, and employee turnover indicating area of improvement works to be further investigated by the management of Comet.Based on strong findings of the study, the researcher concludes positive outcome of implementing BPR to have resulted enhanced performance increasing operational and financial efficiency and effectiveness and advices other companies to follow suits to reap of gains achieved by Comet Transport Company.

Key words: BPR,Revenue,profitability ratio,Km travelled per year, load factor, freight ton per km, number of trucks available for operation throughout the year, truck down time, actual capacity utilization.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Reviving from more than three decades of conflict, destruction and economic malaise; Ethiopian economy is witnessing historically un-paralleledprogress,although the progress isoftencriticizednot to be adequate (Obidegwu, 2004. p. 5).The acclaimed wide range development in the economy is evidenced by expansion of trade in manufacturing, industry and service sectors. Consequently, this growth has opened opportunity to logistics providing firms linked at back as well front ends of supply chain. Manufacturing and service companies these days have shown tendency to outsource logistics services to reduce cost, increase productivity, enhance client satisfaction and expand profit margins. The move to focus on core competencies by service and manufacturing companies has opened enormous opportunity for logistics service providers or Third Party Logistics Service Providers. Given this situation, there is a shift in establishing private transport logistics service providers which one is exhibited by the withdrawal of Ethiopian state by privatizing companies to private owners and endowment funds and the setting up of new ventures from scratch by entrepreneurs who has sought much return from engaging in the sector. As the competition between inter-industry players is intensifying, logistics enterprises are implementing performance enhancementstrategiessought to enable companies to adopt survive and sustain their activities. Such survival strategies has been widely adopted by the remaining state owned companies as they are competing with privately owned firms who have the flexibility to exploit advantages through fastdecisionmaking unlike the state dependent on following stringent stacked government bureaucracy, indecisive and inflexible to take advantage of business opportunities.

From among management enhancement tools, Business Process Reengineering (BPR) was sought and taken as standard medicine in almost all public institutions and state owned business organizations and hence implemented to increase performances and better manage the services. ***Bekelecha***, ***Comet*** and ***Woyira***transportshare companiesare state owned transport enterprises that implemented BPR foreseeing increased performance and better customer satisfaction. It is these developments and attempts of implementing BPR, that instigate the conduct of this research with the objective to better understand and explain the impact of BPR on third party logistics service

providers.

Prior to the demise of the ***Derg***regime, the Ethiopian Freight Transport Corporation was a sole monopoly institution responsible for handling of dry as well liquid cargo shipments to various zones established as ***Ketenas***. The Corporation did not only handle its trucks, but it also centrally commanded and coordinated dry and liquid cargo dispatch of fleets owned by private entrepreneurs. It also served as war logistics as abackbone engaged in the deployment of military equipment, rations and even used for deployment of troops to war fronts.

Following a change of government and a swing of concomitant political and economic ideology, the enactment of Proclamation Number 14/1992 in May1992, haveled to landmark amendment to Ethiopian freight transport industry; through deregulation of the transport sector. Ethiopian Freight Transport Corporation (EFTC), the state operated monopoly and transport giant, that operated more than 1200 heavy trucks at the time, was broken into four semi-autonomous enterprises; namely***Comet;Sheblea;Woyiraand Bekelcha***. In a move lessen damages to retrenched employees the state organized them by safety-net program and helped them to establish a transport company called ***Abyssinia***. The newly born companies were granted with significant asset and working capital and were also allowed to operate independently with greater autonomy. Following the deregulation of the sector, the companies started to face fierce competition from mushrooming private freight transport companies as well from the much favored party-state enterprises which were established from war booty by endowment scheme. The deregulation move has diluted the status public enterprises enjoyed for so long as protection they accustomed to was lifted in a drastic measure. The management of the enterprises were put to test from vibrant private competitors which has invested on new fleet equipment's and fast decision making critical for success in logistics sector.

1.2 Overview of Logistic Service Providers

Logistics Service Providers (LSP) or alternately Third Party Logistics Service Providers (3SPLP)are firms that carry out the logistics activities of one or more companies within the supply chain to a vendor, primary manufacturer or user of product or services; functioning as an intermediary in between the industry and services providers; to suppliers, wholesalers and retailers (A.Aguezzo 2012, p. 3). According to Aguezzo, the main functions of logistics service

providers are concentrated in areas of warehousing, transportation and distribution, customer services, inventory and logistics management.

Internationally seen, logistics service provision is a business activity with stiff competition and dwindling profit margins (Christopher, 2002). All together, the industry is characterized by cutthroat competition in between players. Specially, the transportation and distributions logistics sector is a business activity hard hit by features of cutthroat competition. (Lemoine et al. 2003).The prevailing competition has forced third party logistics providers to implement various reform schemes to achieve goals of increasing performances, excel competitors and retain market share.

1.3 **Statement of the Problem**

The advent of well-established third party logistics providers in Ethiopia counts only few decades. Performance enhancement was not threatening survival quest in the past decade where, state owned firms enjoyed returns in the absence of stiff competition and even were not accounted to losses they incurred. However, currently the increasing competition between players is forcing state owned firms to adopt different performance enhancement strategies. However, the implementation of change management tool is expensive, time taking and costly. This entails that performance improvement schemes should be evaluated to ascertain whether the promised benefits are accrued. Third party logistics providers should evaluate the benefits accrued from implementing different management systems; to value why such big and expensive commitments succeed or fail and further to know how much the organizations have benefited from its commitments. Even if frequent BPR implementation study have been conducted on civil service institutions, to the knowledge of the student-researcher, there has not been a research made on Ethiopian third party logistics service providers with regard to performance changes accrued as result of change management tool.

CometTransport S.C. is a parastataltransport organization which is one of inborn of the former Ethiopian Freight Transport Corporation. It was established in 1993 inheriting mix of professionals with operational and functional units, experienced management and transport management system, better qualified workforce and significantly high value own facilities like workshops equipped with basic maintenance equipment, terminals, parts and supplies stores, fuel

depots and other required property at their premises for the smooth operation of the business. As the result of the dissolution, it also inherited big warehouses. Following change in management and strong urge from the state through the governing board on the enterprise to display significant changes in terms of quality of services and performances, the company implemented BPR in 2008 and 2009 and has continued to operate with the reengineered process. Comet Transport S.C. has started implementing BPR with the intention of fetching fundamental and dramatic changes to overall organizational performances like quality, speed, revenue and return on investment. It is almost four years since BPR implementation kick started. Despite huge interest in planning and implementation of BPR in Comet Transport S.C. and other civil service organizations, the progress made towards achieving intended results appeared to be diverse. There is much doubt and debates as to the benefits accrued from implementing BPR. This is revealed by debates conducted by executives; as many practitioners applaud and support meaningful performance increase by implementing the change strategy, while others reveal the ineptness of the implementation of the tool and cast doubts on results said to be achieved.

Researches made concerning thorough analysis onthe effect of BPR on organizational performance of third party logistics in Ethiopia is at its infancy and needs further and continued study. More studies are needed to have in depth assessment of the impact of BPR on organizational performance and examine its major challenges constraining the realization of intended results. A variety of studies made by (Jamaiah***et al*** (2012); Kabiru (2012); Tesfaye (2010); Degu (2013); Wanna (2010)) have assessed the effect of BPR on organizational performance and applying quantitative model. Findings from these studies revealed mixed results regarding the effect of BPR implementation on organization performance. Some studies suggested that BPR contributed to efficient and effective organizational performance while others argued it is not. But, these studies did not get into the depth of examining level of organizational performance using both financial and non-financial indicators.

As to the knowledge of student-researcher, little or no researcher has been made in Ethiopia to examine the relation between BPR and enterprise level performances of logistics service providers using descriptive and inferential approaches. Besides, unlike earlier studies done on manufacturing, banking and service sectors, this study, however, focused on the third party logistics service provider, “Comet Transport S.C.,” and applied a combination of descriptive

statistics using financial and non-financial performance indicators as well inferential (paired t-tests). An in depth interview with relevant management and experts was done to validate the findings resulting from BPR implementation and key challenges working against organizational performance in Comet Transport S.C..

Accordingly, the purpose of this study is to assess the significance of business process reengineering onenhancedorganizational performance and pinpoint major accomplishments and debacles on overall firm level performance outcomes exhibited by challenge in Comet Transport S.C.

1.4 Gap in Research

The history of management thought highlights that all management scholars have been mainly concerned with issues of improving individual and organizational performances. As covered in chapter two of the literature survey; markedly starting from the early 1990s, BPR has become one of powerful management tools deployed by executives to improve the performances of modern corporate and government organizations. To easily grasp the variety of researches made on BPR, Kemal, Yasin and Zafer (2010), formed classification frameworks and categorized research outputs in to four major researches groupings. According to Kemal and etal (2010) the largest research stream investigated lessons learned from BPR initiatives and attempted to identify critical success factor. Leading authors like Stoddard, D.B. and Jarvenpaa (1995) are amongst some who made researches in the area. Accordingly, most of the papers in this category are case studies. Other research teams made studies focusing mainly on depicting inter-organizational aspects of BPR. These categories of researches are leadingly proponed by authors like, Riggins, F.J. and Mukhopadhyay (1994). Whilst a third stream of researchers examined the effectiveness of BPR methodologies, tools, and techniques like sighting researchers Nissen ME (2001) and others. The fourth categories of researchers have investigated organizational impacts of BPR, especially depicting its relation with enterprise level performances. Yasin Ozcelik (2010) is mentioned as lead author in these aspects.

Many case research studies are also made on manufacturing, service and banking sectors. Jamaiah H. Yahaya and etal (2012) made an analysis on small and medium enterprises and have ascertained that improved work process to have resulted in increasing performances. Kabiru

Jinjiri (2012) also evaluated the impact of process redesign and overall bank service improvement and found significant relation in between process redesign and performance enhancement. In Ethiopian context, many researches and thesis works have been made on BPR. The researches have most often and almost exclusively have concentrated on public institutions as BPR was adopted major cure to remediate the ailing and inefficient public service sector. Among many Tesfaye Debela (2010) have evaluated the implementation of BPR on Ethiopian public service institutions; while Naod Mekonen Jun (2011) have evaluated the implementation of BPR on the Ethiopian public universities. Wanna Wakie published his thesis (2010) by conducting research with the purpose to explore the effort made by (Ethiopian Revenue and Customs Authority (ERCA) in achieving goals set by BPR, whilst Abdurazak Zyad and Mohamad Kassi (June 2011,and June 2010) had conducted research to identify BPR and employee performances at selected public institutions and Addis Ababa City Administration respectively.

1.5 Research Question

In line with the problem statement, this study was expected to answer the following research questions.

a) What is the nature and extent of Business process reengineering made by Comet Transport Share Company?
b) What significance does BPR had on the operational performance of Comet Transport S.C.?
c) What general outcome BPR had on financial performances of Comet Transport?
d) Which performance components of state owned third party logistics service providers got most affected by BPR implementation? And which factors stay unaffected by BPR?

1.6 Objective of the Study

1.6.1 General Objective

The general objective of this study is to assess the significance of BPR in enhancing the overall organizationalperformance of Comet Transport S.C. Specific objectives of the research

1.6.2Specific Objective

a) To determine the nature and extent of Business process reengineering made by Comet Transport Share Company.
b) Assess the significance of BPR on the operational performances of Comet Transport S.C.
c) To determine the performance components of state owned third party logistics service providers which got most affected and unaffected by BPR implementation.
d) Assess major KPI financial performances factors in Comet Transport S.C.
e) Determine the outcome BPR on financial performances of Comet.

1.7 Significance of the Study

The study attempted to evaluate the significance of BPR on the overall organizational performance of Comet Transport S.C. and major factors constraining performance. Conducting a study of this sort will be important for the following major reasons:

- the study may provide Comet Transport S.C. management with an independent assessment of the effect of BPR on organizational performance, major challenges that constrained BPR implementation and some suggestions proposed to overcome them and ultimately contribute towards the revisiting of some of organizational policies that might help for successful implementation of change management strategies;
- the findings of this study may also be used as a source of information for those who are interested in conducting research on the effect of BPR on organizational performance of third party logistics service providers;

1.8 Scope of the Study

This study focused on Comet Transport S.C. and is limited to selected performancemeasurementsin the logistics industry. The data were limited to assessment of the twelve years period of performances of which five years (2003-2008) before BPR implementation and four years (2010-2014) after BPR implementation.Years2008-2009 were considered as planning and preparatory period of BPR. The study cannot measure firm level performances from the perspective of client'ssatisfactionrelating to any changes associated with BPR.This study will also notmeasure the satisfaction of employees by failing short of measuring employees' motivation,moraland the working conditionssuitableness. The study does not address

the society's point of view towards the corporate in terms of leading the business in socially responsible way.Thus, the study will be limitedto Comet Transport S.C. and solely concentrate on firm level assessmentofBPRimplementation on the bases of some selectedKey Performance Indicators (KPIs) which have been widely adopted to evaluate performances in the transport industry.

1.9 Organization of Research Report

The study is divided into five chapters. Chapter 1 deals with highlight on introduction, background of the study, statement of the problem, research questions, objectives and related topics. Chapter 2 will deal with the theoretical underpinnings of performance management in third party logistics providers, change management tools adopted with especial focus on BPR implementation and related literature on conceptual issues that will provide framework for the study. Chapter 3 will be devoted to deal with research design and methodology. Chapter 4 will be devoted to cover the results and discussion part of this study. Finally, Chapter five will present conclusion and recommendation.

Chapter 2: LITERATURE REVIEW

2.1 Introduction

This chapter attempts to covers management thoughts and perspectives rearing different management strategies and tools with special focus on BPR, performance measurement, activities regarding third party logistics service providers and key performance indicators adopted by third party logistics providers to assess performances. Other than providing holistic theoretical review to see on the business practices, it will present the framework of the study that will serve to conduct the underpinning research.

2.2 The Drive for Implementing Change Management Tools

In the era of technologyglobal competition and rapid change in customers need, change has become a necessity not an option in such environment of massive competition and drastic technological changes. This has become daunting task and of a great concern for organizations and as they are required to plan accordingly and improve productivity. In this context, there has become a trend to implement different management tools and approaches with the aim of increasing productivity and enhance efficiency. One of this approaches or management tools is Business Process Reengineering (BPR). BPRis a change management approach aimed at achieving quantum improvement in business performance. Decade long exploration andassessment of global business environment has unravelednever declining interests to implement BPR so as to improve their business performances.This rising interest to implement BPR is mainly a direct result of current difficulties on the global economic climate and tight business conditions (Prosci Report on Critical Business Management, 2001).

2.3 The Concept of Business Process Reengineering (BPR)

Many authors define business process re-engineering in different ways. Hammer and Champy (1993:32) define BPR as “the critical analysis and radical redesign of existing business processes to achieve dramatic improvements in critical contemporary measures of performance, such as cost, quality, and speed.” Davenport and Short (1993:38) defined as “the analysis and design of work flows and process within and between organization”. Linden (1994:70) defines BPR as the critical analysis and radical redesign of existing business process to a chive break through

improvement in performance measure". All in all, Business Process Reengineering is the redesign of business processes and the associated systems and organizational structures to achieve a dramatic improvement in business performance. The business reasons for making such changes could include poor financial performance, external competition, and erosion of market share or emerging market opportunities. Business process reengineering has some fundamental critical features to be explained here in after in detail.

2.4 Fundamental Rethinking and Radical Design

The most common feature of reengineering steams from belief of the fundamental rethinking and radical redesign of business processes to achieve dramatic improvement in critical contemporary measures of performance, such as cost quality, service and speed' (Hammer and Champy, 1993:32). Hence, reengineering can be characterized as refinement of an organizational or departmental structure in order to streamline business process. The major point in the definition is that an organization can achieve dramatic improvement in performance through radical redesign of its processes. BPR calls for complete examination of the old practices, principles, and assumptions. For example, the non-valuating activities in the process of customer satisfaction and total performance of the organization is identified and eliminated. (Ibid)

2.4.1 Breakthrough Notion

The other aspect to the definition of BPR is the notion of breakthroughs. The point as it is understood in the definition is that it assumes reengineering existing process is not good enough, and therefore existing processes has to be replaced or even developed. Thus, the major assumption of the definition connotes that 'A properly reengineered process will provide major improvements in performance, and achieving breakthroughs in providing value to the customer satisfactions, product quality and services, efficient use of resources, and the like' (Driva and Hunt, 1994: 126).

According to advocates of BPR, re-engineering is not about improving what already exists. Rather it is about throwing it away and starting a new one. BPR viewed radical change as "throwing away the old". However, practical facts ascertained that certain existing processes could be working well and hence did not need to be discarded.

2.4.2 Early Critiques of BPR

Many critiques have been made on the change management tool BPR, as the contextual and ground fact leads to the development and presentation of two strong and sound arguments up on the pioneers of reengineering who defined and promoted BPR. Critics such as, Hauser and Paper (2007) and Kemal (2010) and others in opposition state that 'the definition of BPR is flawed in its perspective of change and its approach that rarely recognizes the role of human element, the bedrock for reengineering process.

Kemal etal (2010:7-8) debunking the definition of BPR indicated two major failures. In their assessment, the scholarblamed the definition for reducing the role of employees hence becoming insufficiently appreciative of the human dimension. Secondly, the approach viewed change as radical as "throwing away the old" but certain existing processes could be working well and hence did not need to be discarded, are substantive criticisms against the broadly accepted and widely applied definitions of BPR. (Ibid)

The main champions of BPR, Hammer in 1996 and Davenport and Short in 1995 confessed having made mistakes when defining and promoting BPR (Kemal, 2007:24). However, Hammer (2001:62) as cited in Kemal argues and asserts that the most important word in the definition and approach of BPR is "process" rather than "radical" in emphasizing change and underpinning reengineering. This new view of BPR is also shared by its critics. BPR, as understood today, focuses on business processes and includes both radical and incremental process changes, which should be customized to the problem and context.

Consequently the recent conception of BPR modified by Hauser Paper (2007:67) defines BPR by replacing "radical" with "meaningful" changes. This modified approach emphasizes on the notion that the appropriateness of process changes for the business context is more important than whether they are drastic or incremental. In fact, the definition of BPR published in a number of literatures and articles has increased since 2001, albeit this modified definition of BPR is adopted for the purpose of this study.

2.5 Brief History of BPR

During the early 1990s, BPR was introduced for the first time as a tool used for incorporating change .The result produce by the efficient utilization of this approach over decades proved and

propagated its fame for successful and useful instrument of change. Initially, according to Hammer (1990) BPR was adopted by US based private firms as a replacement of Total Quality Management (TQM), a Japanese approach. The replacement of TQM by BPR went as fad, even though BPR was a new approach of process management and many organizations implemented it to improve organizational performance in short period(Batton, 1994: 22 Cited on Gore 1999).

Following the publication of fundamental concepts of BPR by Hammer (1990) and Davenport and Short (1990), many organization have reported dramatic benefits 'gained from successful implementations of BPR.' However, despite the significant growth of the BPR concept not all organizations embarking on BPR projects achieve their intended results they seek. Hammer and Champy (1993) estimates that as many as 70% do not achieve the dramatic results they seek. Thereafter, as more executives expressed skepticism about the success of their BPR initiatives and as researchers reported disappointing results on those initiatives perception towards BPR started to change (Davenport and Beers, 1995:7).

In the middle of this mixture of publicities, BPR have continued to be an even more strategic tool for firms. Champy (1997:25) states that process changes and reengineering continue to enjoy significance popularity and relevance in practice. Impacts of BPR on organizational restructuring efforts, quality improvement programs enterprise resources planning and the like are some of the benefits attracted businesses and organizations to adopt it as a viable instrument of change and growth.

Hence forth, traditional functional management approaches were no longer seen as appropriates in a time where quality innovation and customer services were of paramount importance. There was a real need to implement processes that would enable bushiness to meet the ongoing demands of its market place. The apparent plausibility of the approach suggested by Hammer (1990) and others for attaining these goals had led to the rapid up take of Business Process Redesign.

2.5.1. Disciplinary Roots of BPR

BPR as a change management initiative draws its tools and techniques from variety of well-established disciplines such as Industrial Engineering, Quality Management and Systems Analysis. Rigby (1993:25) remarks that many of BPR's attributes can be traced back to works done by early researchers of organizational system and design. According to Rigby the

disciplines served as a base to introduce and establish incremental change techniques like activity value analysis or core process redesign. Organizational system and design concepts discussed here, in many respects are earlier incarnations of BPR.

2.5.2. Relation of BPR with Other Change Management Tools

There are a number of features which distinguish BPR from other change management approaches. These include BPR's 'radical, largely non incremental nature, claim of rapid pay back for money and time invested, heavy involvement by management and consultants' and its strong link with enabling technologies.

Batton (1994:61) mention that BPR has different approaches that provide variety of change tools for businesses and enterprises. Improved tools and approaches associated to features of BPR mainly align to its earnest promises to deliver dramatic and fundamental changes in a way business is made. Improvement tools attributed to BPR consists of 'business process re-engineering i.e. identifying the dramatic points in work environment, Business Process Improvement (BPI) where addressing the improvement tool, like the continual improvement approach in Total Quality Management, Business Process Outsourcing (BPO) where presenting new concepts of using the outsourcing service while integrating it in the organizational business processes,' and others.

Earlier to the introduction of BPR, the main emphasis of change management instruments has largely been focused on improving quality (Hammer, 2001:76). As dominant change management tool, many corporations have adopted a new management operation philosophy widely known as Total Quality Management (TQM). The major understandings of TQM 'are continuous effect to improve products, processes, and operation to better satisfy customer needs employee empowerment in decision making and a team approach to identify, prioritize and change targets for improvement'(ibid).

Critiquing TQM, authors presented its shortcomings citing how modern view of quality holds it as insufficient for product attribute to meet customer requirements when even other factors drive competition in between industry players. Ramberg (1994) asserts that enterprises who have embraced the principles of total quality realized that in many cases there is need for more dramatic improvements' in productivity competitiveness and profitability. This has brought a

paradigm shift from a focus on continuous and incremental performance and improvement approach to a need for a radical and more dramatic performance improvement (Ramberg, 1994:51).

BPR also is different from TQM approach, despite the fact that both are based on the premise that superiority in business process performance is critical to competitiveness. The major differences in philosophy as well approach is revealed on their stances and approached to motivation, technique, objective, result and the business circumstances in which they are applied (Gulden and Reck, 1992:59). TQM favors' steady incremental gain and May often attained. However, TQM can lay the groundwork for BPR and provide a foundation for a focus on processes. According to advocates of BPR, re-engineering is not about improving what already exists rather, it is about throwing it away and starting a new one. BPR is not restructuring, automation, downsizing or some other business improvement program (ibid).

According to Hammer (1990:32), automating the old processes in a given organization perhaps might simply enhance more efficient ways of doing the working kinds of things. This from a perspective of re-engineering, however, is a continuation of non-value adding activities. When it comes to restructuring and downsizing. They are not substitute for BPR rather they could be its consequences incidentally or by default mostly what force organizations to go for BPR do not stem from their process structures. Therefore, one way to eliminate the problem is by re-engineering the process.

Gotelible (1993) briefly stated that a combination of business imperatives and technology availability underpin the motivation of enterprises to commence BPR. Organizational and operational, technological and policy sub-straight and super-straight pressure and effects increased businesses and organization interest for change introducing BPR initiatives. A growing realization of intensified industry competition with in domestic markets and from overseas, interests to achieve economies of scale and cost, incompatible or totally different organizational cultures, work practice and information systems, a wide diversity of new technologies, deregulation, regulation or privatization are the main factors calls for complete re-examination of the old practices, principle and assumption.

Essentially, BPR amounts to these radical changes affecting one or more business processes. It also requires across functional effort usually involving innovative applications of technology.

Business process definitions are considered now as one of the key solutions for such kind of challenges and pressures. BPR is now being under taken by a substantial number of organizations to realign their operation in order to cope with these circumstances.

2.6 BPR Implementation Frameworks and Approaches

Once, an organization decides to go for business process re-engineering, whether it is private or public, it is supposed to take a certain approach. As BPR literature shows there are several approaches and frameworks in the implementation of BPR project initiatives. Many BPR engineers designed and presented implementation frameworks, methods and techniques of BPR on the bases of existing literatures and the experiences of enterprises and firms.

2.6.1. Six Phase Approach

Mansar and Reijers (2007) focused on the concept of redesign known as Business Process Redesign (BPR). The aim of the approach was to find out the best practices in implementation methods that yield the higher value and impact organizationally performances and productivity. Based on the selection of ten best practices of BPR in the past Mansar and Reijers (2007) developed BPR implementation framework that has six major components.

The best practices that are considered as frequently used in BPR initiatives are found out as "customers, products/operation view, Behavioral view, external environments, organization structure, and organization population" (Mansar and Reijers, 2007:122). The implementation approach component according to authors of the model consists of six main dimensions of practices. These as identified by (Mansar and Reijers, 2007) includes, "Task compositions, integral technology, empowerment, order assignment, specialist – generalist, integration, parallelism, and numerical involvement" (ibid). Moreover, Mansar and Reijers (2007) concluded that customers are the key reasons for redesigning of business process and the best practice most frequently adopted for that purpose was of task elimination (for fast and efficient service) and inclusion of IT in organization.

Motwani, Kumar, Jiang and Youssef (1998:8) designed implementation framework on BPR that consists six phases. According to this approach 'understanding of objectives and commitment forwards the initiatives, vision, identifying areas of real concern and bench marking, conducting a pilot study, implementing BPR projects organization wide, monitoring and evaluating the

initiative to regularly monitor the success of the project' are the major components or stages of BPR implementation model developed by the authors.

2.6.2. Ten Step Approach

Carr and others (1992:21-29) also designed BPR implementation framework which has ten implementation steps. Luo and Tung (1999) developed a framework of Business Process Model (BPM). The model aims to identify appropriate business process analysis methods. Business process model as defined by Luo and Tung (1999:12) is "the techniques for characterizing and analyzing business process." The approach developed a model that helps to select the right approach to BPR implementation.

Mostly, in the implementation stage there is a clearly defined "re-engineering or process redesign blue print" (Champy, 1995: 165). The blue print may contain all the necessary information to carry out the re-engineering effort. This has been acknowledged by many BPR advocates. However, among other things implementation still requires awareness, personnel adjustment and training, change management plan, empowerment, and the like.

2.6.3. Recommended Approach to Implement BPR

Among the various implementations approaches as the BPR literature shows, the five-step approach proposed by Davenport (1993) is the most pronounced approach that most successful organizations were using when re-engineering their processes objectives. Moreover, Broadbent and Butler (1993:26) Davenport (1993) implementation approach put in place inclusive redesign process implementation strategy has features that asserts continuous improvement in the redesign processes and enterprise performance and productivity.

According to Davenport (1993:41) the steps are "Developing the business vision and praises objectives, identifying the processes to be redesigned, understanding and measuring the existing processes, identify IT levers and designing and building a prototype of the new processes respectively."

The first step is developing the vision and objectives of the process (i.e. cost reduction, speed, product/service quality improvement, etc. Then identifying the processes that are to be redesigned comes next. Here the various processes in the organization are identified and prioritized in order that they should be redesigned. Thirdly, ensuring proper understanding of old

processes by BPR teams. Next is to make sure thatIT is available with teams that have the skills required. Finally, design and build a prototype of the new process and then test on segment of the organization as a pilot before full-scale implementation. However, in the course of BPR, from start to end the efforts pertaining awareness creation, training, communication to all concerned and resource mobilization including ITCs and other infrastructure is indispensable.

2.6.4. Relation between BPR and Enterprise Performance Enhancement

Since BPR projects typically involve substantial investments, a justification of their expected returns is a serious concern. According to internationally Known research center Prosci (2002) published report on BPR project initiatives, return on investment and productivity and performance of businesses and organization based on a survey of 227 organizations from 53 countries varied results have been revealed. According to this report, 73% of the respondents indicated that they met or exceeded their objectives with their BPR projects, a clear sign of success for BPR.

Fried (1991), King (1991) and Olson (1992) states that 'BPR is a change mechanism which if successfully implemented, can assist organizations to compete effectively in a chosen market, and to realize payoffs on this (BPR) costly initiation or investment. Today, 'more than ever, firms face a rapidly changing business environment and high consumer expectations' (Olson, 1992:21). In such an environment, 'the design and implementation of sound business processes are extremely important in achieving the required business performance and flexibility' (Roberts, 1994:25).

Given such kinds of effects that still surround BPR, practitioners would clearly benefit from empirical research that investigates the relationship between BPR implementation and firm performance, since the result of such kind of researchers could provide guidance in estimating and documenting the potential impact of BPR projects on productivity and performances of organizations and businesses.

Devaraj and Kohil (2000:45) indicated that the limitation in this kind of researches which investigates the relationship between BPR projects and firm performances saying "… the literature in BPR implementation is rife with anecdotal evidence and short on rigorous empirical evidence of performance impacts of BPR." There is a definite need to better measure BPR

implementation through objective measures, and to relate BPR to organizational performance in the context of other variable that also affect performance.

2.7 Models to Measure Impact of BPR on Performances of a Firm

There are different models applied to measure the impact of BPR on overall firm level performances. Here onwards we will give highlight on different models used to measure performances.

2.7.1. Business Value Complementarily Model

Kemal (2008) empirically investigated whether business process reengineering (BPR) is associated with enhanced firm productivity and overall performances. The study made by Kemal employed a standard variable model to analyze BPR effects on fixed asset to measure firm productivity and performance. Moreover, others like Ahmad Ragab (2011), developed "process interdependency model" to measure BPR impact on productivity and performance of firms.

Barau etal (2010) proposes a business's value complementarily model to measure impact of BPR on enterprise wide performance and productivity based on a theory of business value complementary introduced in economics by edge worth. Some other studies on the organizational impact of BPR use mathematical, analytical and strategy modeling to understand the condition on context that favor various type of reengineering efforts affecting performances.

2.7.2. Decision Model, Analytical Reengineering Strategy Model and Economic Model

Buzacot (2001), Orman (2000), introduced decision model and analytical reengineering strategy model respectively while Seidmann and Sundararjanintroduced economic model. The models in one way or the other has immensely contributed to the development of functional and rigorous model that can be applied in a case study which investigates the effect of BPR on enterprise level performance and productivity relationships. One that can be mentioned in this regard is the model developed by Kemal Altinkmer in (2008). The refined model introduced by Kemal has highly benefited from previous studies and models. The studies progressed and evolved into research which systematically investigating the productivity and performance impacts of BPR on enterprises. These theories and models would generally benefit process-reengineering researchers and a study aimed to investigate and evaluates the productivity and performance

effects of BPR widely at the level of enterprises.

2.7.3. Tying up BPR Initiatives to Success and Failures of Enterprises

Despite the significant growth of the BPR concept, not all organizations embarking on BPR projects achieve their intended results. Hammer and Champy (1993: 127) estimate that as many as 70 percent do not achieve the dramatic results they seek. Alter (1994:7) supporting the issue further states that several annual surveys of critical information systems reflects executives failures to reflects BPR projects failure in relation with benefits in productivity and performances. In fact, the registered failures in the initiatives are attributed to several factors.

This mixture of results made the issue of BPR implementation very important. BPR has great potential for increasing productivity through reduced process time and cost, improved quality, and greater customer satisfaction, but it often requires a fundamental need to be checked against several success/failure factors to ensure successful implementation, as well as to avoid implementation pitfalls.

Majid Al Mashari and Mohamed Zairi (1999) based on the relevant literatures review and critical analysis of several implementation processes identified five main factors that cause success and failure in the BPR project implementation initiative process. These factors were distilled from various articles and empirical research on BPR implementation. Following, the factors were categorized in to a number of sub-groups each representing various dimensions of change [success or failure) related to BPR implementation. According to the authors of BPR implementation process approach, success or failure in implementing reengineering processes are dependent up on or determined by the following five main factors which consists of several elements (Al Mashari and Zairi, 1999:243). The elements of study are related to change management system and culture and the second, factors are related to management competence. Third, factors relating to organizational structure. Fourth, factors related to BPR project management. Last, factors related to IT infrastructure are major factors that determine successful implementation of BPR initiatives or assert their failure.

Factors relating to change management system and culture are considered by many researchers as a crucial component of any BPR efforts towards change or thwarted the dimension of change. Change management as BPR success factor involves “all human and social related changes and

cultural adjustment techniques needed by management to facilitate the insertion of newly designed processes and structures in to working practice and to deal effectively with resistance" (Car, 1993:24-38). The most important factors related to change management and culture accepted by many such as (Talwar, 1993; Zairi and Sinclair, 1995) and the like are "revision of reward systems, communication, empowerment, people involvement, training and education, creating a culture for change and stimulating receptivity of the organization to change."

Conversely, on the other side of change management BPR initiatives failure is associated to several causes identified and stated as

- problems in communication;
- organizational resistance such as, resistance to change, fear,
- lack of optimism and skepticism about BPR results, worries about job security, fear of loss of control and position,
- Lack of organizational readiness for change, problems related to creating a culture for change; and lack of training and education ;.(Davenport 1993, Hoffmann 1997, Grover etal, 1995, Hall teal 1993 cited in Sharma, 2006:7).

Factors relating to management competency as BPR related changes includes committed and strong leadership, overcoming political, economic and organizational problems associated with BPR related change management of risks, risks associated with acceptance of changes in organizational structure, large investment in new resources needed for the new processes, loss of personal and loss of earnings are stated risks which needed to be managed properly with commitment and caution (Hammer and station, 1995).

In relation to organizational structure factors as agents of change, 'adequate organizational human resource infrastructure, effective cross-functional BPR information communication, and appropriate job definition and allocation of resources, are identified causes. Factors related to BPR project management are highly dependent on effective BPR program management. These as stated by (Guhaetal, 1993) 'effective planning and project management techniques, identification of performance measures, adequate resources, appropriate use of methodologies, external orientation and learning, effective use of consultants, building process vision, effective process redesign, integrating BPR with other improvement techniques, and adequate identification of the BPR value'.

Information technology infrastructures have been increasingly considered by many researchers and practitioners as a vital component of successful BPR efforts. As factors related to IT (Brancheauetal., 1996) described IT factors that contribute to the success of BPR projects as, 'effective alignment of IT infrastructure and BPR strategy, building an effective IT infrastructure, adequate IT infrastructure investment decision, adequate measurement of IT infrastructure effectiveness, increase IT function competency, and effective use of software tools". These are the most important factors that contribute to the success of BPR projects.

In sum, change management, competences and support, organizational structure, effective planning for project management i.e. linking BPR strategy with organizational strategy, and information technology, are the most important factors for the success of BPR project initiatives however, same factors may be a cause for failure thus they need to be considered, planned and wormed very carefully.

2.7.4. Scopes in Implementing BPR

The other most important concept that has to be addressed in BPR projects implementation processes is the scope of BPR projects implementation in organization and business. According to several BPR engineers;Hammer (1990), Champy (1993), Kemal (2001), DavenPart and Short (1991), and the like, there are two approaches related to the focus of BPR projects. These are function focused and enterprise wide implementations of BPR projects. The target of function focused is to affect one or two functional areas. Here the scope of BPR initiatives is to implement the project in one- or two-targeted function within enterprises and impact organizational productivity and performance.

Frequently, as indicated by Kemal (2001) in function focused BPR projects initiatives 'accounting, customer service, finance, human resource, information technology, manufacturing, operation, purchase, sales and marketing and supply chain functional areas are targeted. However, as stated by Kemal (2001) manufacturing and operation are the most frequently impacted functions followed by accounting and finance. Ranganathan and Dhalewar (1996:6) also report manufacturing and operations to be the most frequently impacted functional areas.

In enterprise wide BPR projects virtually all functional areas are targeted and impacted. Companywide BPR projects involved major restructuring, strategic rethinking of businesses

coupled with comprehensive process redesign or other substantive changes. Companywide project scope is a project initiative aimed to affect the whole process activities to improve productivity, increase a more efficient use of resources and enhance organizational performance.

Empirically, the scope of BPR projects varies considerable. Some projects focus on a few business functions, while others are implemented at enterprise level as 'The scope of their projects may potentially affect the level of impact on firm productivity and performance'. Empirical studies such as Kemal (2001), Devaraj and Kohil (2000) and others showed there are no direct relationship between the scope and certainty in BPR effect benefit and performances.

It may be the case that BPR projects with large scope made the highest possible impact. It may also be the case that the application of BPR across the enterprise does not actually produces as much benefit as functionally focused BPR initiative hence empirical studies in the literature do not provide conclusive evidence on the direction of impact. Therefore, whether BPR projects that from on a few business functions or those implemented at to enterprise level benefits firms productivity and improve and enhance company's performance is dependent on specific project implementation practices and impacts of initiatives on company (Kemal, 2001:114). Hence, the problem and question that BPR projects which focus in a few business are better than those implemented at the enterprise level in terms of company benefits and forms productivity and performance is debatable and open for empirical researchers.

2.7.5. BPR Implementation, Performance and Productivity

There are so many possible business benefits from reengineering. The benefits derived could be major reductions in process, execution time and major improvements in quality of processes` outcomes. Based on literatures synthesized, the list of other BPR benefits include

- improvement in sales and marketing processes,
- profitability, products and services, customer satisfaction,
- Efficiency in use of resources, information technology, employee morale and productivity i.e. decrease cycle time, inventory, or cost, and the like' (Johansson, 1995: 43-52).

In return, these benefits encountered in BPR projects will translate into improved company performance. However, given the wide diversity of such possible benefits from BPR initiatives

and the need for content validity, studies assessing the impact of BPR initiatives on company performance should use multidimensional scales.

However, Carr and Johansson (1995) mentioned that "many authors have used one item to measure company performance, such as company profitability (return on total assets). To measure the payoffs from company innovativeness on business processes, the authors (ibid) developed a model that depicts the 12 company performance dimensions. These dimensions of performance are widely applied derived from companies' implementations of BPR projects.

This performance dimensions as listed by Johansson (1995: 14-22) are "sales growth rate, market share, operating profits, rates of profit to sales, cash flow from operation, return on investment, new product development, new market development, research and development activities cost reduction program, personal development, and political and public affairs. "Therefore, these performance dimensions should be considered as the ultimate measures and dependent variables for studies assessing the overall benefits from substantial reengineering projects. In fact, these dimensions of performances are frequently employed as standard variables for measuring firm productivity and performance. Usually, one or some of these key variables are used in empirical researches that investigate the relationship between BPR implementation and firm performance and measure the potential impact of projects.

However, Johansson (1995:22) revels that the literatures in BPR implementation are 'short on their models and techniques which better measure BPR implementations through objective methods, and relate BPR to organizational performance in the context of other variables that also affect performance.' Some empirical studies, however, with an aim to explain the relationship between process changes and value generated for a firm applying theories, methods and techniques from empirical studies in economics, finance, marketing and strategy developed functional models to calculate the relationship between BPR driven benefits and improvement in firm performance.

Kemal Altinkmer (2000) developed a model that can be employed to calculate the relationship between BPR project initiatives and firms' performance and productivity. The approach is an empirical method that applied the logarithm of the numerator of each performance measure as a dependent variable, and the logarithm of its denominator as a control variable. This formulation relies on a property of the logarithm function. Dependent variable such as labor productivity,

financial and operational firm performance, and the like are calculated using standard approach such as regression model found in previous works in business value and economics.

For instance, labor productivity is calculated by dividing total sales by the number of employees. In the same token, financial firm performance is measured by return on equity operational performance is measured through inventory turnover, which is the cost of goods sold divided by the total cost of inventory. The model includes three firm level control variable firm size, advertisement expenditure, and market share. Empirical studies in economics, finance, marketing, and strategy have identified there control variables as key determinants of firm performance for meta- analytical reviews. As a main core study the research also perform productivity regression based on the economic concept of production function and relates the output to BPR benefits.

Kemal (2000) to reveal the rate of improvement on firm performance and productivity associated with BPR applied a regression analysis model and technique to calculate BPR projects value and benefits. The model showed that regression analysis has a feature that various performances with a wide variety of value creation variables can be measured. Therefore, the model is useful to investigate the various impacts of BPR on organizational performances in organization development and change management, in addition to presenting such a benchmark or pioneering model for monitoring tools for organization performance using latest management performances.

2.8 **Definition of Third Party Logistics Provider (3PLP)**

Logistic Service Providers (LSP) is specialists in supply chain management, and is generally well aligned with the type of supply chain they serve. LSPs often are also referred as Third Party Logistics Services Providers (3PLSP) (Smriti, 2011: 18). 3PLSP carry out the logistic activities for one or more companies within the supply chain. Supply chain management is thus important to logistics services products. Supply chains can typically be categorized into either efficient or responsive supply chains (Fisher, 1997). Christopher and Towel (2002) 'make a similar distinction into lean and agile.' For the authors agility implies the ability of the supply chains to react quickly to change in market demand including dimensions such as product volume, variety mix (Elfriede and Hans, 2004: 240). Lean or efficiency oriented supply chains are firms that typically are producing and distributing products with predictable demand (Smriti, 2011), 'which

leaves relatively more time for planning and thereby allowing the supply chain to achieve greater level of efficiency'.

According to the Council of Supply Chain Management Professionals glossary, (updated February 2010) 'Third Party Logistic Service Provider (3PLSP) is firms that provides multiple services for use by customers.' The services are integrated or bundled together by the provider (Rabbinovichetal, 1999). Christopher (1992) defined 3PLSP saying "Third Party Logistic is the outsourcing of logistic activities to other companies, such as transportation, warehousing, inventory management, distribution, and other value added services." For example, 'pick-pack, assembly, repairs, and re-conditioning' are mentioned as logistic services 3PLSP provided for customers.

Lau (1999) and Field (1998) defined 3PLSP as "companies that provide a range of logistics services to outsourcing companies to co-ordinate the transfer of goods from one place to the other." From, a service partner perspective Y.S. Man (2006) defined "Third Party Logistics as a value added process that is purposely used to enhance organization cooperatives advantages and to provide low-cost product or service differentiation and focused strategies." Field (1998) define 3PL service providers as "companies that provide a range of logistic services to outsourcing companies to co-ordinate the transfer of goods from one place to the other." The function of 3PLs or LSPs can be divided in warehousing, transportation, customer service, and inventory and logistics management (Sink etal., 1996), (Valdyanathan, 2005). Usually these services increased importance to logistic service providers.

2.9 Rationale for Emergence of 3PLP

Liberalized economy and free market across the local and national boundaries resulted into a wide use of maritime and air transport in the international trade. The trade supply chain have brought complex and intricate trade relations market opportunities and challenges and fierce competition and increased dependence on competent transport intermediaries. Globalization and emerging technological advancement have led Third party logistics (3PL) to become an important source of competitive advantage, especially for supply chain organizations. The complexities and intricacies in global and local trade and market called for the need to outsource logistic activities to third party logistic service providers or companies. The increased

importance on core competencies opened up many business opportunities for logistics service providers (Christopher, 1998).

Logistic outsourcing has received increasing attention from researchers and practitioners. Consequently, Third Party Service Providers widely existed in logistic operations and help to increase efficiency and effectiveness of outsourcing company's logistic functions and services.

2.10 General Concepts of Performance Measures

According to Weely (1995:31) 'performance measurement is a popular issue that is widely discussed but rarely defined.' Hence, it is necessary to introduce certain relevant definitions of performance measurements and present related discussion points about the concept of performance, frameworks and approaches in performance measurements in light of 3PL service providers. Performance as defined by (Sink, 1991) refers to "action that an organization carries out to accomplish its principles missions and functions for the generation of profit."

Performance measurement is a metric that can be used to quantity performances. Rose (1995) describing performance measurement activities says' it is a process that records measures, display results, subsequent actions. Generally, "performance measures have financial performance or non-financial and tangible (hard) or intangible (soft) classification" (Locany and Spencer, 1998:104) based on criteria's applied as performance indicators.

Financial performance measures according to Lockany and Spencer (1998) relates "tend to focus on the resultant impact in financial symbols of production activities, such as logistic activities." Whereas, non-financial performance measures as indicated by Polakof (1992:124) are associated with factors which "focus directly on actual production activities such as investment turnover, defect ratio, and lead time." As it is discussed, historically companies concentrate on financial indicators. However, gradually non-financial, intangible or soft performance measurement criteria's have gained acceptance or the upper hand in initiatives measuring performances. "Historically, companies concentrated on financial indicators, however, now days it is widely recognized that non-financial and even non-numerical indicators can give valuable information" (Brewer et al., 2000 and Ittner et al., 2003).

The major problem associated to non-numerical performance measurement indicators use is that "such indicators are more difficult to measure and compare" (Ittner et al., 2003:52) performances

of functions and processes. Brewer et al (200:21) asserting this mentioned two major challenges related to applying non-financial criteria's as performance measurement indicators. First, "a full set of indicators could in a huge amount of data which would require a lot of efforts and high costs both in acquiring and analyzing." Second, "it is not uncommon that the selected indicators turn out to be conflicting, i.e. improving one may worsen another." These have made selecting the right non-financial performance measurement indicators complicated and difficult.

Another significant factor in performance measurement activities and processes is the issue that "performance indicators are to a large extent domain specific" (Lai et al., 2004:33).Hence, there is no unique subset of indicators that can be selected. Therefore, frequently the choice is company specific and orientation of the company is important. Existing literatures on performance measurement in logistics provides a large number of potential useful indicators. Literatures on the logistic industry are in abundance in the form of survey-based empirical research and reviews of the existing literatures from user perspectives. However, it is still scarce from the perspective of Logistic Service Providers (LSP).

2.10.1. Performance Measurement of Third party Logistic (3PL) Service Provider

Empirical and theoretical literatures on 3PL service provider's performances showed that 'supply chain performance evaluation takes many identities' (Kemppainenetal. 2003). Among these, 'many researchers and practitioners agree up on internal and company-centered performance measurement approaches' (ibid).

Internal measurement approach focus is 'cost calculation based performance evaluation method.' Whereas, company-centered performance management 'focuses on the measurement and evaluation of decision making on company performance' (Krauth and Moner, 2005:241). There are several empirical researches and studies about 3PL service providers applying internal and company-centered performance measurement approaches.

Van Donselaaretal. (1998) quoted on (Krauth and Moner, 2005) conducted a study on the transportation and distribution sector in the Netherlands focusing on logistic performances from the providers point of view. The study put a division between distribution and transportation and conducted third party logistic service providers.

UPS executive Perter Bromley (as quoted on Krauth and Menon (2005) in 2001 listed out five

key performance Indicators (KPIs), what he calls the big five for UPS logistics. The list presented "on time receiving, on time shipping and delivery, order accuracy, inventory accuracy, return cycle time" as UPS' KPIs. According to Krauth and Menon (2005) 'although law costs are important for UPS, perfect customer experience or a perfect service directed UPS' business process. Factors that directed UPS business process can be different for other LSP.

Mentzer etal. (1991) in their study on performance evaluation in logistics, identify a list of performance measures in five sub-areas of logistics. Performance measurement of 3PL service providers is differentiated between five measures. "Labor measures (loading, driving, general labor), cost measures, equipment measures, energy and transit time measures" have been considered as KPIs to evaluate 3PL service provider's performance.

ElfriedeKrauth and Hans Monen (2005) based on previous studies' theoretical and empirical insights developed a framework applied to evaluate 3PL service providers using the internal measurement approach. The study identified and indicated the most important factors that are relevant for customers in selecting logistic service providers. These as listed in the study are "speed and reliability, loss and damage rate and fright rate (tariffs)." According the study delivery performance is measured by on-time delivery, and determines whether a perfect delivery has taken place or not. The study measures customer services and considered it as KPI. Delivery performance measurements were further elaborated by Stewart (1995) as "delivery to request rate, delivery-to-commit date, order fill lead-time and goods in transit." According to Stewart (1995) delivery performance of 3PL service provided 'is dependent on quality and the way information is exchanged.' Moreover, the possible performance indicators are mentioned as the 'number of faultless invoices, flexibility of delivery systems to meet particular customer needs.' In addition, measures of customer service and satisfaction are mentioned as 'flexibility, customer query time, and post transaction measures of customer service.'

Krauth and Monen (2005:235-249) developed a model for 3PL service performance measurement and listed down performance indicators based on the internal and external perspectives and point of views of managers, employees, customers and the society. The model thoroughly considered KPIs literatures and developed a different KPIs scheme.

Initially, KPIs are typically used in a ***post ante*** context to evaluate the past performance of a company. However, Krauth and Monen (2005) reason out that KPIs could be used to measure

performances in the planning phase and as well in an ***exante*** context. The internal perspectives of 3PL service provided performance is represented by performance point of views of managers and employees. The external perspectives considered customers and the society point of views of performance. Moreover, the performance indicators are divided in the long term and short-term measurement variables.

From the literature survey we conducted we can conclude that Effectiveness measures the capability of producing an intended result and is considered as an internal factor i.e. what the organization achieve and this requires performance measurement variables from the management point of view. All in all, the major Internal KPIs from the manager's point of view as listed in the framework are measured by

- revenue,
- profit margin,
- capacity utilization,
- km per day,
- labor productivity,
- price,
- turnover per km,
- number of deliveries,
- benefit per deliveries,
- trip per derive,
- Perfect order fulfillment and the like".

In contrast of effectiveness, Efficiency is the measurement for producing results taking in to account used resources. Efficiency is a measure to understand how the organization achieves its results. Thus, efficiencyrefers to the inside' of the organization. Some of the factors listed as efficiency measurement variables in 3PL service provider's performance are

- total distribution cost,
- labor utilization,
- overheads percentage,
- overtime hours,
- %of absent employees,

- salaries and benefits,
- non-controllable expenses,
- Customer service costs, inventories, and the like.

Satisfaction represents the human factor in the model. An organizational achievements may be optimal regarding effectiveness and efficiency, however, in this approach the value of the human element have gained a due consideration. In this regarded variables such as “attrition of drivers, morale, and motivation of personnel” have got substantial value and listed as determinate variables in 3PL service provider’s performance. Finally, the model associated organizations future performance with IT and innovation. Innovation and IT utilization are indispensable factors for measuring long-term performance. These factors as major performance measurement variables listed in the model consists of

- information system costs,
- up to date performance in IT,
- information availability,
- utilization of IT equipment’s,
- And IT training costs.

From an internal perspective and employees point of view 3PL service providers performance is measured by factors like” Km per trip, working conditions, and the line”. 3PL service provider’s performance measurement from an external perspective and customer point of view is measured by variables such as

- transportation price,
- insurance price,
- primary service price,
- goods safety,
- Product variety and response time.

3PL service provider’s performance, from the point of views of the society as an external perspective is seen as the lever of CO2 emission, society satisfaction, resources, recycling level, employee satisfaction, disaster risks. The model, thus, listed out both internal and external variable as core performance measurement factors for 3PL service provider’s performance measurements.

2.11 Review of empirical studies

The history of management thought highlights that all management scholars have been mainly concerned with issues of improving individual and organizational performances. As covered in chapter two of the literature survey; markedly starting from the early 1990s, BPR has become one of powerful management tools deployed by executives to improve the performances of modern corporate and government organizations. To easily grasp the variety of researches made on BPR, Kemal, Yasin and Zafer (2010), formed classification frameworks and categorized research outputs in to four major researches groupings. According to Kemal and etal (2010) the largest research stream investigated lessons learned from BPR initiatives and attempted to identify critical success factor. Leading authors like Stoddard, D.B. and Jarvenpaa (1995) are amongst some who made researches in the area. Accordingly, most of the papers in this category are case studies. Other research teams made studies focusing mainly on depicting inter-organizational aspects of BPR. These categories of researches are leadingly proponed by authors like, Riggins, F.J. and Mukhopadhyay (1994). Whilst a third stream of researchers examined the effectiveness of BPR methodologies, tools, and techniques like sighting researchers Nissen ME (2001) and others. The fourth categories of researchers have investigated organizational impacts of BPR, especially depicting its relation with enterprise level performances. YasinOzcelik (2010) is mentioned as lead author in these aspects.

Many case research studies are also made on manufacturing, service and banking sectors. Jamaiah H. Yahaya and etal (2012) made an analysis on small and medium enterprises and have ascertained that improved work process to have resulted in increasing performances. KabiruJinjiri (2012) also evaluated the impact of process redesign and overall bank service improvement and found significant relation in between process redesign and performance enhancement. In Ethiopian context, many researches and thesis works have been made on BPR. The researches have most often and almost exclusively have concentrated on public institutions as BPR was adopted major cure to remediate the ailing and inefficient public service sector. Among many Tesfaye Debela (2010) has evaluated the implementation of BPR on Ethiopian public service institutionsand concluded that though this brought some improvements in the performance of some civil service organizations, the effort required was too much compared to the benefits obtained; WannaWakiepublished his thesis (2010) by conducting research with the

purpose to explore the effort made by (Ethiopian Revenue and Customs Authority (ERCA) in achieving goals set by BPR, and the finding of the study, among other things, revealed that BPR has been considered as the casual factor for effectiveness and efficiency as well as better customer services, whilst AbdurazakZyad and Mohamed Kassi (June 2011,and June 2010) had conducted research to identify BPR and employee performances at selected public institutions and concluded that the impact of BPR on the selected organization is negative in most core human resource dimensions (i.e. reward, promotion, work life, etc,), except empowerment and career development.

2.12 Operational Definition of Key Performance Indexes

Total ton lifted: the total weight lifted in the workout was recorded by adding up the weight of all lifts.

Trucks down time: Period during which trucks are not functional or cannot work. It may be due to technical failure, service, maintenance, or non-availability of inputs such as, drivers, fuel and lack of cargo to be loaded and unloading problem.

Ton-Kilometer: A unit of measurement equal to the weight in tons of material transported by a truck multiplied by the number of kilometers driven.

Load factor: is the ratio of the average load to total vehicle freight capacity, expressed in terms of vehicle kilometers. Empty running is excluded from the calculation. Empty running is calculated as the percentage of total vehicle- kilometric which is run empty

Truck available for operation: The proportion of the available trucks (expressed usually as a percentage or in numbers) that a piece of truck is available for operation.

Truck turnaround time: Period for completing a cycle from loading to unloading of trucks commonly expressed as average of previous such period

Vehicle operating costs (VOC): include the various direct costs the transport provider must pay to operate a given vehicle, notably labor, capital, fuel, tires, maintenance and depreciation cost of a vehicle.

Transport costs (TC): are the costs the transport operator incurs when transporting a cargo. In addition to VOCs, transport costs include other indirect costs, such as license fee, road blocks,

etc.

Transport prices/tariffs (TP): are the rates charged by a transport company or a freight forwarder to the shipper or importer. Transport prices normally cover transport costs, and the operator's overheads and profit margin.

CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

In this chapter, research design, population, sample, sampling techniques, source and instrument of data collection, data collection procedure and methods of data analysis will be presented.

3.2 Research Design and Method

The research applies mixed research methods and employs descriptive and also correlational research collection methods. It is partly descriptive because it describes and interprets findings from secondary data. It is partly correlational because it tries to assess the significance in which BPR implementation has on operational performance of Comet Transport S.C. The study employed mixed research methods i.e. both quantitative and qualitative.

3.3 Types and Source of Data and Instruments of Data Collection

Both primary and secondary data were used to meet the objectives of the study. Secondary data on key organizational performance measures were gathered from annual reports and audited financial statements of Comet Transport S.C. The secondary data covered five years (2003-2008) before BPR implementation and five years (2010-2014) after BPR implementation. The years 2009-2010 were considered as planning periods of BPR in Comet Transport S.C. Descriptive and analytical research techniques were applied to better understand key performance indicators regarding the implementation and effectiveness of BPR on Comet Transport S.C. In addition to document review and in-depth discussions was held with senior executives to get insights about BPR implementation in Comet Transport S.C. for content validation purpose.

3.4 Methods of Data Analysis

The study applied descriptive and inferential statistics (paired t-test statistics). The descriptive data analysis (average, percentage and graphs) and paired t-test statistic were computed using statistical software called SPSS. Paired t-test was applied to test whether BPR implementation had significant effect on operational performance of Comet Transport S.C. or not. For paired t-test to be valid the differences (post BPR minus pre BPR) were assumed to be approximately normally distributed.

3.5 Consistency and validity

Expert opinions and literature search were first analyzed and then used to establish content validity. In addition, triangulation of quantitative and qualitative analysis was made to ensure the consistency of findings related to each research questions.

3.6 Ethical issues

While undertaking interview administered questionnaire, the consent of respondents were obtained and the objectives, methods used and the demands of the study were informed. Respondents provided their response voluntarily and reassured that the privacy of their response was maintained. In addition, the integrity of data collection, analysis and reporting of results were maintained.

Chapter 4: Analysis and Presentation of Findings

4.1 Description of Research Unit

Comet Transport Share Company is located in Addis Ababa at Kality sub city Keble 11 and advantageously situated next to Addis Djibouti road close to the southern ring road. Comet is situated at the entrance of the city which is very convenient to truck movement and other logistical services. Besides, the company is host to large customs depot which is the country main import and export hub opening seamless business opportunities to transport logistics services. The company is seated in well-furnished three-story building furnished and fit to excellent customer care. Furthermore Comet is endowed with large asphalt concrete compound which is very convenient for container terminal and truck parking.

Figure.1. The company head office

The objective of the company as enduring entity is to guarantee its existence by being viable and profitable in the market economy through provision multi-faceted and integrated logistics service to its customers. The challenge to compete in the market has stiffened as many players entered in the market and as well investment by parastatal organizations increased many fold.

Diversification in core competencies and services were enduring strategic engagements pursued by late executives to condense challenges from the ever-increasing competition market evolving to the state of fittest survival. The types of services rendered by the company are inclusive of

- Transport services; through its 213 trucks and trailers the company avails freight transportation service to its customers along the Djibouti corridor and other roots per customers' orders.
- Maintenance services to its own vehicles and washing and greasing to its own and other fleets that get into Comet premises for other premises
- Warehousing & Cargo Handling With its total area of 30,000m^2 the company renders open and closed warehousing services. Of the total area allocated for storage 10,000m^2 is for closed and 20,000m^2 is to open warehousing services. Along with warehousing facilities the company provides cargo-handling service by employing of modern equipment to its customers.
- Dry Port facility; the company has also developed a dry port service to facilitate Import & Export in the country by providing an integrated logistics service.
- Although excluded from a designated core activity and core function, the company provides other services by utilizing idle put resources long stranded in the compound and inherited from the parent company EFTC. Among many; fuel gas station services at its premise, rental of offices to major stakeholders i.e. Customs Authority, Clearing agents, Standard authority etc., rental from Restaurant and cafe service, fees from Weigh bridge services, fees from Crane Service for loading and unloading and fees from Washing and greasing service are recognizable incomes.

4.1.1 Organization and Manpower

After fully implementing business process reengineering, Comet transport has organized its structure conducive to facilitate to its works and meet its tasks. The structure is an outcome of two years of study and experiment of the implementation of business process reengineering. Comet has a total of eight Departments and three Services heads all accountable to the General Manager. Currently The Company has 856 employees of which 708 are permanent and 148 are Contract workers. After implementing BPR, Comet has grown to become flatter and have expanded the type of services.

4.1.2 Rationale for BPR

Ethiopian logistics system is characterized by poor logistics management system and lack of coordination of goods transport, low level of development of logistics infrastructure and inadequate fleets or freight vehicles in number, aged and inefficienttrucks, damage and quality deterioration of goods while handling, transporting and in storage. The integration among the parts of the supply chain is not integrated. The whole system often is evaluated as messy, absence of transparency, speculative freight price often decided by brokers. Minimal road infrastructure, lengthy and loading and unloading practices at ports and freight destination areas is major hurdles third party logistics service providers face.

Comet is not different from others. However the above stated problems coupled with internal inefficiency had put enormous pressure on the company to engage in all types of change management initiatives. Besides to the existential treat posed out by the openingof the sector to new market forces and cut throat price competition from para-statatl and private business organizations, the board of directors which is assigned by the state to ascertain state polices are adhered by the enterprises; had put much of its influence on the management of Comet enterprise to implement BPR and acknowledge change initiatives taken to proper supervising bodies.

The manifestation of major problems dates back to inheritances from the former monopoly state enterprise “Ethiopian freight Transport Corporation” that was split by decree in to four smaller companies. The partition was made in the intention of breaking the monopoly power it held over the sector and ensure effective and efficient management of resources. As the company has inherited different cost structure and assets from its parent Company “Ethiopia freight Transport Corporation” and subsequent lack of significant investment interventions from the state, it is immersed with myriads of standing problems. Among many, the following were sighted as major challenges to pursue smooth operation threatening Comet survival and going on concerns. Major hurdles reported at the time confirms to;

1. Aged and worn out vehicles holding high fixed cost and incurring huge maintenance expenses.
2. Drastic Change in market structures change of players subjecting the company to stiff competition from new state ,para-statatl and private business players
3. Shortage of modern cargo handling equipment’s and lack of financial resources to invest

in the acquisition of the machineries

4. Low skilled labor with less drive for productivity and with very low moral

4.1.3 Driving Problems and Projected Outcomes of Implementing BPR

The executive management of Comet Share Company has made extensive researches on deep-rootedproblem of thecompany prior to the implementation of business process reengineering. Form multitude of, problems the following pressing cases were itemized on the BPR document to stand as impediments from achieving the goals stated on the strategic plan document, specified as an integral part of the company BPR document. Among many, aging trucks and the associated high fixed costs, poor maintenance services to make the aging trucks operational were regarded as major blocking factors from succeeding in the attainment of the targets and inhibiting extraordinary performance's as sought in the BPR document. The board and the executive management team, understanding the gravity of the constraints, sought strategies to use the challenges as springboard to create business opportunities. With regard to the old age and the high fixed cost of the trucks, the company planned to solve the crisis through better search of finance to resolvetruck-agingcrisis by replacing the old trucks by new ones to have been procured according to purchasing schedule of the company.

With regard to solving problems associated with quality and adequacy of maintenance services, the company planned to conduct strong market research and look for better maintenance service providers for outsources maintenance works and provide intensive trainings to its staff to make improvement of in house maintenance system. Furthermore, the company strategic plan charted to actively engaging in Minimizing fixed costs by disposing obsolete machines through disposal of machineries. The BPR document envisages engaging in search for local and international partner in the long run to secure able financiers that would invest for procurement of new machineries ardently required for the expansion of trade activity.

The BPR study team evaluated the human resources of the company as an asset but requiring significant improvement works in the form of trainings to make them qualify to the improved and redesigned work processes. As the study team predicted major resistance to come from human resources, with the intention of portraying the executives as benevolent management the company decided to make retrenchment as last option by planning to give robust training to make them valuable contributor to the success of the company and adjust their remuneration to

make them committed to work.

4.1.4 Brief Description of the BPR Implementation Process

The Management of Comet transport S.C. pursued BPR implementation priority up on the strict order of the then board of director Mr. Geber Wahid and laterthe executive undertook on exploration of the conditions and situations that would demand the implementation of BPR project. Even if, ordered as standard pill to all ailments in public enterprises, the executive management team of Comet went under rigorous management meetings and researched to seek for real problems that could be solved by the change management tool and amplified the manifestation of the following problems to demand the implementation of the change management tool. The major change activates to be carried out and the problems to be remediated by implementation of powerful change management toll were sought and scored as

1. The redesign and restructuring of work process to render services that add value to clients and enhance their satisfaction by integrating the company's strategic intent fully with the newly designed and structured work processes,
2. Setting up organizational structure and decision making processes that would empower employees via creation of flat hierarchies and permits intensive horizontal interactions among work units,
3. Making employees understand the strategic intent of the company, convince them of its workability and make them energetic ,loyal and committed stakeholders to make them excellent performers in conduct of their operations
4. Implementation of performance appraisal scheme that evaluate internal stake holders at organizational, process ,work unit and individual level
5. Significantly reducing time taken to entertain client request, and time to perform any operation.

The board of directors accepted the full charge of envisioning and BPR implementation through setting up and assignment of committee members and appointment of chairman's to conduct the study of key process. In addition, the board was responsible for selecting a consultant to aid the in-house initiatives and supervision of its activities to gain the maximum from the advisors.

Comet Transport Share Company started reengineering its processes in October 2009. However,

the board also suggested the previously studied process to be revised by the consultant team and submitted with the newly studied work processes.

During the first weeks of September 2010, the reengineering teams presented the redesigned processes to the steering committee accountable to the board . At the end of the meeting, the board formed an organizing committee set up to control supervise, and coordinate reengineering works and gave an official blessing to the committee to design a flat structure for the company based on the new reengineered business processes but almost similar to the prior work units although thenthey were not defined as work processes but functional departments. The steering committee planned to finish organizing between September 2009 and the end of December 2010 and to commence implementing result based performance management system at the end of the fiscal year. In January 2010, the organizing committee reported the completion of its assignment. Besides, the steering committee scheduled the month of January to initiate implementing organization structure. However, organizing was not as such simple. The document submitted was evaluated that the team needed more capacity to design and bring realistic organizational structure.

After the approval of the "To Be" (newly redesigned) processes in September 2010, the reengineering teams took almost more than six months to refine and rectify the reengineered processes. Organizing activity was introduced again in June 2010. The board gave the blessing for implementation of the newly set processes.

4.1.5 Analysis and Presentation of Data

In order to ascertain the impact of BPR on Comet transport share company a regressive 12 of years of performance data was analyzed using key and selected performance indicators commended by the literature survey to be very fit to the industry gathered and compiled from yearly performance report generated by the plan and documentation department.. The data was analyzed using SPSS statistical package and Microsoft EXCEL applications. Descriptive, graphical presentation and student t- test analysis was made on key performance data gathered for the purpose. The results and analysis are intended to compare the presence of significant differences in the period described as pre BPR and post ante BPR period in terms of organizational performances to measure along non-finance and finance key performance indicators.

Table 1. Twelve year's key performance data of Comet enterprise

Description	2002/2003	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Total no of trucks	144	144	143	144	145	155	234	228	221	217	207	205
Trucks standing due to down time	49	48	49	52	35	47	77	60	56	66	72	77
Average trucks available throughout the year	95	96	94	92	110	108	157	168	166	151	135	128
Ton transported /in millions/	111.84	104.32	123.85	105.67	123.81	135.67	198.65	269.89	230.58	252.15	239.99	216.96
Total ton /km in million/	89.32	89.55	108.3	86.38	106.09	115.72	173.55	230.2	202.88	213.06	203.83	190.83
Load Factor	67	60	58	64	60	60	53	57	58	54	66	66
Km travelled (in millions/	4667.34	4833	6129.2	4453.3	5665	5990.6	9353.57	11256.07	9622.26	10915.95	8386.6	7795.87
Average Monthly TAT	2.32	2.38	3.08	2.29	2.59	2.61	2.68	3.04	2.62	3.26	2.8	2.94
Tariff (Per ton KM/	0.3577	0.378	0.3436	0.436	0.3612	0.4505	0.6502	0.7319	0.7513	0.9332	0.8837	0.8929
Income (inthousands)	31374.4	35009	37034	37491	37629	52129	112846	168481.5	153244.5	198827.4	180131.8	170386.1

(The data depicts summary of 12 years of performance of the company along 10 selected key performance indicators.)

4.1.6 Operational KPI for Operation Before and After BPR

KPI or key performance indicators are scientifically established performance standards that are fit and adoptable to measure performances of third party logistics service providers. The literature survey has enabled the student researcher to identify, select and put on the most appropriate performance measurescompatible with the specific characteristics of the industry. Hence accordingly ,operational performance variables selected to measure the performances of the study unit are ; Average truck turnaround time, Average Tariff per ton per km, Load factor, Labor productivity, Return on assets, Km travelled per year, Total ton per km, number of trucks available for operation throughout the year, number of trucks standing for maintenance throughout the year, Actual capacity utilization were the major performance indicators utilized to evaluate the performance of the company measure the results.

Table 2 Post and Pre BPR performance comparisontable alongside 10 key performance measures.

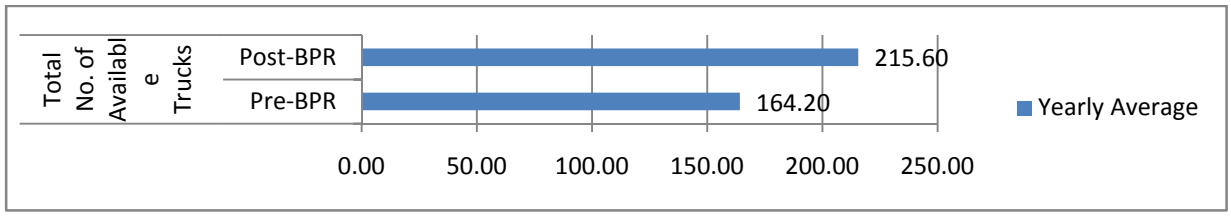
Key performance indicator mean description	Group Description				t-test for Equality of Means					
									95% Confidence Interval of the Difference	
		N	Mean	Std. Deviation	T	Df	p-value	Mean Difference	Lower	Upper
Total truck availability per year	Pre-BPR	5	164.20	39.32	-2.839	8	.022	-51.40	-93.14	-9.66
	Post-BPR	5	215.60	9.63						
Truck downtime	Pre-BPR	5	52.00	15.39	-1.789	8	.111	-14.15	-32.39	4.09
	Post-BPR	5	66.15	8.71						
Average Total trucks operational per the year	Pre-BPR	5	112.20	26.31	-2.621	8	.031	-37.25	-70.03	-4.47
	Post-BPR	5	149.45	17.83						
Total tone lifted in the year in thousands	Pre-BPR	5	137.56	35.80	-5.673	8	.000	-104.35	-146.77	-61.93
	Post-BPR	5	241.91	20.26						
Distribution in kilometer in millions	Pre-BPR	5	118.01	32.89	-5.600	8	.001	-90.15	-127.28	-53.03
	Post-BPR	5	208.16	14.63						
Load factor percentage	Pre-BPR	5	59.00	4.00	-0.404	8	.697	-1.23	-8.25	5.79
	Post-BPR	5	60.23	5.50						
Totalkilometercovered in thousand	Pre-BPR	5	6318.33	1820.80	-3.092	8	.015	-3277.02	-5720.90	-833.14
	Post-BPR	5	9595.35	1516.73						
Truck turnaround time per month	Pre-BPR	5	2.52	0.30	-2.078	8	.071	-.36	-.77	.04
	Post-BPR	5	2.89	0.25						
Tariffbirrper ton km	Pre-BPR	5	0.38	0.24	-4.035	8	.004	-.46	-.72	-.20
	Post-BPR	5	0.84	0.09						
Revenue in thousands	Pre-BPR	5	55425.76	32728.43	-7.221	8	.000	-118788.47	-156724.4	-80852.52
	Post-BPR	5	174214.23	16793.41						

The above figure (Table 2) depicts the result of t-test comparison of average performances before and after BPR implementation by utilizing ten key performanceindicators. The KPI indicators are in conformity to literature survey as they were indorse by authors to be most fit to evaluate performances of third party logistics service providers. To depict the comparison and give in the results in detail, this research has gone through evaluation of each of the performance indicators independently.

One of the measures used to evaluate performances in third party logistics service provider is number of trucks available per year actually are readily available for operation. The mean number of trucks available for operational pre BPRperiod in average was about 164 trucks per year. The no of trucks available for operation per day during post BPR has reached to 215 trucks. This shows a31% increase to the fleet size reported pre BPR period. The t-test result with p-

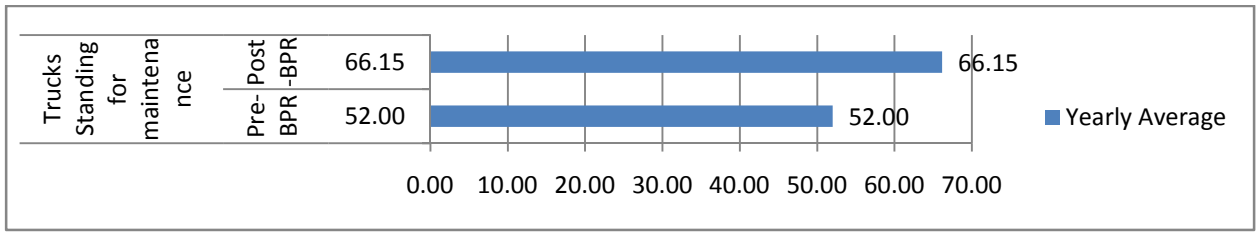
value of 0.022 < 0.05 indicates a significant difference of average number of trucks betweenpost-BPR and after-BPR. In terms of availing trucks per year, the statistical test asserts a significant increase (about 51) in terms of no of trucks readily available for operation. The increase can be unswervingly attributed to the procurement activity of the company to have engaged in the acquisition new vehicles as stated in the BPR document. The 95% confidence intervalon the average increase in no. of trucks as is in the range 10-93 trucks per year. In seeing the percentage difference between post and post BPR operation, we can conclude also that the no of trucks availed for operation every day to have significantly exceeded the pre BPR period truck per day availability. The following chart specifically depicts figuratively the range of differences in between pre and post BPR periods.

Figure 2. Truck availability post- and pre-BPR period comparison chart



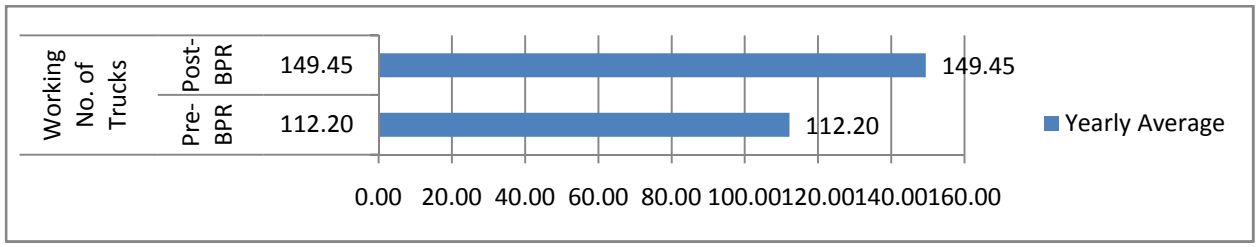
Regarding down time for maintenance, the t-test result with p-value of 0.111 > 0.05, shows lack of significance difference during the pre and post BPR periods. Meaning, the increase by about 14 vehicles (27%) after the BPR is not considered as significant increase in trucks down time (standing for maintenance) compared to the significantly high number of additional trucks after the BPR. Speaking in terms of percentage comparison of trucks downtime by percentage total fleet size, the mean has not shown significant difference from post BPR period. Hence, the test asserts abundantly that even with massive truck number increase during post BPR period, the no of downtime hasn't increased significantly. The chart below depicts mean no of trucks stopped at in-house and outsource garage for maintenance.

Figure 3. Truck downtime at maintenance stations post and pre BPR period.



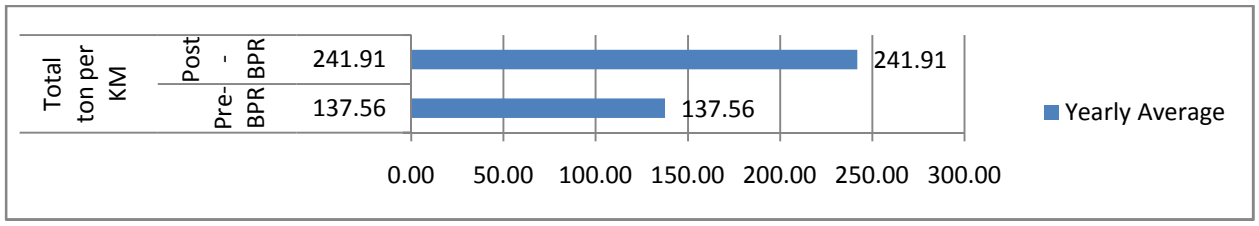
Operational tucks per year; which stands and measures the no of trucks readily available working trucks during the years, which is the difference of total trucks availed per year and total trucks stopped at in-house of outsource maintenance posts is found to be significantly different in the two periods (p-value =0.031 < 0.05). The number of working trucks has increased by about 37 (33%) on average. The 95% confidence interval, mean average increase of truck down time has range in between 4 trucks to 32 trucks.

Figure 4.Average truck availability per day pre and post BPR period



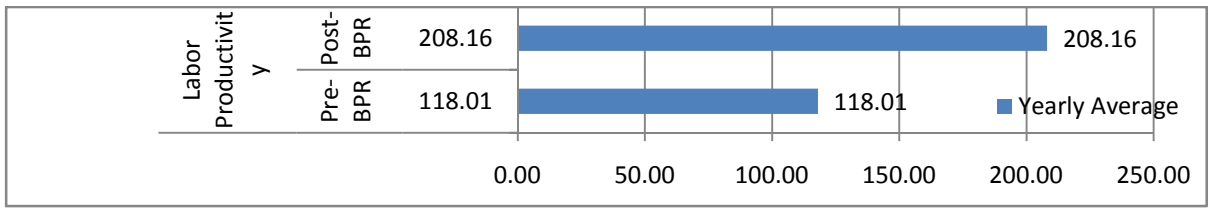
Analysis of the data reveals the amount of tonnage lifted (in '000 ton) to have increased from 137.56 during the pre-BPR period to 241.91 the post-BPR period. The mean average tonnage life and mean percentage growth is 104.35 (75.8%) increase is tested to be significantly high as justified by the t-test result with p-value of 0.000 < 0.05. The amount of tonnage per working trucks before the BPR is 137.56/112.2*1000= 1,226.03 tons. The tonnage figure after the BPR is 241.91/149.45*1000=1,618.67 tons. This shows that the efficiency of the trucks lifting higher amounts of tone freights is attained via increasing fleet availability and efficient utilization of trucks by reducingtruck turnaround time (TAT).

Figure 5.Average total tone lifted post and pre BPR period comparison



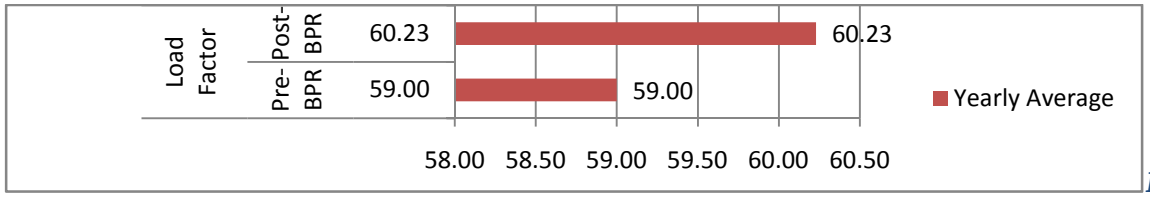
The coverage of distances expressed in million km, mean average amount before the BPR is 118.01 that have reached to the level 208.16 during post-BPR period. This asserts an increase of 90.15 (76.4%), which is a significant achievement as the result of the BPR that is asserted by the t-test result with p-value of 0.001 < 0.05.The increase in number of kilometers travelled shows greater efficiency in deployment of trucks to lift load and upsurge of freight load order from clients. As Comet often travels to Djibouti corridor to lift freight, the no of dispatches markedly have increased resulting in coverage's of greater market areas.

Figure 6 Mean average distance covered in thousands of kilometer before and after BPR



Regarding the load factor, the mean average amount before and after the BPR is 59% and 60.23% respectively. The t-test result with p-value 0.697 > .05 justifies the load factor before and after the BPR are not significantly different implying any significant progress to have been witnessed. However, what so ever the little gain exhibited assertsComets effort made by the management in trying to reduce truck empty travel as loaders normally do not pay for trucks that travel empty and even though pricing of tonnage lifting is considerate of factors like the time, fuel and depreciation of trucks that dispatched without load on the way to loading.

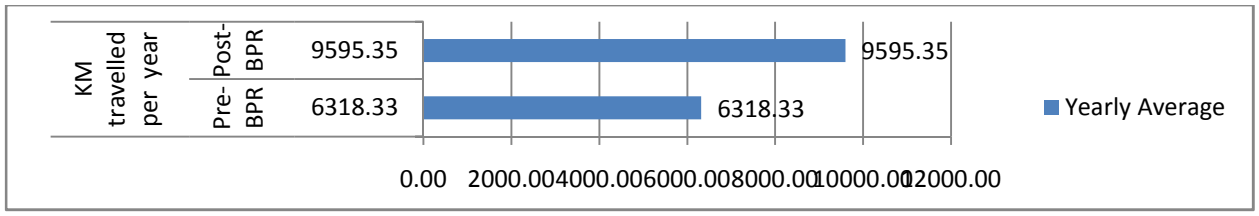
Figure 7. Mean average load factor expressed in percentages.



Figure

Kilometers travelled during the pre-BPR period is 6318.33 thousand kilometers per truck per month. During the post-BPR period the kilometers covered reached 9595.35 on average. This is a significant increase as the t-test result with p-value of 0.015 < 0.05. The average increase is recorded to be 3277.02 kilometers in thousands, which exhibited 51.9% improvement. The average km covered per truck during the pre-BPR period is 6318.33/112.20*1000=56,313.1. This figure after the BPR has increased to 9595.35/149.45*1000=64,204.42. Taking the figures on monthly basis, the average km covered per truck per month during the pre-BPR period is 56,313.1/12 = 4692.76; and increased to 64,204.42/12=5350.37. Although significant increase has been exhibited in monthly km coverage, rough comparison with other similar industry players assert the gain not to be significantly high as some have shown significant progress in increasing mean monthly distance coverage.

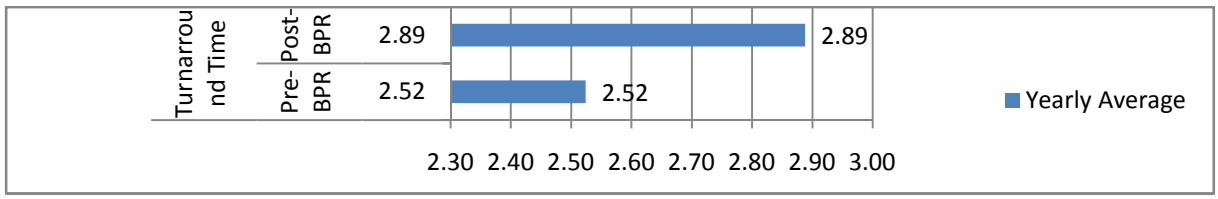
Figure 8. Mean total km kilometer covered per year in 000, of kilometers



The truck turnaround time in the two periods is not significantly different as the t-test with p-value of 0.071 > 0.05 indicates. The turnaround time before and after the BPR are 2.52 and 2.89 respectively.Howeverthough not to have been significant, pre and post BPR periodComet has exhibited progress; which the result if stated in actual terms would mean to make about three turn rounds in between Addis and Djibouti. The progress may be attributed to reform measures taken on port loading practices at Djibouti and establishment of dry port inside Ethiopia

facilitating direct shipment of freight from the port. The marked improvement in Ethiopians road condition and coverage is also a factor not to be neglected in improving truck turnaround time permitting trucks make long distance coverage's. The introduction of fleet management system aided by GPS tracking may also have caused the improvements, given all these factors it is wise to conclude that the implementation of BPR not to have casual relation even to the small amount progress exhibited.

Figure 9 Mean truck turnaround time expressed in terms of no of trips made per month.

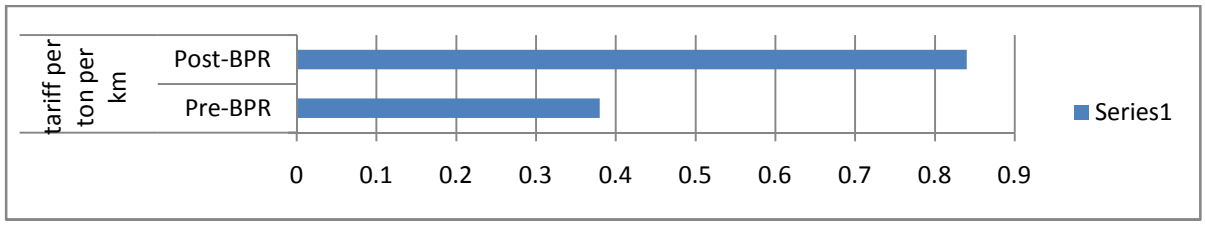


4.1.7 Assessment of Improvements Made on Financial KPI

Other non-operational performance indicators were also evaluated to ascertain the impact of BPR on Comet transport organization as result of BPR implementation. Besides to 12 years compiledfinancial performance data, Ethiopia total gross domestic product dollar amount was gathered to counter check and ascertain the changes exhibited are not of the outcome of expansion in trade activities of the economy. A chart that depicts the gross domestic product of Ethiopia compiled for 12 years starting from the year 2002 to the year 2012 is annexed. As the figures first were stated in dollars, the amount is adjusted to its equivalent in birr by taking the average dollar exchange value posted on website of national bank of Ethiopia.

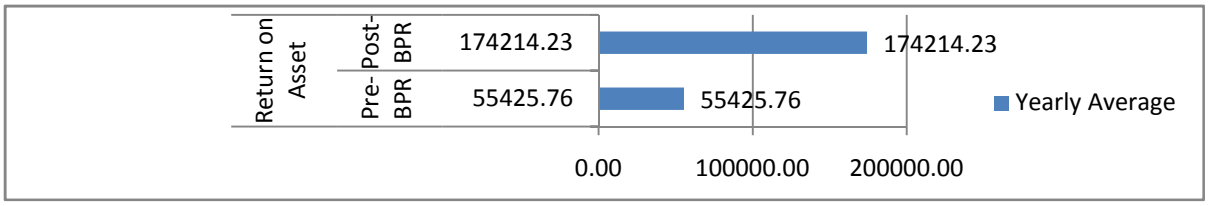
One of the factors evaluated was tariff per ton per kilometer which demandsComet to price its services fairly and rip of benefits. The analysis of Tariff per ton per km shows a significant difference between the pre- and post-BPR periods (p-value =0.004 <0.05). The tariff before the BPR was 0.38 cents per ton per kilometer that reached to the amount 0.84 per ton per km during the post-BPR periods. This is a vast amount of 0.46 (121.1%) increase per ton per km. even if price inflation is a nationwide event Comets effort to rightly price its services could be associated with the change implementation of BPR has brought.

Figure 10Tariff per ton per km



Return on asset is one of the financial criteria's deployed to evaluate performance of the share company. ROE during the pre-BPR period is 55,425,760.00 on average. The average return on asset after the BPR has increased to the amount 174,214,230.00 on average. The t-test result with p-values 0.000 < 0.05 shows significantly high amount of return on asset after the BPR compared to the return on asset before the BPR. The mean average increase amounts to 118,788,470.00 which is 214.3% increases compared to the performance before the BPR.

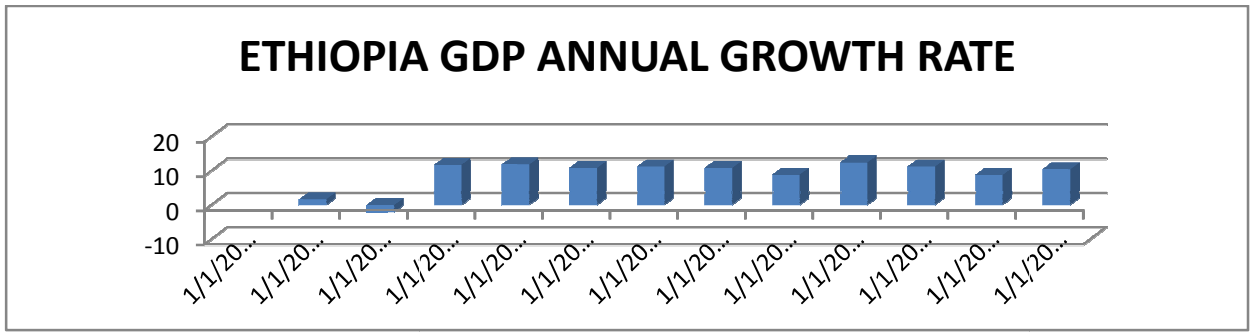
Figure 11. Mean average return on asset



The threefold increase exhibited in mean yearly average for the two periods in comparison of return on asset depicts the very significant performance improvement to have been witnessed after implementation of BPR in Comet transport.

As the other KPI indicators show significant progress we have tried to see the relation of Comets performance with GDP of Ethiopia. For that Comets performance was evaluated in-relationagainst the gross domestic product.

Figure 12.Ethiopia GDP growth rate



Source: www.tradingeconomics.com, National Bank of Ethiopia

The above chart depicts the expansion of gross domestic product of Ethiopia along the years exhibiting significant expansion on the volume of trade activity in the country.

In order to test the ratios against the consistent increase in gross domestic product of Ethiopia, 12 years of financial performance data was compiled for study unit. The following chart depicts compiled report of Comet financial stand in terms of revenue, and costs incurred to cover trade activity and concomitant profit earned.

Table 3. Twelve years of aggregate financial performance data

Year	Revenue ('000)	Cost ('000)	Profit ('000)	Manpower	Employee turnover To	Total assets
2002/2003	35,602.50	40,653.22	-5,050.72	675	38	208,613,190.00
2003/2004	40,067.56	33,768.95	6,298.61	844	25	211,732,620.00
2004/2005	64,833.83	57,276.71	7,557.12	841	24	222,919,927.00
2005/2006	73,443.99	61,329.54	12,114.45	868	23	237,119,804.54
2006/2007	83,099.09	71,795.42	11,303.67	874	36	249,255,846.00
2007/2008	102,032.88	87,081.90	14,950.98	868	21	262,000,689.70
2008/2009	171,470.67	126,564.35	44,906.32	897	42	398,838,929.79
2009/2010	240,199.83	171,075.58	69,124.25	852	72	393,829,884.08
20010/2011	236,934.01	170,721.11	66,212.90	737	119	387,266,678.72
2011/2012	276,820.53	224,900.05	51,920.48	861	47	412,541,179.35
2012/2013	343,412.32	225,301.08	118,111.25	830	54	453,407,901.30
2013/2014	369,674.32	227,034.35	142,639.97	809	56	518,519,158.73

The table and chart above describes Revenue generated and cost incurred in the past 12 years the study was conducted. The table depicts both the revenue as well the cost to have increased significantly over the years. Likewise the profit has shown significant increase over the years to reach to profit level incomparable to its history. The figure below depicts trends of Comet consistent increase both revenue and costs. The data compiled for manpower shows steady growth as the no of staffs showed gradual increase since 2003/2004. However the employee turnover reached pick 2010/2011 with record 119 turnover caused by the disgruntlements related with implementation of BPR and staunch resistances. Post BPR period is characterized by high labor turnover.

Figure 13.Cost and revenue chart

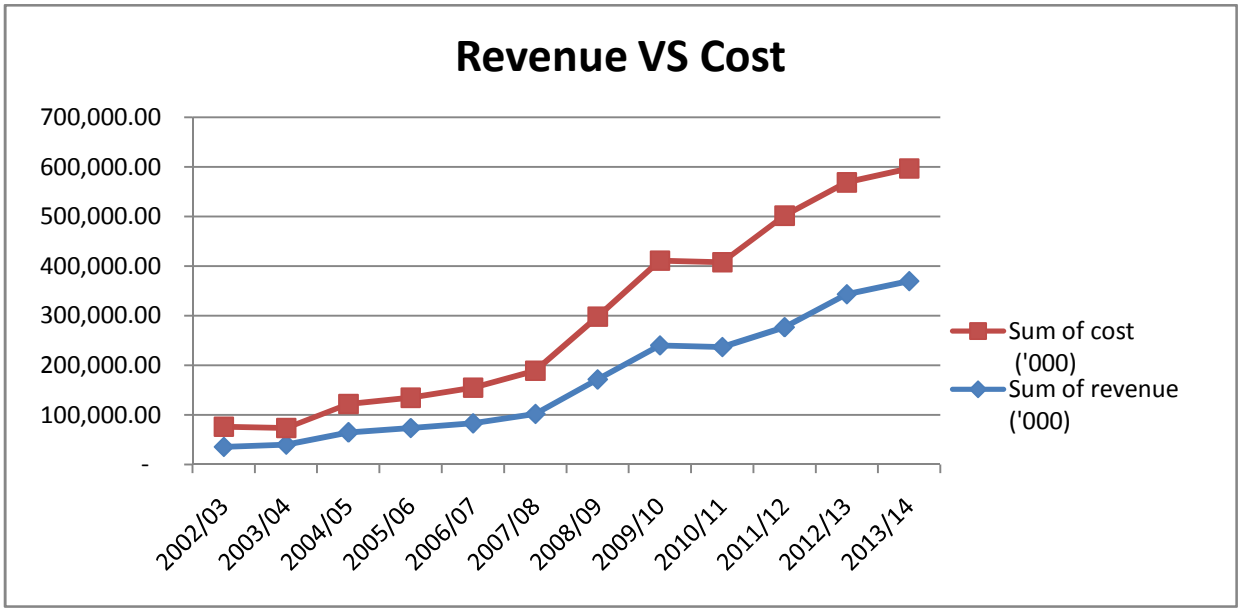
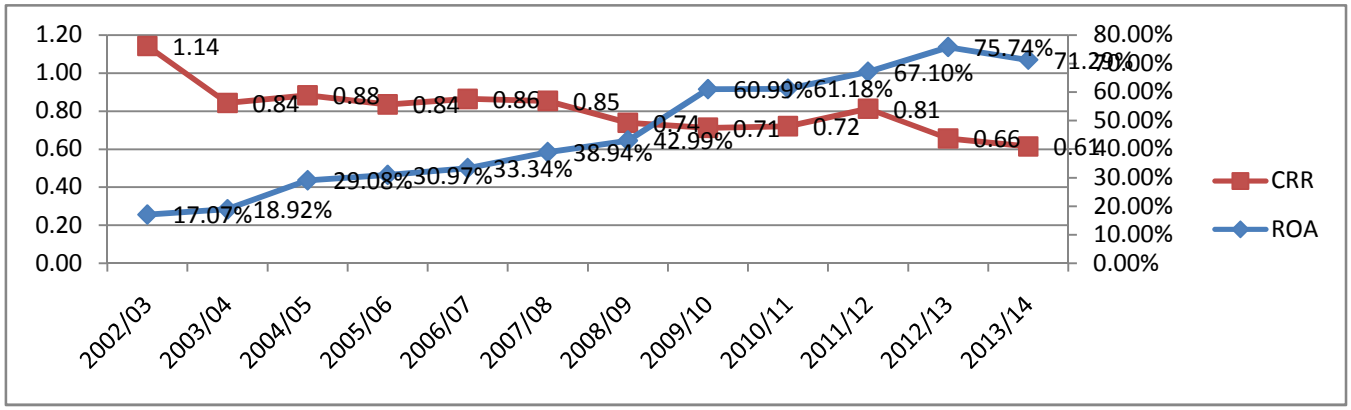


Figure 14. Cost to revenue and return asset ratio



The gap between the revenue and cost graph shows the profits earned by the company. Regarding cost-to-revenue ratio, a decline trend is seen in the chart depicted below. The-cost-to-revenue ratio is the amount of cost the company has to expend in order to generate one dollar. This ratio was 1.14 in 2002/03 and becomes as low as 0.61 in 2013/14. This decline trend shows that the company has expended lesser costs to make revenues even if it is recognizing

depreciation expenses for the newly procured trucks.

Thus cost-to-revenue ratio, in general, has decreased from an average of 0.86 in the pre BPR period to 0.70 after the BPR marking consistent cost reduction control as envisaged in the company BPR document. Likewise, profit is also seen to have significantly increased over the years. It is also evident from the graph that, the gap (profit) is much wider (higher) during the post BPR years than the pre BPR years. Moreover, the rate of revenue increase during the post BPR period is 10.44% compared to the pre BPR period which had increased by 22.02% on mean average.

Table 4. Pre and post PBR comparison key finance performance indexes

Performance Indicators	RoETO (rate of Employee Turnover)	R%ofGDP (revenue as Percentage share of GDP)	RoRinc (Rate of Revenue Increase)	MPP (Manpower Productivity)	ROA (Return on Asset)	CRR (Cost to Revenue Ratio)
Pre-BPR	2.92%	0.068%	22.02%	93,583.17	33.08%	0.86
Post-BPR	7.92%	0.048%	10.44%	378,424.22	68.83%	0.70

This relatively lower rate of increase may be attributed to the problems of percentages in reporting growth to a higher in relative terms with smaller scale. This is asserted as although lower rate of increase is observed in the revenue generated, the company enjoys an average profit of 94,721,150 during post BPR compare to average of 11, 486,000 during pre BPR era.

Tables depicted above and below show trends in key performance indexes like Return on asset and cost-to-revenue ratio over the years. The steadily increase in ROA is evident from the tables put above. For the study period, the return on asset has increased from 17.07% in 2002/03 to 71.2% in 2013/14. This means that, once the BPR is implemented, for every dollar of an asset investment, 0.71 cents was returned in one year. During the pre BPR period, this figure is 33.08% compared to significantly improved level of 68.83% after the BPR; which is almost double.

Table 5. 12 year's trend of return on asset and cost to revenue ratio

Year	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
ROA	17.1%	18.9%	29.1%	31.0%	33.3%	38.9%	43.0%	61.0%	61.2%	67.1%	75.7%	71.3%
CRR	1.142	0.843	0.883	0.835	0.864	0.853	0.738	0.712	0.721	0.812	0.656	0.614

In the table and chart below, the revenue generated by the company is seen vis-à-vis the GDP of the country. As seen in the table before theGDP (USD) has a steady increase from 7.71 billion USD in 2002/03 to 46.87 billion USD in 2013/14. The growth rate of the national GDP is also evident over the years. Consistent with the trend in GDP growth, although the revenue has increased over time, the company'srevenue growth rate (RvGrRT) has showed a decline trend. As the revenue generated by the company is a contribution to the GDP of the country, the revenue as percentage of the GDP could measure the contribution of the company in the country's overall economy. This percentage share to the GDP is seen to have declined over the years.

Figure 15. Comet wealth growth rate and wealth contribution towards Ethiopian GDP

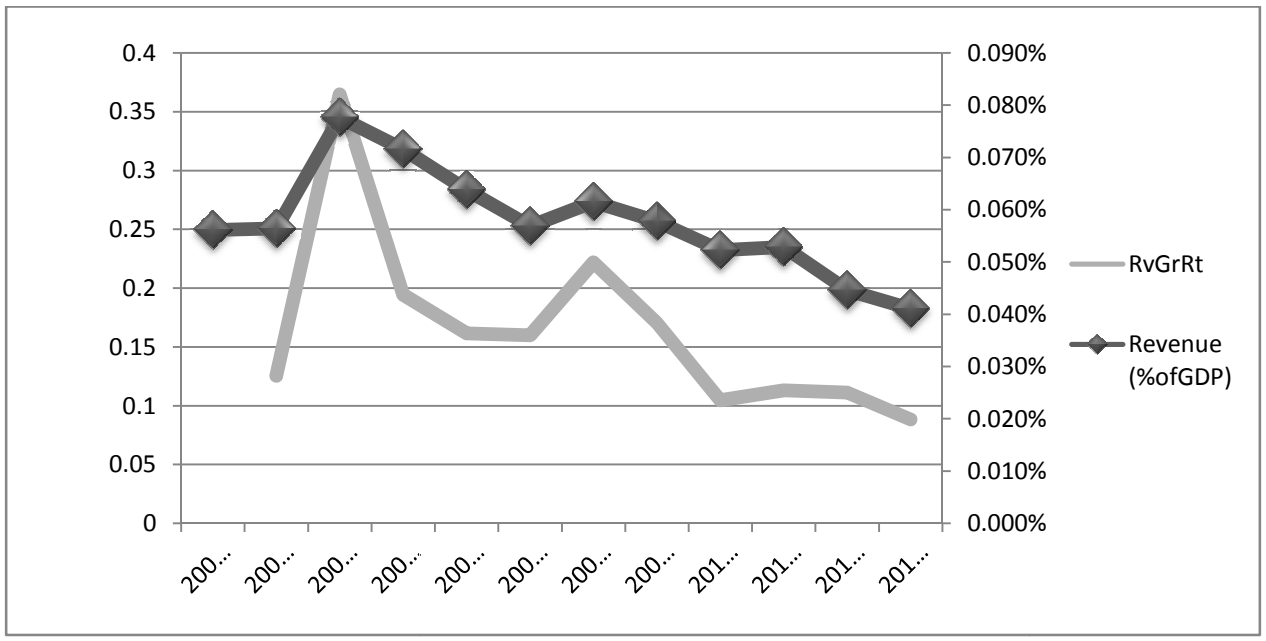
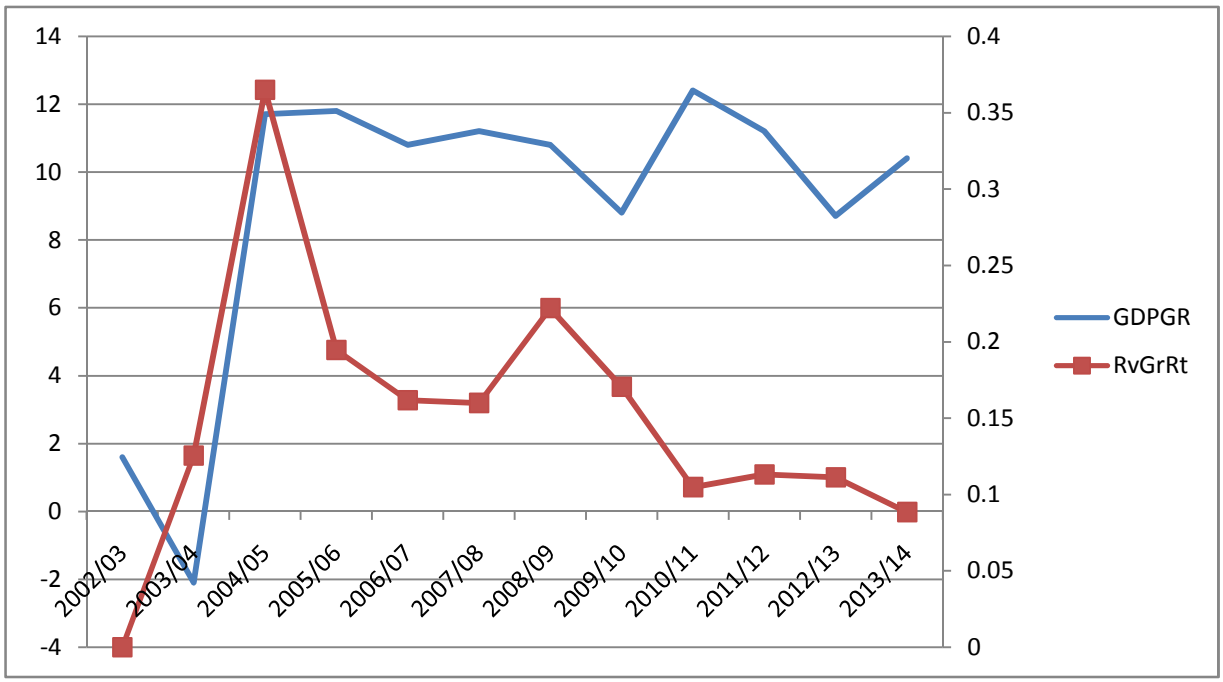


Table 6. .Comets wealth growth and share from the GDP

Year	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
GDPGR	1.6	-2.1	11.7	11.8	10.8	11.2	10.8	8.8	12.4	11.2	8.7	10.4
GDP(USD)	7.71	8.54	9.95	12.17	15	19.35	26.57	31.84	29.39	31.37	42.81	46.87
Revenue (%ofGDP)	0.056%	0.056%	0.078%	0.072%	0.064%	0.057%	0.062%	0.058%	0.052%	0.053%	0.045%	0.041%
Exc. Rate (est.)	8.224	8.314	8.3845	8.4275	8.68	9.265	10.485	13.05	15.41	16.685	17.975	19.2
RvGrRt		12.54%	36.48%	19.46%	16.17%	15.99%	22.19%	17.05%	10.48%	11.31%	11.12%	8.84%

During the post BPR period, percentage share of GDP (%ofGDP) was 0.048% on average as compared to 0.068% before the BPR is implemented. The decline trend in percentage contribution to the GDP compared to the stable GDP growth rate is seen. This asserts that as theeconomygrow, Comet not to have been able to maintain fair share out of it. This may also have been caused from growth on sectors where Comet as Logistics Company may not partake share.

Figure 15 comparison of GDP growth Vis a VisComets revenue



Furthermore return on asset, during the pre-BPR period was mean average of 55425.76 birr. Return on assets has increased to Birr 118,788.47, which has shown 214.3% increases compared to post BPR period.

4.1.8 Performance Assessment Related to Efficient Utilization of Human Resources

Over the years manpower of the company has shown significant increase. The increase in manpower is justified as the company activity in the business has increased significantly. The major attribute here is to assess how the manpower productivity (MPP) has increased over the years. As the chart below shows, the manpower productivity in the company has steadily increased. The mean average contribution which at post BPR period to have amounted about 53,000.00 in 2002/03 has shown marked increased to about 457,000.00 in 2013/14. On average, the manpower productivity during the pre BPR time was 93,583.17 which have significantly improved to 378,424.22 once the company implemented BPR.

The four-fold increase depicts the effectiveness ofthe BPR implementation and fruitful contributions the redesigned and engineered work process had earnest contribution towards the success as asserted byoverall assessments.

Figure 15.Employee turnover and average employee contribution to revenue

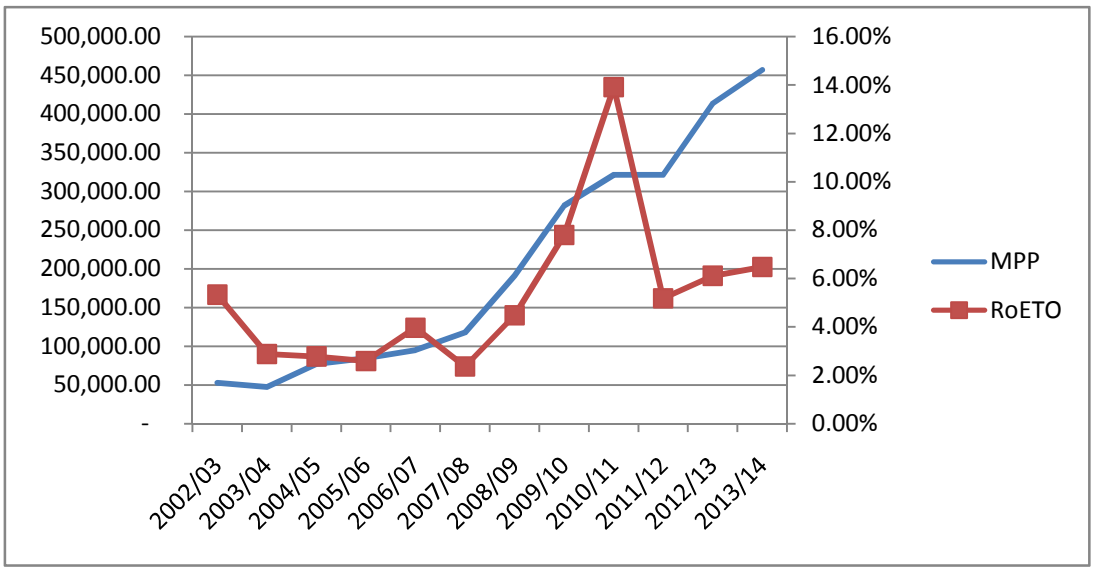


Table 7. Employee turnover and average revenue per employee

Year	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Manpower	675	844	841	868	874	868	897	852	737	861	830	809
EmpTO	38	25	24	23	36	21	42	72	119	47	54	56
MPP	52,744.44	47,473.41	77,091.36	84,612.89	95,079.05	117,549.40	191,160.17	281,924.68	321,484.41	321,510.48	413,749.79	456,952.19
RoETO	5.33%	2.88%	2.77%	2.58%	3.96%	2.36%	4.47%	7.79%	13.90%	5.18%	6.11%	6.47%

4.1.9 Summary of Findings

After Analyzing operational and financial -financial data's compiled for the past 12 years, the findings obtained justifies significant improvements made by the S.C. which can be attributed to the powerful change management tool BPR implemented since fiscal year 2009/2010. The improvements made are huge in terms of increasing efficiencies on operational KPI and effectiveness on in increasing outcomes measured by financial key performance indicators. Hence the findings affirm an increase the efficiency of operation, minimization of costs and an increase on profitability all other aspects. I will discuss the findings of the study to provide a comprehensive but brief summary alongside with the operational and financial performance indicator.

- The review of Comet's BPR organizing process study and implementation document and

the strategic plan has identified the intention to increase its operational capabilities by procuring new vehicles and increase truck availability by increasing maintenance services. In line with this strategic intent, the number of available trucks significantly increased from 164 before the company initiated BPR, to 215 as a result of BPR implementation; which is a 31% improvement. The mean number of working trucks after BPR has increased by about 37 (33%) on average. The study has asserted the mean truck availability post BPR implementation period with yearly mean average to show increments from 112 to 149. Though not significant, truck waiting time at maintenance posts has shown an improvement aiding the mean yearly truck availability. The post BPR period has exhibited tremendous increases in expanding operational capabilities to have resulted in positive impact in other key performance indicators that have shown positive outcome.

- Third party logistics providers are most often evaluated by amount of tonnages they transported. The comparison of tonnage transported throughout the post BPR period has shown enormous increase witnessed by the statistics that, as the amount of carriages made (in '000 ton) has increased from 137.56 during the pre-BPR period to 241.91 during the post-BPR period. This 104.35 (75.8%) improvement of the BPR. Moreover, the amount of carriage per working trucks before the BPR is 137.56/52 = 2.65 have now improved to the level 241.91/66.15=3.66 that clearly depicts the gain in efficiency as a result of the BPR implementation.
- The mean yearly distance covered in post BPR period measured in million km has improved by about 76.4%. The increase is very significant, evidenced by an increase from 118.01, before the BPR, to the level 208.16 during post-BPR period. The increase in kilometer coverage will witness operational efficiency in reaching longer distances. The gain can be attributed to the increase on truck availability that has increased operational capabilities. However the distance coverage exceeded the contribution from newly procured trucks as the mean average distance coverage per truck has increased significantly asserting truck kilometer coverage to have increased at post BPR period. This is evidenced by the increases in per truck Kilometers travelled that have exhibited an increase by 51.9%. The average km covered per truck during the pre-BPR period is 6318.33/52=121.51. This figure after the BPR has increased to by 24 km'sper truck

during after the BPR. The striking difference cannot be attributed to other factor than the improved work process design and improved work supervision system.

- Post BPR period has fetched robust increase in revenue, profit and return on asset. The rate of revenue increase during the post BPR period is 10.44% compared to the pre BPR period which had increased by 22.02% on average. The mean rate revenue growth percentage of post BPR is almost double than the rate of revenue growth recorded at pre BPR period. Even if the overall cost has increased for post BPR period, the data asserts the decrease in rate of increase of costs in comparisons to the gigantic increase of revenue at post BPR period. Likewise, the costs have increased but with lesser incremental rate compared with the rate of revenue growth. Though the ration rate of revenue increase has shown decline, the costs incurred to generate the revenue has significantly decreased letting the company to earn profits not seen in pre BPR period. Although lower rate of increase is observed in the revenue generated post BPR, the company enjoys an mean average profit of 94,721,150 during post BPR compare to average of 11, 486,000 during pre BPR era. Cost-to-Revenue ratio has shown declined trend. This C-to-R ratio, in general, has decreased from an average of 0.86 in the pre BPR period to 0.70 after there. Indicating greater efficiency to generate greater outcome using fewer resources.
- The return on assets ratio, often called the return on total assets, is a profitability ratio that measures the net income produced by total assets during a period by comparing net income to the average total assets. In other words, the return on assets ratio or ROA measures how efficiently a company can manage its assets to produce profits during a period. The analyses of the data have indicated ROA to have increased from 17.07% in 2006 to 71.2% in 2006. Mean ROA before BPR is computed to be 33.08% compared to significantly improved level of 68.83% after the BPR; which is almost double. Hence the data asserts implementation of BPR to have increase its resources efficiently
- The cost-to-revenue ratio measures operation efficiency by comparing operating costs as a proportion of the total revenue. In other words, dividing costs by the amount of revenue, the cost-to-revenue ratio shows the level of resources required to generate every dollar of revenue. T-to-revenue ratio has declined trend. The mean cost to revenue ration for post and pre BPR period has shown significant decrease from an average of 0.86 in

the pre BPR period to 0.70 after the BPR. Thus post BPR period is to be commended for reducing costs significantly as stated as one of the objectives BPR objectives.

- Revenue per employee measures the average revenue generated by each employee of a company. Over the years manpower of the company and the manpower productivity has increased over the years. Mean average manpower productivity during the pre BPR time was 93,583.17 which have significantly improved to 378,424.22 once the company implemented BPR. The almost four fold increase in per employee revenue contributions is additional testament on the level of change implementation of BPR to have brought to Comet.

  Finally Comets performance was evaluated in aspects of wealth contributions towards Ethiopia gross domestic product. I have not been able to calculate industry specific share as there has not been refined data compiled for the past 12 years. Although the revenue has increased over time, the company's revenue's growth rate has showed a decline trend. The percentage share to the GDP is also seen to have declined over the years. Though notassisted by evidence, the greater increase in service sector and enormous in growth in the national economy may have been the courses for declining trends. During the post BPR period, percentage share of GDP is 0.048% on average as compared to 0.068% before the BPR gets implemented.

CHAPTER 5: CONCLUSION AND RECOMMENDATIONS

In chapter four, we have analyzed the data and presented summary of key findings. To close the study, in this chapter we will pass on research conclusions and recommendations. On the bases of the analysis and key findings presented in the previous chapter,it is arrived at the following conclusions and recommendations.

5.1Conclusion

This descriptiveand co relational study has given due attention to the assessment of Business Process Reengineering and Organizational Performance of Third PartyLogistics Service Providers in Ethiopia by taking a case study of Comet transport share company.In doing this, itprimarily focused on the assessment of the significance of BPR in enhancing the overall organizationalperformance of Comet Transport. With this regards, the findings of theresearch appear to underscore that third party logistics service providers in Ethiopia can be improved if commitment, ownership, and the drive for change are in place. In particularBPR can deliver significant changes in the efficiency and effectiveness of performances of logistics service providers as asserted in the findings of this study conducted on Comet Transport Share Company. According to the findings arrived via evaluating the implementation processes, one can conclude that those external factors that pushed the enterprise to conduct BPR has paved the way for the organization to reap off benefits that was not at allcomparable to pre BPR period. Converse analyzing reveals that the executive management ofComet should not have waited the top down orders of state officials to delve into implementation of change management initiatives, which could and should have been conducted earlier as the situation were proved to be very reap at post BPR period. Had they made a continual survey on threats posed from the market, expectations of the federal state, demandsof clients and service recipients and of had performed SWOT analysis on the nature of the market and level of competition amongst player, the change management could have been established earlier. The company should have conducted assessments on level of satisfaction from internal and external stake holders than to act in response to the prescription of the state to implement the changes. Thus, the deferral to implement the change management may perhaps have resulted in exacerbation of problems at post BPR period and discloses lost opportunities for significant gains.

5.2Recommendations

Based on the study findings, the following major recommendations are forwarded.

1. Recognizing the bulk of significant improvement to have come from implementing change management tool, accomplishments in performances registered for Comet from implementing BPR can be attributed to several factors. Amongst many, the commitment and full involvement of top leadership and the government of Ethiopia to get success in the BPR endeavors may have made the business executives to work extra hard on delivering the necessary reform measures. These it is up to the current management to work towards sustaining the changes implemented as result of BPR. Failing to internalize BPR continuously to employees and sliding back from getting rid of those who block the transformation process tend to backslide from gains secured so far.
2. The evaluation of some of the key performance indicator that have not resulted in significant changes suggests, Comet should give adequate attention towards improving some key performance indicator like the turnaround time that affects overall truck utilization and impede progresses secured on variety of aspects. Truck down time is one component that have not been readily addressed as the assessment has asserted it to be key area progress have-not been achieved.
3. The improvement envisioned to happen in strengthening the in-house maintenance unit and the search of outsourcing companies that give better maintenance services should not be overlooked as the indicators at post BPR period proved to be Achilles Hill of Comet Transport S.C.
4. The management of Comet share company should not be soothed by the marked increase in revenue as different factors like price inflation, the increase in trade volume of import export, getting award of contracts from the of state without competition may have contributed to the unprecedented growth in the generation of revenue and the concomitant growth in profit. Thus it is necessary to make inter-industry comparison to assert the sincerity of growth in revenue and look for holes that would open future opportunities.
5. The labor turnover has shown significant increase since the wake of the implementation of BPR project with reported incidents of strikes and conflicts with the union and

individual employees. The management of Comet needs to place adequate focus on increasing communication about the change management tool and work hard to win the trust and confidence of the employees as lasting improvement would be secured only in the presence of smooth industrial relations between the management and employees. Issues that threaten employees' confidence and trust to the organization need be addressed early as stability in employee turnover yet subsided until 2003/3004 the last year the study addressed.

6. All in all the BPR implementation in Comet transport has witnessed marked improvement in almost all rages of performance indicators. The mark of success exhibited in operational performance indicators asserts well the benefits ripped in financial performance indicators. Along with the success on an increase in revenue and profit it has fulfilled its social obligation role in paying taxes to the state and creation of employment opportunities for citizens. This asserts the contribution of change management initiatives towards efficiency and effectiveness at macro level as well the overall contribution towards the development of the state.
7. Finally the management of Comet transport should not fall in slumber as the endurance of achievements is not to be taken for granted, unless the company proves its commitment to engage in continuous assessment of business opportunities, corrective measures to short fallings; sustained and continual improvement tasks to sustain the current gains and even take them to higher heights.
8. Lastly we recommend further research to be made on the topic and industry area that would be able to evaluate the effect of BPR implementation on industry level performances, to underpin and articulate the findings asserted so far.

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