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Service Marketing in Bangladesh- A Case Study of Bangladesh Railway

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A THESIS SUBMITTED TO THE INSTITUTE OF BUSINESS ADMINISTRATION (IBA) AT THE UNIVERSITY OF RAJSHAHI FOR THE AWARD OF THE DEGREE OF MASTER OF PHILOSOPHY

BY

MAHMUDUL KABIR

M. PHIL. FELLOW, ROLL NO: 08-0002 SESSION: 2008-09

INSTITUTE OF BUSINESS ADMINISTRATION (IBA) UNIVERSITY OF RAJSHAHI BANGLADESH

DATE: 18-06-2015



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DECLARATION

I do hereby declare that the thesis entitled "Service Marketing in Bangladesh- A Case Study of Bangladesh Railway" submitted to the Institute of Business Administration, University of Rajshahi, Bangladesh, for the degree of Master of Philosophy (M. Phil) in Marketing is an original and independent research work. No part of this thesis, in any form, has been submitted to any other university/ institution for any other degree or diploma.

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CERTIFICATE

I do hereby certify that the thesis entitled "Service Marketing in Bangladesh- A Case Study of Bangladesh Railway" submitted by Mahmudul Kabir, a fellow of the Institute of Business Administration (IBA), University of Rajshahi, Bangladesh, for the degree of Master of Philosophy (M. Phil) in Marketing has been done under my supervision and guidance. I recommend its submission for examination.

SUPERVISOR

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Date: 18-06-2015

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The Author Date: 18-06-2015

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ABSTRACT

The present study is descriptive in nature. It attempts to explore the condition of Service Marketing in Bangladesh Railway sector depending on the mixes of Marketing. The study has been designed to find out the condition of Service Marketing in Bangladesh Railway related to product, price, place promotion and people.

In the present study, the researcher has collected both qualitative data and quantitative data depending on the mixes of marketing. The researcher has analyzed data using the mixed approach of Creswell and has formulated triangulation to interpret data and their result for the findings of the research study. So, the present research study is qualitative and quantitative (mixed approach) by nature.

A potential practical situation observation and documentary analysis has been conducted for descriptive analysis of the study. This documentary analysis is widely used here to draw the inference from the compilation, analysis and interpretation of assembled data. Here, 'Opinion survey' is also used for qualitative judgments from the lower class, upper class and middle class passengers traveling in different times by Bangladesh Railway. For opinion survey, 400 respondents (100 upper class passengers, 200 middle class passengers) have been selected randomly from the west zone of Bangladesh Railway. The reason behind selecting more number of middle Class passengers than that of other classes is that, researchers found this group of passengers replied more enthusiastically to them. The Simple Random Sampling (SRS) technique has been followed for collecting primary data.

First, the researcher has collected a range of information regarding the issue through interview, consultation and observation. The statements have been noted on the basis of their opinion and 49 items have been used as the primary elements of the questionnaire. The Likert-type (Summated Scales) scale has been considered suitable and adopted for the present study because of the fact that the study has been viewed as a mediator of social life of the people engaged with the transportation service of Bangladesh railway. Then a pilot study has been conducted in order to select the items of the questionnaire. 120 respondents

have been interviewed (35 lower class Passengers, 35 upper class Passengers and 50 middle class Passengers) for this purpose. Then, the method of finding the Discriminative Power (DP) of each statement has been calculated for primary item selection. An item with a high DP has been selected for the questionnaire. By this way, 14 items have been excluded which have showed DP below 0.50. As a result, final list of questionnaire contains 35 items. The selected 35 questions have been classified into five major groups according to the mixes of marketing considered as product, price, place, promotion and people. That will remain in final form of questionnaire to be applied on selected respondents finally for collecting primary data. Then, another one close ended questionnaire has been reformed to find out the satisfaction, belief and opinion of different kinds of passengers. Each of the questions has two alternate answers as 'Yes' and 'No'.

Different statistical methods and techniques have been applied for analysis of data such as Percentage corresponding, Mean Deviation, Standard Deviation, One-sample T-test, Paired T-test and Co-efficient of Variation (CV) analysis. Then the researcher has calculated the scores of the opinions of the respondents in quantitative approach. The researcher has formulated the matrix of the beneficiaries' using both percentage corresponding and mean corresponding of the scores through triangulation. Then the researcher has converted the highly stressed opinions into qualitative mode and has interpreted as findings. By this process, the issues that have more significance and possible solutions have been identified.

In general the interpretation of results has showed that the overall existing service sector of Bangladesh Railway has implemented a little content of service marketing concept. The overall enterprise has implemented the conventional ancient methods in managing the organization. In order to achieve the expected goal of Bangladesh Railway there needs a change, extension and modification of the overall corporate structure of the enterprise and a proper market based reorientation is very much necessary.

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ACCRONYMS

ABR	:	Assam Bengal Railway
AC	:	Air-Conditioned
ACCM	:	Additional Chief Commercial Manager
ACCM	:	Assistant Chief Commercial Manager
ACO	:	Assistant Commercial Officer
ADB	:	Asian Development Bank
ALTID	:	Asian Land Transport Infrastructure Development
AO	:	Accounts Officer
BBA	:	Bachelor of Business Education
BBS	:	Bangladesh Bureau of Statistics
BCR	:	Bengal Central Railway
BCS	:	Bangladesh Civil Service
BE	:	Business Education
BEA	:	Bangladesh Economic Association
BG	:	Broad Gauge
BIISS	:	Bangladesh Institute of International Strategic Studies
BITS	:	Bangladesh Integrated Transport System Study
BIWTA	:	Bangladesh Inland Water Transport Authority
BOO	:	Build Operate & Own
BOT	:	Build Operate & Transfer
BR	:	Bangladesh Railway
BRA	:	Bangladesh Railway Authority
BRCE	:	Bangladesh Railway Corporate Entity
BRTA	:	Bangladesh Road Transport Authority
BTSS	:	Bangladesh Transport System Study
BTTB	:	Bangladesh Telegraph and Telephone Board
C& W	:	Carriage and Wagon
CCM	:	Chief Commercial Manager
CLW	:	Central Locomotive Workshop
CONCOR	:	Container Corporation
CPA	:	Chief Personnel Administrator
CRB	•	Central Railway Building
CSO	:	Community Service Obligation
CSRTS	•	Computerized Seat Reservation and Ticketing System
CV	:	Co-efficient of Variation
CWCS	•	Computerized Wagon Control System
DAO	:	Divisional Accounts Officer
DCO	•	Divisional Commercial Officer
DE	:	Diesel Electric
DFA	:	Divisional Finance Advisor
DG Track	:	Double Gauge Track
DG	:	Director General
DH	:	Diesel Hydraulic
DP	•	Discriminative Power
~1	•	

DRM		Divisional Railway Manager
EBR	:	Eastern Bengal Railway
EMBA	:	Executive MBA
EPZ		Export Processing Zone
ESCAP	•	Economic and Social Commission for Asia and the Pacific
FA & CAO		Finance Advisor and Chief Accounts Officer
GATS	:	General Agreement of Trade in Service
GCP	:	General Class Passengers
GDP		Gross National Product
GIPR		Great Indian Peninsula Railway
GIS	•	Geographic Information System
GM	•	General Manager
HCP		High Class Passenger
HR	•	Human Resource
HRD	•	Human Resource Development
HRM	•	Human Resource Management
IBA		Institute of Business Administration
ICD	•	Inland Container Depot
IMF	•	International Monetary Fund
ITA	:	International Transport Authority
IWT	:	Inland Water Transport
JRI	:	Junior Traffic Inspector of Commercial
LCP	:	Lower Class Passengers
LOB	:	Line of Business
M. Phil	:	Master of Philosophy
MBA	:	Master of Business Education
MCP	:	Middle Class Passengers
MG	:	Meter Gauge
MIS	:	Management Information System
NBR	:	Northern Bengal State Railway
NTRC	:	National Transport Research Center
Р	:	Probability
PDB	:	Power Development Board
Ph. D	:	Doctor of Philosophy
PPP	:	Public Private Partnership
PSO	:	Public Service Obligation
PWD	:	Public Works Department
Q	:	Question
RNB	:	Railway Nirapatta Bahini
RRP	:	Railway Recovery Program
RTA	:	Railway Training Academy
SAARC	:	South Asian Association for Regional Cooperation
SRI	:	Senior Railway Inspector
SRS	:	Simple Random Sampling
SWOT	:	Strength, Weakness, Opportunity and Threat
TA	:	Technical Assistance
ТА	:	Trans Asian Railway

ТАО		Traffic Account Officer
TC	•	Ticket Collector
	•	
TIA	:	Traffic Inspector of Audit
TIC	:	Traffic Inspector of Commercial
TIT	:	Traffic Inspector of Transportation
Tk.	:	Taka
TN	:	Train Number Taker
TT	:	Train Ticker Examiner
UCP	:	Upper Class Passengers
UK	:	United Kingdom
UNDP	:	United Nations Development Project
UNESCO	:	United Nations Educational, Scientific and Cultural Organization
USA	:	United States of America
USSR	:	United Soviet Socialist Republic
VC	:	Vice Chancellor
WB	:	World Bank
WSE	:	World Survey of Education

CHAPTER ONE

1.1 INTRODUCTION

Marketer tries to bring satisfaction to the customers for any organization by anticipating the needs, wants and demands and provides products or services accordingly. As society develops it becomes imperative that the cumulative experiences and knowledge is necessary for any kind of development. The accepted customs, norms, values, skills, expertise etc. are required to be preserved passing on to successive generations.

Every organization tries to satisfy their customers in the best possible ways. Product, price, place, promotion and people are the marketing mixes which help an organization to satisfy customers. As a matter of consequence, marketing is clearly an increasingly important factor which plays a dominant role in the service sector. Marketing helps an organization to produce product or generate service for the customers according to their needs. Marketing dictates people of the organization how to behave properly with their customers in fulfilling their expectations.

We cannot deny the fact that whether we run a production based organization or a service generating organization we need to have proper application of marketing there. To increase the performance of an organization in terms of productivity and efficiency, the application of marketing principles is a must. Marketing is necessary to make an organization productive, creative, efficient, and sustainable, profit oriented and progressive.

The activities of railway managements will have to be directed at: identifying, understanding and responding to the needs of their existing and potential customers; identifying and understanding the cost causation and profit potential associated with individual traffics or market segments; and bringing about the organizational change which will ensure that railways will satisfy new commercial goals. These guidelines are intended to assist the railway organization of the country to set up the systems and procedures necessary for BR to be able to function as commercially vibrant, market-led organization. All units of the organization must become and remain customer aware, and their activities

must be harmonized and coordinated with the satisfaction of customers as the fundamental objective.

To enhance the efficiency of BR, proper attention should be given to this trust sector. Government has to patronize the sector properly for its expansion and development. In the same time, operational & maintenance as well as overhead cost should be minimized, management should be efficient, and number of employees should be rational. So, for the healthy growth and development of Bangladesh Railway, the unique mass transportation system of the country, a proper market-based reorientation is very much necessary.

1.2 STATEMENT OF THE PROBLEM

Bangladesh Railway (BR) is one of the largest public enterprises (Information Book: Bangladesh Railway, 2012, p. 20) in the country, so to say, the lifeline of the nation. This enterprise is playing a vital role in the transport communication sector of Bangladesh and enhances the socio-economic development and industrialization of the country. Bangladesh Railway is expected to serve both as a commercial enterprise and as a public utility service. As a commercial enterprise, Bangladesh Railway has an obligation to generate sufficient revenue to meet its cost and as a public utility service it has a special responsibility to provide transport facilities to a large number of passengers and transport essential commodities for mass consumption all over the country.

Bangladesh Railway, the only largest service oriented industry, is also required to provide transport facilities in time of floods, cyclone, draughts etc. In addition to these, Bangladesh Railway has to bear some costs of education and medical care of railway employees, deployment of police forces in railway premises, etc.

In performing all these social obligations, Bangladesh Railway has to bear certain cost burdens namely 'Social Costs'. Some important item of social costs are noted below: (Information Book: Bangladesh Railway, 2012, p. 24)

- Carrying essential commodities and rendering transport facilities to passengers at lower prices than cost of services;
- Operation of un-economic branch lines to ensure the transport facilities of the vulnerable groups;
- Carrying relief materials at concessionary rates;
- Carrying military traffic at less than normal traffic etc.

Bangladesh Railway is compensated under "Public Service Obligation (PSO)" system for operating specific services, which are not commercially viable, but for social benefit it is necessary. This type of social obligation has already been accepted by the State and which is being reflected in the revenue budget of Bangladesh Railway since 1993-94. (Information Book: Bangladesh Railway 2012, p. 24)

The history of railway in the present geopolitical boundary of Bangladesh dates back to 15 November 1862 (Kabir, 2007, p. 21). In the Bangladesh British India railway system, there was considerable expansion of railway network in this territory. But since the partition of India in 1947, there was hardly any expansion of railway in East Pakistan while the road network expanded tremendously. Because of monopoly, the railway of this area inherited from Bangladesh British India started declining day by day and the railway started losing its glorious past. As a commercial enterprise, there may have the impact of service marketing on the overall organization of Bangladesh railway. Now, in the long history, Bangladesh railway is facing major threats to its long term survival. It requires a major change in the out look of railway management and in the culture of railway organization.

Hence, the present study tried to find out the existing service structure of Bangladesh Railway, it tries to know the opinions of the customers towards Bangladesh Railway as well as it tries to identify the problems faced by Bangladesh Railway and lastly it tries to give a few suggestions for the betterment of Bangladesh Railway. Bangladesh Railway always plays a vital role in the expansion of trade, commerce and industry. Bulk of the export and import traffic of the country is still rail borne. It feeds the industry with raw materials and then helps export and marketing of the goods at a considerable cost. The railway carries the food grains, fertilizers and consumer goods to all parts of the country at reasonable and

comparatively low costs. But it is also true that Bangladesh Railway at present within the territory of Bangladesh has been facing the most severe stresses and strains since the Second World War. Bangladesh Railway has many problems of various operating bottlenecks. Traditional method and equipment are utilized and no modern system is applied as the time expects. A large number of railway employees including experienced officers and skilled workers have left their jobs.

Considering the vulnerable circumstances of Bangladesh Railway, the present study tried to create a new dimension of working environment in Bangladesh Railway implementing the theory and principles of marketing to enrich Bangladesh Railway as a commercial enterprise of global standard.

Marketing In Service Sector

Marketing means producing product according to the demand, it's pricing, promoting it to the consumers to the convenient places for them. Thus, marketing is essential in any sector of economic development. So, we cannot think any progress without implementing proper marketing strategies in the service sector of any commercial enterprise. Marketer tries to bring satisfaction in the mind of the consumers, through developing new ideas in product or service. So, it is clear to us that nothing can be done effectively without proper application of marketing in any organization.

Therefore, the true implementation of marketing is must to build an efficient organization; it ensures it's simultaneous and harmonious growth, and above all productivity in the industrial sector like Bangladesh Railway.

1.3 OBJECTIVES OF THE STUDY

The Objectives of the study are as follows:

- 1. To analyze the existing service structure of Bangladesh Railway.
- 2. To know the opinions of the Customer towards Bangladesh Railway.
- 3. To identify the problems faced by Bangladesh Railway.
- 4. To give a few suggestions for the betterment of Bangladesh Railway.

1.4 DEFINITION OF KEY TERMS OF THE STUDY

Services marketing is a sub field of marketing, which can be split into the two main areas of goods marketing (which includes the marketing of fast moving consumer goods (FMCG) and durables) and services marketing. Services marketing typically refer to both business to consumer (B2C) and business to business (B2B) services, and includes marketing of services like telecommunications services, financial services, all types of hospitality services, car rental services, air travel, Railway travel, health care services and professional services. The range of approaches and expressions of a marketing idea developed with the hope that it be effective in conveying the ideas to the diverse population of people who receive it.

Services are economic activities offered by one party to another. Often time-based, performances bring about desired results to recipients, objects, or other assets for which purchasers have responsibility. In exchange for money, time, and effort, service customers expect value from access to goods, labor, professional skills, facilities, networks, and systems; but they do not normally take ownership of any of the physical elements involved. Here the word 'Service' is used to refer to the whole working atmosphere of Bangladesh Railway, the largest communication sector of Bangladesh. The term 'Service' is considered in two perspectives such as:

- 1. Professional activities of officers and employees what they do as service.
- 2. The service what the railway enterprise provides toward the customers.

Marketing: Marketing is a social process by which individuals and groups obtain what they need and want through creating, offering and freely exchanging products and services of value with others. (Philip Kotler, Book: Marketing Management, P. 9, 11th Edition)

Bangladesh Railway: The largest and unique transportation sector of Bangladesh rendering its service from 1862 (Information Book: Bangladesh Railway, 2012, p. 1) to still today as the autonomous enterprise of the country.

1.5 IMPORTANCE OF THE STUDY

Marketing is the performance of business activities that direct the flow of goods and services from producer to customer or user in order to satisfy customer and accomplish the firm's objectives. In order to achieve the customer's satisfaction service/product must be available in the right form, at the right time, in the right place and the number that will allow customer to obtain possession of the product.

Even a few years ago, there were not a large number of road vehicles owners employed in transportation sector, but recently observing due to increasing demand of transportation, many firms are engaged with the field. There is much high demand for Railway transportation than the existing service structure. Most of the customers prefer speedy and more available mode of transport. As a commercial enterprise, BR has some activities that ensure services to satisfy customer. In order to achieve the customer satisfaction, service must be available in the right form at the right time in the right place and the number that will allow customer to obtain possession of the service. Bangladesh has earned a terrific development in road networking, which creates a hard competition between Roads and Railway transportation.

The marketing policy, which the organization initiated, is not effective, as the customers are not getting the services as per their need. The policy has failed to reflect the theory of economics to a great extent. Service marketing is influenced by the properties like quality, availability, safety, comfortable and speedy service towards customer. Most of the characteristics have not been fulfilled to attract the customers. In case of pricing, the organization has to face a great constraint. The traffic fare has not been increased according to the operational cost as well as inflation. As a result, the net operating income shows negative figures for several years.

As a pubic utility service, it has a special responsibility to provide cheaper transport facilities to a large number of passengers and movement of essential commodities for mass consumption. That is why, it cannot raise fare rate like other private transportation to achieve the highest earning goal. Besides these, it faces different problems in service marketing.

However, very few research works have been accomplished in the area of service marketing in railway sector. So the researcher has taken this study to analyze the basic service marketing problems in Bangladesh Railway. BR has a bright prospect in mass transportation in Bangladesh. The study will be helpful for the transport service providers, the customers and the policy makers who are involved in the formulation of the service marketing strategy for the continuous growth of BR as well as of the country.

1.6 LIMITATIONS OF THE STUDY

Simultaneously all information from individuals related to Bangladesh Railway needs more time and money. Since the respondents were not aware enough and might not be available at times of need and since they were busy with their own activities, the researcher would have to undergo many troubles. Moreover, the time and expenditure to be incurred might hinder the process of data collection. The study is confined to Lalmonirhat and Pakshi that are the two divisions of west zone of Bangladesh Railway. In this case, we have to depend on the various reports, Journals and newspapers also. Customers are not well acquainted with the modern marketing concepts and practices. For this, sometimes their answers may not be subject related. In spite of such difficulties, the researcher would try to use the best of the ability to motivate respondents. So, the data collected from the respondents would be reliable enough and objective oriented. Taking these limitations into consideration, it will not be fare to draw any significant conclusions, yet it will help the policy makers in formulating a desirable policy on service marketing.

1.7 CHAPTER OUTLINE

The present study is consisted and organized in 6 (Six) Chapters. The Layout of the proposed chapters are as follows:

The First is adhered to the statement of the Problem, Objectives of the study, Definition of key terms of the study, Importance of the Study, Limitations of the study and Chapter Outline.

The Second Chapter has illustrated about the literature reviewed for this study.

The Third Chapter has highlighted the conceptual ideas.

The Fourth Chapter is comprehended with the methodology of the study.

The Fifth Chapter is exposed for data analysis.

The Sixth Chapter has displayed the Findings, Recommendations and Conclusion.

CHAPTER TWO

2.1 REVIEW OF LITERATURE

In Bangladesh there are only few research work conducted on Bangladesh Railway. The purpose of this chapter is to provide an overview of the main findings of important studies relating to the Bangladesh Railway. The review of relevant literature was essential to know the available works in the field of the present study. At this stage the researcher has tried his best to make review of relevant works done in this area. A few research works, articles, reports and books related with the proposed study are briefly reviewed below:

Hall (1976) submitted a report focusing on the main engineering and economic consideration affecting the conversion of a railway to a road, and replacement of trains with buses and Lorries. They did not discuss anything about service marketing on those communication sectors. Hence, the present study tries to explore service marketing situation of Bangladesh railway.

Ahmed (1974) accommodated the general rules for open lines of Bangladesh Railway together with the subsidiary rules for information and guidance of the staff in the book. It was organized with 20 chapters and each chapter contained different rules, Acts and amendments. The reviewed book had contained various rules and regulations of Bangladesh Railway. But it was a traditional rule book. So the present study has tried to formulate a way of adopting service marketing policy for the betterment of the organizational structure of Bangladesh Railway.

Kabir (2007) did a research focusing the history of Bangladesh Railway and the impact of railway on the socio-economic change and development of the mass people of the country. Kabir had drawn a pen picture of the historical background of Bangladesh railway but she did not mention anything about the role of service marketing in the railway sector. So, the present study is much more appreciated to find out the necessity of service marketing in Bangladesh Railway.

The General Manager (1975) formulated the general rules for the conveyance of passengers and the rules, rates and conditions for the conveyance by coaching trains, of other traffic such as luggage, parcels, animals etc. The rules, rates and conditions given in this book are applicable to the Bangladesh Railway in local and through booking. But these rules and regulations are not related with service marketing in railway sector. So, the present study is conducted to find out the necessity of service marketing in Bangladesh Railway.

Chowdhury (1981) said that the paucity of Text books on Railway subjects in the country is well known. The shortage of books was keenly felt by the Trainers and the Trainees. In an attempt to solve this problem partially a program for compilation of instructions and rules on different subjects had been undertaken by the Academy and the task had been assigned to the Instructor concerned in the respective field. At last they organized a book ' A Hand Book of Instructions on Commercial Subjects' which contained only the Railway codes, Manuals embodying basic rules, instructions, functions and principles of different Departments. But there was no proper discussion for the overall development of Bangladesh Railway. So, the researcher has tried to implement the mentioned aspect in the sector of Bangladesh Railway for the overall improvement of that sector.

Planning Commission organized a project named 'Railway Development Planning Project, Revised: October, 1983' under the supervision of UNDP and expressed that the history of planning for economic and social development in Bangladesh began soon after liberation, with the initiation of the first five year plan-1973-1978. It brought about a new economic order through social ownership of the vital sectors of economy and development of a system of institutions and effective implementation. During the last decade, a number of studies on the various aspects of functioning of Bangladesh Railway had been conducted with expatriate technical assistance financed by Asian Development Bank (ADB), United Nations Development Project (UNDP) etc. The recommendation contained in this study reports have been mostly accepted by the government and there was no doubt, that their systematic implementation would go a long way in improving the overall efficiency of Bangladesh Railway. But they did not asses the impact of Marketing Mixes on this service sector individually. So, the researcher has tried to find out relationship of the enterprise with the impact of service Marketing. The statistical information book 'Rail in canada-2007' published from the statistics Canada, Transportation Division, and Multimodal Transport section, June 2009, provides information on the size and structure of the Canadian Rail Transport industry. It contained a number of financial, operating and commodity origin and destination statistical tables. The statistical tables in the publication were created from two annual surveys- the annual Rail survey and the Rail commodity origin and destination survey. The reviewed information book was about the information on the size and structure of the Canadian Rail transport industry. It was a statistical overview on Canadian Railway and did not state any impact of service marketing on that sector. Hence the present study has discussed about the impact of service marketing on Bangladesh Railway and tries to find out the challenges of implementing proper marketing strategies on that sector.

Mukherjee et al. (2004) expressed that India has one of the largest networks in the world which is under a public monopoly. The objective of this study was to examine the prospect of liberalizing trade in rail transport services and the costs and benefits of doing so under the GATS framework. The study also attempted to identify the domestic and external barriers to India's trade in rail transport services and suggested various reforms with a view to enabling Indian railways to improve its productivity, efficiency and global competitiveness. The study also suggested possible strategies for India and this sector in the ongoing market access negotiations in services in the Doha round. The study highlighted the prospect of liberalizing trade in rail transport services and the costs and benefits of doing so under the GATS framework. It tried to investigate the developments in rail transport sector, both globally and in India, in the context of ongoing GATS 2000 negotiations. The present study tries to find out the way of implementation of service marketing in the railway sector of Bangladesh.

De (2007) said that in recent year, South Asia had received growing attention as a region that was integrating successfully into the global economy. The study tried to find out the opportunities and associated prospects and problems in strengthening the India-Bangladesh economic cooperation and integration agenda in the context of SAARC. Describing the communication system, the study stated that India had a stable broad gauge railway network

whereas that of Bangladesh was miserably poor, fragmented and unstable. Hence the present study tries to find out the way of developing the overall condition of Bangladesh Railway implementing service marketing on that sector.

Rahman (2009) described in their article 'Economic growth in Bangladesh: Experience and Policy priorities' that the Liberation War of 1971 destroyed one fifth of Bangladesh's economy and post-war dislocations left the country on a slow growth trajectory for better part of two decades. It was found that major constraints on Bangladesh's economic growth include: low levels of human capital; poor infrastructure; market failures in specific sectors; low levels of trade; corruption; low levels of transportation and communication systems and cumbersome regulations. The study explained that in items of passengers carried or goods transported, Bangladesh's Railway was far less efficient than most comparable countries of the world. However, the present study has tried to find out the gap in the way of the development of Bangladesh Railway through exploring the impact of service marketing in that sector.

Islam (2009) said that transportation sector in general and Bangladesh Railway in particular, had always played a vital role in the economic growth and development of Bangladesh by hauling both goods and passengers. However, Bangladesh Railway had been facing formidable challenges from alternative modes of transport during the past decades. Bangladesh Railway was loosing its share both in absolute and relative terms, to a fast growing road sector. This lose of share could largely be attributed to a well planned and well developed road network that began expanding since the eighties. The objective of this paper was to conduct an empirical investigation into the time series properties of Railway's output measured as a ratio of gross domestic product (GDP) by closely following Cuddington (1992), Cuddington and Urzua (1989) and Reinhart and Wickham (1994). Their methodology found widespread application in the movement of commodity prices. Despite its simplicity, the approach did not proliferate to other research topic, including the transportation sector. This paper was an attempt to fill in a gap in knowledge and was a significant contribution to the literature in terms of an application of a methodology to understand the operation and performance of Bangladesh Railway. The paper also offered a

set of policy suggestions for the short, the medium and the long term. The policies would help the Railway arrest its declining share and improved its performance.

Ahmed (2004) described that an attempt had been made to analyze competition policies form two perspectives, namely, global perspective and Bangladesh perspective. The geographical location of the country was ideal for global trade with access to international sea and air route. Apart form that, the country was endowed with abundant natural resources like natural gas, water and fertile soil etc. The Bangladesh railway, a state owned enterprise enjoyed some monopoly in the Railway sector; it covered about thirty two percent (2706 Km.) of the total area of Bangladesh. In Bangladesh, it was basically a service sector leaving a little scope for the private sector investment, considering its huge investment costs. However, some private companies had been entrusted with the management of several trains/locomotives with a view to raising the efficiency in Railway services. To be honest, most of the trains still run under the government management. This sector was not a profitable one for which, it was thought, and the local or foreign investors have not shown keen interest for massive investment in that sector. The study briefed the management system of Bangladesh Railway and a comparative analysis with the managerial performance of some private companies with a view to raising the efficiency in Railway services. As a result, the present study has tried to find out the way of improvement in the overall service sector of Bangladesh Railway implementing the proper marketing strategies.

Yuhua Guo (Bureau of Transportation, Ministry of Railways, Beijing 100844, China, PhD candidate of Central South University in Railway Transportation Planning and Management- Email: guoyuhua675@yahoo.cn) did a research on Mass customization Marketing Strategies for China Railway Freight service. He identified different systems. By following those systems Mass customization Marketing Strategies for China Railway Freight service marketing strategy for Bangladesh Railway. So, the present study has tried to find out the way of improvement in the overall service sector of Bangladesh Railway implementing the proper marketing strategies.

Ron Kopicki et al. (CFS Discussion Paper Series, Number 111) did a research on japan national railway case study. This case study details the plans and process by means of which the JNR restructuring and ultimate privatization was carried out. The research was carried out on Japan National Railway. It was not related on service marketing of Bangladesh Railway. So, the present study has tried to find out the way of improvement in the overall service sector of Bangladesh Railway implementing the proper marketing strategies.

Ron Kopicki et al. (CFS Discussion Paper Series, Number 111) did a research on New Zealand railways case study. This case study, which is organized into four parts, details the process whereby New Zealand's rail system was transformed from a government department into a privately owned commercial enterprise. It was not related to Bangladesh Railway Service Marketing. So, the present study has tried to find out the way of improvement in the overall service sector of Bangladesh Railway implementing the proper marketing strategies.

Ron Kopicki et al. (CFS Discussion Paper Series, Number 111) did a research on United States small railroads case study. The purpose of this case study is to identify the factors that created an economically viable small railroad industry segment in the United States. This study details the baseline industry conditions prior to small railroad restructuring, discusses the evolution and the restructuring of private railroads, recent performance of those explores the lessons learned during the process conversion of uneconomic branch lines to viable small railroads. It was not related to Bangladesh Railway Service Marketing. So, the present study has tried to find out the way of improvement in the overall service sector of Bangladesh Railway implementing the proper marketing strategies.

A study was prepared by G. Raghuram and Rachna Gangwar on "Marketing Strategies for Freight Traffic on Indian Railways; A System Perspective." The research tried to find out the basic marketing strategies of the company, Indian railways (IR). It was not related to Bangladesh Railway Service Marketing. So, the present study has tried to find out the way of improvement in the overall service sector of Bangladesh Railway implementing the proper marketing strategies. A study has taken form International Journal of Business and Management Invention ISSN (Online): 2319 – 8028, ISSN (Print): 2319 – 801X www.ijbmi.org Volume 2 Issue 2 // February. 2013// PP.49-54. The study Attempts to identify the Indian Railway provided for the passengers in train. Hence the basic objective of this study is to identify the factors determining the service quality of the Indian Railways in train service that lead to the customer satisfaction. It was not related to Bangladesh Railway Service Marketing. So, the present study has tried to find out the way of improvement in the overall service sector of Bangladesh Railway implementing the proper marketing strategies.

A study was prepared by Desh Gupta and Milind Sathye- Faculty of Business & Government- University of Canberra, Canberra, Australia (ASARC Working Paper 2008/06) on "Financial Turnaround of the Indian Railways. The research tried to find out the factors that led to the turnaround of the Indian Railways from a low performing organization to a high performing one. It was not related to Bangladesh Railway Service Marketing. So, the present study has tried to find out the way of improvement in the overall service sector of Bangladesh Railway implementing the proper marketing strategies.

A study was prepared by Geetika, Shefali Nandan Motilal Nehru National Institute of Technology (Geetika et al. 2008; Sachdev and Verma 2004; Ekinci 2003; Czepiel 1990), on Determinants of Customer Satisfaction on Service Quality: A Study of Railway Platforms in India. The research tried to find out the factors for passenger satisfaction regarding facilities provided on platforms. It was not related to Bangladesh Railway Service Marketing. So, the present study has tried to find out the way of improvement in the overall service sector of Bangladesh Railway implementing the proper marketing strategies.

The editorial and staff reports of many daily newspapers attracted the attention of the concerned authority of the Bangladesh Railway for keeping vital role in the respective sector and commented on various issues. The individual ministry of Railway was the result of long run revolution. The new established ministry announced a program in order to extend Bangladesh Railway in many desired ways. It was a matter of great hope that the planning program would keep a vital role for the development of Bangladesh Railway. The

negligence of the Railway policy makers and planners, the impediment of the properties of the Road transport and confusing media news made an obstacle in the way of implementing the program. In the way of extension, it would be kept in mind that the preference would have to be adopted for welfare of low earned people. The Railway would not be reconstructed not only for the luxuries of the rich people but also for a comfortable journey of the general people. There need a different type of thinking about the future development of Bangladesh Railway. Bangladesh Railway was the only communication enterprise of the country which was going on under the direct supervision of the government. Bangladesh Railway was not only a government supervised welfare organization but also related with the culture, constitutional right, national security, environment, fuel, poverty eradication, the rights of the common people and their hope etc. The newspaper report tried to describe the overall poor condition of the Bangladesh Railway as well as the desire and expectation of the common people regarding Bangladesh Railway.

Literature Gap Analysis

Reviewing all the literatures it is understood that different studies were conducted on Railway of different nations also on Bangladesh Railway by several researchers. Some studies are closely related to this particular study, some are somehow related to this study and others are not very much related. All these studies on railway were conducted for specific purpose, motive and required different methodology and time period. So, the researcher has tried to focus on those aspects of Bangladesh Railway that are very much necessary in recent times following a different methodology, sampling and time period.

Discussion

New technology has made considerable changes in the nature of services and in the development of the organization. Government policies, social changes, business trends, advances in information technology, internationalization and globalization are forces that determine the basis for competition. (Lovelock and Wright, 2001, p.23). The willingness and ability of officers and executives to respond to changes affecting the service sector determine whether their organizations prosper. The innovative service organization thrives on change and on the creative strategy necessary to make it happen (Fisk et.al., 2004.p.62).

Along with service strategies all members of service organizations should be able to answer the question of what business they are in an how their processes make satisfaction to their customers and to all parties involved in including them. Here, the concept of a learning organization offers a lot of ideas of organizational development. Watkins & Marsick (1992.p.115) suggest that "It is an organization that is characterized by total employee involvement in a process of collaboratively conducted, collectively accountable change directed towards shared values or principles." According to Senge (1990,p.22) it is: 'An organization where people continually expand their capacity to create result they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free.'

In Senge's (1990,p.28) view, system thinking is the cornerstone of a learning organization as it integrates all other disciplines (personal mastery, mental models, shared vision, team learning) into a coherent body. People should learn to realize how they are company works as a whole and how their actions are contributing/blocking its developments. It is evident that creating a learning organization without individual learners is impossible. Mumford (1994, p.16) believes that a learning organization depends on the skills, approaches and commitment of individuals. Argyris and Schön (1996, p.36) point out that an organization can only accumulate knowledge through the actions and capabilities of the individuals which make it up. The lack of proper system is a cause of problems; in Scholtes's (1997, p.31) view majority of problems within organizations originate from systems, processes and methods not form workers. Staff efforts are in vain if the system does not support their activities. The strong organization enables networking and collaboration valuing open and causal conversations. People get benefit from own and other people's experience, whether it is positive or negative. (Allen, 1996, p.104) consequently in the framework of organizational goals it is essential to see interrelations between systems and people. However without a shared goal the relevant processes become more mechanical than creative.

One of the favorable factors in an organization is believed to be a flexible structure (Senge, 1990, p.22; Pedler et.al., 1991, p.48; Handy, 1992, p.56), which enables involvement of all employees in decision making and strategy developments. Handy (1992, p.57) emphasizes

that people can sense true freedom and contribute to change only when they can make their decisions themselves. One of the benefits of flexible structure is that it enables people to learn skills and acquire knowledge beyond their specific job requirements. Flexibility allows people to move freely within the organization and perform other roles and tasks, and exercise judgment and add their personal touch. According to Antonacopoulou (1998,p.68) and Kandampully (1998,p.431) by adding personal touch employees not only enhance the quality and value of the service they extend but also establish strong relationships and bonding with the customers they serve internally.

Many researches of leading organization plays a central meaning on teamwork benefits as by working in teams' knowledge can be shared. Key areas of teamwork relying on Chang (1994,p.73) are effective communication, active listening, willingness to understand team members' mental models, ability to solve conflicts, diversity of Team members and motivating clients. Allen (1996, p.108) has emphasized that every team member cannot and is not expected to know everything about the job. However sharing common knowledge is important for the completion of a job. Outstanding element of a learning organization is effective communication e.g. vertical, horizontal, formal, informal influences perceptions of participants, and therefore affects the overall performance. Communication between and across all layers of the company gives a sense of coherence, making each individual a vital part of the whole system, thus employees perform better as they feel more a part of the company (Allen, 1996, p. 109; Watkins & Marsick, 1996, p. 32). Key words of the communication flow are transparency, openness, constructive feedback and free access to information. The same importance is also put on communication with all parties interested, e.g. suppliers, customers, share holders and local communities. Garvin (1998, p.47) has stressed that sometimes the most interesting ideas can be generated form outside the immediate working environment.

Development Of Objectives

Previous studies have provided some empirical support and theoretical backing that employee satisfaction; service quality, customer satisfaction, and firm profitability are likely to be associated to one another. The researcher has developed and established the following objectives grounded in pertinent theories and empirical works accordingly.

Yoom and Suh (2003, p.597) showed that satisfied employees are more likely to work harder and provide better services via organizational citizenship behaviors. Employees who are satisfied with their jobs tend to be more involved in their employing organizations, and more dedicated to delivering services with a high level of quality. Previous research has also suggested that loyal employees are more eager to and more capable of delivering a higher level of service quality (Loveman 1998, p.18; Silvestro & Cross 2000, p.244). Researchers have argued that service quality is influenced by job satisfaction of employees (Bowen & Schneider 1985, p.127; Hartline & Ferrell 1996, p.52). Hartline & Ferrell (1996, p.53) find evidence that job satisfaction felt by customer-contact employees is associated with service quality.

The argument that employee satisfaction improves service quality is grounded on the theory of equality in social exchanges (Gouldner 1960, p.161; Homans 1961, p.327; Blau 1964, p.96; Organ 1977, p.46). Although there are different views on social exchange theory, theorists agree that social exchange involves a series of interactions to generate obligations (Emerson 1976, p.335; Cropanzano & Mitchell 2005, p.874) that are un specified (Blau 1964, p.97). These interactions are usually seen as independent actions of another persons (Blau 1964, p.97). The underlying reason is that an exchange requires a bidirectional transaction where something is give and something is returned (Cropanzano & Mitchell 2005, p.875). The transaction also has the potentiality of generating high quality relationships among the parties involved in (Cropanzano & Mitchell 2005, p.877). The underlying assumption of equity in social exchanges is that most people expect social justice or equity to prevail in interpersonal transactions (Organ 1977, p.47; Cropanzano et.al. 2003, p.160). An individual accords some manner of social gift that is inequitably in excess of what is anticipated will experience gratitude and feel an obligation to reciprocate the benefactor (Gouldner 1960, p.162; Organ 1977, p.48). Such positive reciprocal relationship evolve over time into trusting, loyal, and mutual commitments (Cropanzano & Mitchell 2005, p.877).

In the context of social exchange theory, when an employer offers favorable conditions that make its service employees satisfied, the latter will return tend to be committed to making an extra effort to the organization as a means of reciprocity for their employer (Wayne et.al. 1997, p.82; Flynn 2005, p.737), leading to a higher level of service quality.

Research in consumer psychology has shown that exposing customers to happy employees results in customers having a positive attitudinal bias towards the service (Howard & Gengler 2001, p.189). Likewise, research in organizational behavior has revealed that the hostility of service employees has a direct impact on hostile mood of customers (Douct 2004, p.761), leading to customer dissatisfaction regardless of the performance of the core tasks of the services delivered to fulfill customer needs.

The direct relationship between employee satisfaction and customer satisfaction is established based on the theory of emotional contagion (Sutton & Rafaeli 1988, p.461; Hatfield et.al. 1992, p.151; Hatfield et.al. 1994, p.164; Barsade 2002, p.643). Emotional contagion is defined as the tendency of a person to automatically mimic and synchronize expressions, postures, and vocalization with those of another persons and, consequently, to converge emotionally (Hatfield et.al. 1992, p.155; Hatfield et.al. 1994, p.166). This process occurs through the conscious and unconscious induction of emotion states and behavioral attitudes (Schoenewolf 1990, p.49).

Barsade (2002, p.644) discussed a model of emotional contagion to explain how group emotional contagion processes operate. It starts when a person enters a group; he exposed himself to other group members' emotions. He perceives the group members' emotions expressed primarily through their non verbal signals, including facial expression, vocalizations, postures, and movements. The group members' expressed emotion is then transferred to him. This transfer involves mimicry of facial expressions, speech rates, and body movements of the senders. Affective feedback form such mimicry then produces corresponding emotional experiences. Research has shown that mimicry is more likely when there is a bond between two parties. Accordingly, the researcher has conjectured that when customers are exposed to the emotional displays of employees, the experience corresponding changes in their own active status (Pugh 2001, p.1018; Barsade 2002, p. 643). Service employees with a high level of job satisfaction will appear to the customer more balanced and pleased with their environment, leading to positive influence on the level of customer satisfaction (Homburg & Stock 2004, p.144). In contrast, dissatisfied service employees are likely to display unpleasant emotion to customers, reducing the level of customer satisfaction through emotional contagion.

Based of these arguments the researcher has proposed the following objectives:

- 1. To analyze the existing service structure of Bangladesh Railway.
- 2. To know the opinions of the customer towards Bangladesh Railway.
- 3. To identify the problems faced by Bangladesh Railway.
- 4. To give a few suggestions for the betterment of Bangladesh Railway.

An Overview

An adequate and efficient transport system is a pre requisite for both initiating and sustaining economic development. Investment and adopting modern business policy in improving transport efficiency is key to the expansion and integration of economic development- sub-national, national and international. It also helps the generation of economies of scale, increased competition, reduced cost, systematic urbanization; export led faster growth and a larger share of international trade.

The transport system of Bangladesh consists of roads, railways, inland waterways, two sea ports, maritime shipping and civil aviation catering for both domestic and international traffic. The relative role of transport modes evolved with road transport was expanding at the expense of railways and inland water transport. In terms of physical structure, about 2800 kilometers of rail-route inherited in 1947 came down 2746 km. by 1998 and presently it has increased to a length of 2854.96 km. Roads have been built at places ignoring existence of parallel railway facilities.

In Bangladesh, development and maintenance of transport infrastructure are the responsibilities of the public sector. The public sector is involved in transport operations in rail, road, inland water transport (IWT) and ocean shipping alongside the private sector. In the road transport and IWT sub-sectors, the private sector is dominant. In ocean shipping, however, public sector still predominates, although the private sector has considerably increased its role in this sector in recent years. Recently, private sector has also been involved in domestic air transport and railway operations in a very limited scale. Transport output for passenger flow in Bangladesh is increasing rapidly. In 1992/93, 1.37 billion passengers trips were undertaken in Bangladesh. The average distance traveled for a passenger trip was 48 km. The road sector has increased its share about 69% of total passenger travel demand of 95 billion passenger-km. in 1999/00. On the other hand the rail sector continues to lose its share of passenger travel since more intercity passenger travel is now conducted through the road transport system, which offers faster more convenient and cheaper services. The transport demand is expected to grow much faster than both the economy and population as the industrial structure of the economy changes, and as the transport network is further developed. Transport demand in Bangladesh is expected to increase considerably in the coming years, largely because of the increasing demand for freight transport and the expected increasing personal mobility. The opening of the Jamuna Bridge in June 1998 removed one major national transport barrier in Bangladesh. This together with ADB-financed road and rail link projects and prospected up-coming of Padma Mustipurpose Bridge including railway link, is expected to increase further freight and passenger movement. This major transport development projects are crucial for physical and economic integration of Bangladesh, linking the western and southern parts of the country with the commercial center of Dhaka and country's primary port of Chittagong, both in the eastern half of the country. They are also important for improving access to many poor people leaving in the agricultural areas in the north-west. Thus, The future expansion program of each of the surface transport modes in providing transport services depends crucially on government policy and investment decisions keeping pace with the past transport development trend and the recently changed scenario in the transport sector.

Hence the present study has tried to analyze the existing service structure of Bangladesh Railway, to know the opinions of the customers towards Bangladesh Railway, to identify the problems faced by Bangladesh Railway, and further the study has tried to give a few suggestions for the betterment of Bangladesh Railway.

CHAPTER THREE

CONCEPTUAL FRAMEWORK

3.1 Conceptual Framework In Service Marketing Perspective

3.1.1 Concept Of Service Marketing

Service marketing is a sub field of marketing, which can be split into the two main areas of goods marketing (which includes the marketing of fast moving consumer goods (FMCG) and durables) and services marketing. Service marketing typically refers to both business to consumer (B2C) and business to business (B2B) services, and includes marketing of services like telecommunications services, financial services, all types of hospitality services, car rental services, air travel, Railway travel, health care services and professional services. The range of approaches and expressions of a marketing idea developed with the hope that it be effective in conveying the ideas to the diverse population of people who receive it.

Services are economic activities offered by one party to another. Often time-based, performances bring about desired results to recipients, objects, or other assets for which purchasers have responsibility. In exchange for money, time, and effort, service customers expect value from access to goods, labor, professional skills, facilities, networks, and systems; but they do not normally take ownership of any of the physical elements involved.

There has been a long academic debate on what makes services different from goods. The historical perspective in the late-eighteen and early-nineteenth centuries focused on creation and possession of wealth. Classical economists contended that goods were objects of value over which ownership rights could be established and exchanged. Ownership implied tangible possession of an object that had been acquired through purchase, barter or gift from the producer or previous owner and was legally identifiable as the property of the current owner.

Adam Smith's famous book, The Wealth of Nations, published in Great Britain in 1776, distinguished between the outputs of what he termed "productive" and "unproductive" labor. The former, he stated, produced goods that could be stored after production and subsequently exchanged for money or other items of value. But unproductive labor, however" honorable, useful, or... necessary" created services that perished at the time of production and therefore didn't contribute to wealth. Building on this theme, French economist Jean-Baptist Say argued that production and consumption were inseparable in services, coining the term "immaterial products" to describe them.

Marketing services is different from marketing goods, and the marketing tools and practices developed for goods marketing are often not directly transferable to the marketing of services. There are several major differences, including:

The buyer purchases are intangible

The service may be based on the reputation of a single person

It's more difficult to compare the quality of similar services

The buyer cannot return the service

7 P's product promotion placement and price

The differences have resulted in a divergence in the education of services marketing versus regular marketing. Apart from the traditional "4 P's," Product, Price, Place, Promotion, there are three additional "P's" consisting of People, Physical evidence, and Process.

Product Refers to the creation of a service concept that will offer value to target customers and satisfy their needs better than competing alternatives. This consists of a core product that responds to the customer primary need and an array of supplementary service elements that are mutually reinforcing value-added enhancements that help customers to use the core product more effectively.

Place and time may involve physical or electronic channels such as banks now offer customers a choice of distribution channels including visiting a branch, using a network of ATMS, doing business by phone or conducting them over the Internet.

Price and other user outlays are crucial as well. To determine if a particular service is "worth it", customers go beyond monetary considerations and assess the outlays of their time and effort. Thus, service marketers must set prices that target customers are willing and able to pay and minimize other burdensome outlays that are incurred. These may include additional monetary expense in traveling, time expenditures, unwanted mental and physical effort and exposure to negative sensory experiences.

Promotion in services marketing is also educational in nature, especially for new customers. Suppliers need to teach these customers about the benefits of the service, where and when to obtain it, and how to participate in service processes to get the best results. This can be delivered via individuals such as salespeople, at websites, on display screens in self-service equipment and through a variety of advertising media.

The **Process** of delivering the service is very often as important as the function of the service. Operational inputs and outputs can vary widely due to the lack of inventory and real time interaction involved. Nonetheless, variability can be reduced through careful design of the customer service process, adopting standardized procedures, implementing rigorous management of service quality, high standards of training, and automation. Furthermore, customers are often involved in co-production as partial employees through self-service, telecommunications and the Internet.

Physical environment includes the appearance of buildings, landscaping, vehicles, interior furnishing, equipment, uniforms, signs, printed materials and other visible cues that provide evidence of service quality, facility service delivery and guide customers through the service process. This can also be referred to as the "services cape" which can have a profound impact on customer satisfaction and service productivity.

People refer to the human capital of the firm, i.e. the employees. These individuals should possess the required technical skills, good interpersonal skills and positive attitudes that can become a key competitive advantage for the firm.

Service marketing has increased in importance in the 21st century thanks to growth in the service sector of the U.S. economy. More companies are offering intangible service solutions that require expanded marketing consideration beyond conventional product marketing. The marketing mix or the four P's of marketing (product, place, price and promotion) is relevant in marketing services as well as products. However, services marketing require consideration of three additional marketing elements as well. (Christopher Lovelock and Jochen Wirtz, 2011, Services Marketing-People, Technology, Strategy. P.14, 7th Ed., Upper Saddle River, New Jersey: Prentice Hall; Lovelock, C., Gummesson, E.2004. Whither Services Marketing: In search of a new Paradigm and Fresh Perspectives. Journal of Service Research 7(1) P 20-41).

3.1.2 Service Marketing Characteristics

Before addressing the three additional elements of the service marketing mix, you have to understand the traits that make services different from products. The Learn Marketing website outlines the five unique characteristics of services. The first, lack of ownership, signifies that service consumers do not receive a tangible good to own. This relates to the second basic service trait, intangibility. Inseparability explains that service delivery is not separate from the provider. Fourth, services eventually perish, while goods have a shelf life. Fifth, the characteristic of heterogeneity shows that services are hard to deliver consistently.

In the 21st century, the Extended Marketing Mix concept has been popularized thanks to tremendous growth in the U.S. service sector. The Encyclopedia of Business (2nd Ed.) notes that 97 percent of new jobs added from 1990 through 2002 were service jobs. The 7 P's expands on the original four elements of the marketing mix to account for service characteristics. The fifth P is people. Knowledge workers, other employees and management all add to the value of a product and service, or service-only offering, notes the Value Based Management website. The quality of the provider affects service marketing as much as the actual service.

Part of marketing centers on maintaining long-term relationships with loyal customers. To do this, companies need to have well-established and consistent service processes. Timely

and accurate delivery of services within stated terms is vital. Tools and communication used in customer retention programs are important as well. Retailers, for instance, must have systems in place to fulfill commitments of fast and friendly service.

A final critical service marketing element is physical evidence. This is directly tied to the service characteristic of intangibility. With products, your customers can look at, touch and feel your offering. To provide a similar experience, some physical evidence to validate service delivery is an important marketing consideration. If you provide lawn care service, your physical evidence of a quality service delivery is the neatly cut and manicured lawn. In a restaurant, your physical evidence of service is cleanliness, efficient food preparation and a friendly, courteous server. Without these proofs, customer retention and word of mouth are poor. (Business Dictionary: Services Marketing Mix Definition, Learn Marketing: Service Marketing Mix: The 7P`s Value Based Management: Extended Marketing Mix: 7P's Encyclopedia of Business (2nd Ed.): Service Industry, Financial Times Lexicon: Definition of Service Marketing).

Services play an increasingly important role in the economy and in individual organizations. Services are particularly relevant in industries where competitive pressures are forcing companies to find ways to create competitive differentiation. However, there are significant differences between the marketing of services and the marketing of Tangible Products.

Although services marketing have been practiced by some enlightened professionals for decades, the concept of services marketing is still new to many marketing professionals. Many current marketing concepts and tools have simply been transferred from the manufacturing sector. There are common elements between services and products, yet there is a need for marketing methods, tools and concepts that are specific to services.

3.1.3 Developing A New Service Offer

Marketing services differs from marketing physical goods. Goods provide benefits because of their physical characteristics. Services are actions and are:

- Performed, not produced
- Experienced the result of a deed or action
- Intangible cannot be seen, felt, tasted or touched
- Cannot be stocked
- Once performed, the service cannot be returned
- Highly dependent on the human element
- Typically, the customer is a participant in the service delivery process
- Service delivery quality is dependent on the individual service provider
- Services can be tangible acts directed at people's bodies, for example medical procedures, or beauty salons. Or services can be directed at goods and other physical possessions, for example maintenance services. Services can also be intangible acts, for example education and consulting services.

When a company is considering creating a new service for its customers the starting point is to determine:

- what should be done
- to whom
- how the service will be performed
- with which resources
- why there is a customer need
- which benefits are provided to customers

It takes a managed approach to creating, assessing and developing a new service concept to ensure the company offers the right things, to the right customers, and for the right reasons.

Traditionally, marketers have used a product marketing approach to services, focusing on a careful balance of the well-known Four P's of the Marketing Mix: Product, Place, Price, and Promotion. The right mix of these is still critical. However, because of the nature of services, the additional P's of "People," "Process," and "Physical Evidence" take on a greater importance. The intangible nature of services requires a special approach at the strategic stage of service offer development.

The following factors need to be addressed through the P's of "People," "Process" and "Physical Evidence":

Services do not have physical properties to shape a customer's perception. Because of this, services need to be defined so customers can understand and value the service, and therefore will buy the service. In other words, service descriptions need to emphasize "benefits." Also important is recognizing the value that service personnel provide because of their interaction with customers ("People" considerations).

People, processes, tools, methods and management capability need to be in place ready to respond to a market opportunity. Processes need to enable a consistent level of service delivery. These factors are of importance for the service provider organization for efficiency and for quality management in your customer's eyes ("Process" & "People" considerations).

Service needs to become more tangible so they can be charged for and perceived as something to be purchased ("Physical Evidence" considerations).

Create a Service Definition and Focus on the People Aspect of a Service Service is all about people. People buy and use services and people deliver the service.

Your Customer. Customers ultimately use or consume services and play a greater role in service delivery. Therefore, it is important to set and manage customer expectations of what will be provided. A first step in doing this is the creation of a service description. A service description should clearly outline what a customer can expect as well as the rationale behind why the service is relevant. It should also demonstrate how the service satisfies a real customer need. When marketing services, it is imperative to focus on the benefits that a service provides to a customer. A service definition should detail the following:

- What the service is what is performed or provided
- Why the service is important the perceived pain, problem or environmental factors that drive customer need

- Benefits of the service to customers
- Time saved, reduced costs, improvements Tangible deliverables a customer can expect
- A report, a certificate, 24 hour response **Internal Personnel.** Not only does a service description make a service more "real" in the eyes of your customers, it also plays an important role for the service provider and is an important internal communication tool.

Any employee who interacts with your customer is involved in the delivery of the service a part of the customer experience. Service delivery personnel can either create a competitive advantage or become a liability.

A description of the offer (together with good internal processes) helps internal personnel understand what is expected of them. It ensures that service delivery is consistent across the organization.

A service description is also a tool to help sales people "sell." A well-crafted service description creates value in the eyes of the purchaser and becomes the key item in the sales tool kit. To help pinpoint sales opportunities include the following in service descriptions for an internal audience:

- Opportunity spotters
- Guidance on handling objections
- Internal benefits of selling the service (what's in it for the sales person)
- Sources for customer reference
- Any employee who interacts with your customer should know and understand the value your business brings to your customers and how they, as individuals, contribute to the successful delivery of services.

A service description is the foundation for creating an understanding both externally and internally - a tool to manage customer expectations of what will be provided and a tool that provides guidance for service delivery personnel to ensure consistent delivery of service.

(Services Marketing is Different- The People Factor by Dee Davey, Services Marketing, Griffioen Consulting Group).

Bangladesh Railway is a service generating organization. Therefore, this organization should address carefully the three additional marketing mixes such as: Process, Physical environment, and People in addition to the common marketing mixes generally known as Product, Price, Place and Promotion to enhance its efficiency.

3.1.4 Service Specification

Any service can be clearly and completely, consistently and concisely specified by means of the following 12 standard attributes which conform to the <u>MECE principle</u> (Mutually Exclusive, Collectively Exhaustive)

Service consumer benefits describe the (set of) benefits which are trigger able, consumable and effectively utilizable for any authorized service consumer and which are rendered to him as soon as he triggers one service. The description of these benefits must be phrased in the terms and wording of the intended service consumers.

- 1. **Service-specific functional parameters** : specify the functional parameters which are essential and unique to the respective service and which describe the most important dimension(s) of the servicescape, the service output or the service outcome, e.g. maximum e-mailbox capacity per registered and authorized e-mailing service consumer.
- 2. Service delivery point: describes the physical location and/or logical interface where the benefits of the service are triggered from and rendered to the authorized service consumer. At this point and/or interface, the preparedness for service delivery readiness can be assessed as well as the effective delivery of each triggered service can be monitored and controlled.
- 3. **Service consumer count:** specifies the number of intended, clearly identified, explicitly named, definitely registered and authorized service consumers which shall be and/or are allowed and enabled to trigger and consume the commissioned service for executing and/or supporting their business tasks or private activities.

- 4. **Service delivering readiness times:** specify the distinct agreed times of every day of the week when
 - a. the described service consumer benefits are
 - i. trigger able for the authorized service consumers at the defined service delivery point
 - ii. consumable and utilizable for the authorized service consumers at the respective agreed service level
 - b. all the required service contributions are aggregated to the triggered service
 - c. The specified service benefits are completely and terminally rendered to any authorized triggering service consumer without any delay or friction. The time data are specified in 24 h format per local working day and local time UTC, referring to the location of the intended and/or triggering service consumers.
- 5. Service consumer support times: specify the determined and agreed times of every day of the week when the triggering and consumption of commissioned services is supported by the service desk team for all identified, registered and authorized service consumers within the service customer's organizational unit or area. The service desk is/shall be the so-called the Single Point of Contact (SPOC) for any authorized service consumer inquiry regarding the commissioned, triggered and/or rendered services, particularly in the event of service denial, i.e. an incident. During the defined service consumer support times, the service desk can be reached by phone, e-mail, web-based entries, and fax, respectively. The time data are specified in 24 h format per local working day and local time UTC, referring to the location of the intended service consumers.
- 6. **Service consumer support language:** specifies the national languages which are spoken by the service desk team(s) to the service consumers calling them.
- 7. Service fulfillment target: specifies the service provider's promise of effectively and seamlessly deliver the specified benefits to any authorized service consumer triggering a service within the specified service delivery readiness times. It is expressed as the promised minimum ratio of the count of successful individual service deliveries related to the count of triggered service deliveries. The effective service fulfillment ratio can be measured and calculated per single service consumer or per service consumer group and

may be referred to different time periods (work hour, workday, calendar week, work month, etc.)

- 8. Service impairment duration per incident: specifies the maximum allowable elapsing time [hh:mm] between
 - a. the first occurrence of a service impairment, i.e. service quality degradation, service delivery disruption or service denial, whilst the service consumer consumes and utilizes the requested service,
 - b. The full resumption and complete execution of the service delivery to the content of the affected service consumer.
- 9. Service delivering duration: specifies the promised and agreed maximum allowable period of time for effectively rendering all specified service consumer benefits to the triggering service consumer at his currently chosen service delivery point.
- 10. Service delivery unit: specifies the basic portion for rendering the defined service consumer benefits to the triggering service consumer. The service delivery unit is the reference and mapping object for the Service Delivering Price, for all service costs as well as for charging and billing the consumed service amounts to the service customer who has commissioned the service delivery.
- 11. **Service delivering price:** specifies the amount of money the commissioning service customer has to pay for a distinct service delivery unit or for a distinct amount of service delivery units. Normally, the service delivering price comprises two portions
 - a. a fixed basic price portion for basic efforts and resources which provide accessibility and usability of the service delivery functions, i.e. service access price
 - b. a price portion covering the service consumption based on
 - i. fixed flat rate price per authorized service consumer and reference period for an unlimited amount of consumed services,
 - ii. staged prices per authorized service consumer and reference period for staged amounts of consumed services,
 - iii. Fixed price per single consumed service delivering unit.

3.1.5 Service Delivery:

The delivery of a service typically involves six factors:

- The accountable service provider and his service suppliers (e.g. the people)
- Equipment used to provide the service (e.g. vehicles, cash registers, technical systems, computer systems)
- The physical facilities (e.g. buildings, parking, waiting rooms)
- The requesting service consumer
- Other customers at the service delivery location
- Customer contact

The service encounter is defined as all activities involved in the service delivery process. Some service managers use the term "moment of truth" to indicate that defining point in a specific service encounter where interactions are most intense.

Many business theorists view service provision as a performance or act (sometimes humorously referred to as dramaturgy, perhaps in reference to dramaturgy). The location of the service delivery is referred to as the stage and the objects that facilitate the service process are called props. A script is a sequence of behaviors followed by all those involved, including the client(s). Some service dramas are tightly scripted, others are more ad lib. Role congruence occurs when each actor follows a script that harmonizes with the roles played by the other actors.

In some service industries, especially health care, dispute resolution, and social services, a popular concept is the idea of the caseload, which refers to the total number of patients, clients, litigants, or claimants that a given employee is presently responsible for. On a daily basis, in all those fields, employees must balance the needs of any individual case against the needs of all other current cases as well as their own personal needs.

Under English law, if a service provider is induced to deliver services to a dishonest client by a deception, this is an offence under the Theft Act 1978.

Lovelock has used two issues of number of delivery sites (whether single or multiple) and the method of delivery to classify services in a 2×3 matrix. Then implications here are that

the convenience of receiving the service is the lowest when the customer has to come to the service and must use a single or specific outlets. As his options multiply, the degree of convenience can go on rising, from being able to choose desirable sites, .to getting access at convenient locations. (Lovelock, C., Gummesson, E.2004. Whither Services Marketing: In search of a new Paradigm and Fresh Perspectives. Journal of Service Research 7(1) P 20-41).

3.1.6 Major Constraints In Service Sector

The development of surface transport system in Bangladesh is constrained by three distinct sets of factors. These are physical (e.g., difficult terrain, periodic flooding, poor soil condition, siltation and erosion of rivers, inherited management weaknesses of BR etc.), low investments and maintenance and inadequate institutional framework (four ministries, nine transport sector parastatals and lack of co-ordination and autonomy of transport parastatals).

3.1.7 Transport Sector Allocation In Past Plans

The public sector allocation for the transport sector during the past Plans in base-year prices of each plan period are shown in **Table-1**:

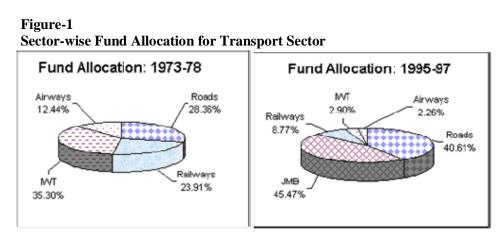
Table-1

	Allocation in Million Taka					
Plan Period	Road	Railway	IWT	Airways	Transport Sector	
First Five-Year Plan (1973-78)	1,496.10	1261.30	1,862.20	656.50	5276.10	
First Two-Year Plan (1978-80)	1,687.90	1230.80	1,098.60	482.70	4500.00	
Second Five-Year Plan (1980-85)	4,090.20	4133.90	3,168.70	1,471.80	12864.60	
Third Five Year Plan (1985-90)	11,853.00	8360.00	5,710.00	2,100.00	30023.00	
Fourth Five-Year Plan (1990-95)	34,650.00	8350.00	7,930.00	2,800.00	63730.00	
Second Two-Year Plan (1995-97)	18,467.10	3986.70	1,319.00	1,027.00	45479.00	
Fifth Five-Year Plan (1997-2002)	-	24000.00	-	-	118000.00	
Three-Year Rolling Investment program (2004-2006)	-	75573.10	-	-	-	

Government Allocation of Funds for Transport Sector in Different Plan Periods

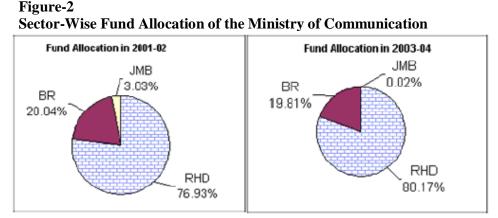
Source: Ministry of Communication Bangladesh.

From the analysis of sector-wise fund allocation for transportation sector we observe a radical shift of government fund allocation for roads sector from Railways and IWT. In the First Fifth Year Plan (1973-78), Railways got 20.91%, roads 28.30%, IWT 35.30%. In the Fourth Fifth Year Plan (1990-95), Railway got only 13.10%, whereas roads' share increased to 54.07%. In the Second Two Year Plan (1995-97), Railways' share decreased to only 8.77%. The percentage of sector-wise fund allocation for transport sectors of Bangladesh are shown in the **Figure-1**:



Source: Ministry of Communication Bangladesh.

Tk. 3300.51 cores was allocated for the Ministry of Communication in 2001/02, where RHD alone shared about 77 per cent and Railway got only about 20 per cent of it. In 2003/04 BR shared only 19.81 per cent of total sanctioned of Tk. 3097.55 crore for the ministry **Figure-2**.



Source: Ministry of Communication Bangladesh

3.2 Conceptual Framework In Bangladesh Railway Perspective

3.2.1 Historical Background Of Bangladesh Railway

The history of Bangladesh Railway goes back to the middle of the nineteenth century which is now the largest mode of transport of the country. The history of this enterprise is a primordial record of at least 158 years. The contemporary communication system of the Indian subcontinent began in 1940 through the steamer service as the standard of communication. Continuing this way, 'In 1843, at the time of his visit to Bhandup, the chief engineer of Bombay, Mr. George Clerk prepared a plan to connect Bombay with Thaney, Kollayan and Borghat through a Railway service. On 13 July 1844, Mr. Clerk arranged a conference with the prominent Elites of Bombay on this regard. The chief justice, Sir Ercosin Perry presided over the conference. In this conference, it was projected to originate a Rail communication service between Bombay to Thalghat and Borghat by a Rail company, Bombay Great Eastern Railway Company of India. In the mean time, the Great Indian Peninsula Railway Company (GIPR) was established in England with the assistance of John Chapman, Messrs White and Borrett, Soliciter Whitehall London. GIPR articulated its first agenda on 15 July 1844. Baronet Sir Jamshedji Jijiboi was appointed the first director of GIPR. The famous inventor of Railway engine, Sir George Stephenson (1781-1848) was another director of GIPR. Robert Stephenson (1803-1859), the son of Sir George Stephenson was appointed as the consultant engineer of GIPR also. At last, on the 1 August 1849, an agreement was signed between the Court of Directors of England and GIPR for collecting a fund of 5, 00,000 pound within the 17 August 1849 to establish the railway communication system. On the 14 November 1849, J.J. Barkley was appointed was appointed as the chief engineer of the Indian railway. Barkley came to India on the February 1850 and concluded the survey within a year. At that period, Lord Dalhousie was the Governor-General of the Indian subcontinent who took the vital role to establish Railway communication system in India as the most modern transportation system of the World. As the result of the attempt of Dalhousie, the first Railway communication system of India was fully established on the 16 April 1853 constructing 21 mile route track between Bombay and Thaney. On that memorable day, a train was driven from the Bory Bandar of Bombay at 3:20 pm with 400 special guests and reached Thaney at 4:45 pm.' (Sharma 1984, p. 63) On the 15 August 1854, the Eastern Indian Railway Company constructed 23 mile rail communication between Houra and Hoogly of the East Bengal. (Sharma, 1984, p. 64)

Bangladesh Railway, now covering a length of 2,835 route kilometers managed by 30,444 regular staff, is Government-owned and Government managed transportation agency of the country. It required sustained efforts for over a century to build this network. The first railway communication sector of the East Bengal was the result of extension of Indian railway from Sheialdah of Calcutta to Jagatti and Poradah of the East Bengal. (Kerr, 1969, p. 4.) On the 15 November 1862, the first section of 33 miles (53.11 Kilometers) of railway was opened to traffic between Darshana and Jagatti. Twenty-three years after, the next railway connection opened to traffic was between Dacca and Narayanganj on the 4 January1885, a distance of 9.31 miles (14.98 Km). Then gradually, these railway lines were extended and new sections were constructed to cover more areas. On the 1 July 1895, the first sections of meter gauge line (3-3-3/8) were opened between Chittagong and Comilla, a length of 93.14 miles (149.89 Km) and between Laksam and Chandpur, a length of 31.62 miles (50.89 Km) (Information Book: Bangladesh Railway, 1975, p. 1)

The construction and operation of these sections in the middle and late 19th century were taken up by Railway companies formed in England. Their primary objectives was to operate these sections purely on commercial consideration but later on, when the various sections were linked up, the British Government of India found them quite important from their strategic, political and economic points of views; therefore, the Government also came in the picture with statutory control and regulations for operation and management of the Railway. At the 19th century, the British Government invested 150 million pound for the establishment of Railway communication network in the Indian subcontinent and it was the maximum investment in the world by the British Government outside the Great Britain at that age. (Kerr, 1969, p. 4) The Railway communication sector started its service in the Indian subcontinent in 1853 and axcquired the fourth position among the largest railway enterprises of the world within 1910. (Kumar, 1971, p. 737)

At the time of establishment, the Indian Railway sector was not an individual separate department or division of the Government. Firstly, it was planned non-governmentally through the initiative of non-government organizations of both of England and India. Then it was directed by the Court of Director of England. After that, it was supervised by the Secretary of State of England. In India, the Railway sector was controlled by the Military Board at first. in 1845, Lord Dalhousie founded the Public Workers Department (PWD) and attached the Railway sector under the supervision of PDB directing by a consultant engineer as the chief. In 1866, the railway sector was reformed as a branch or division under a Deputy Secretary of the Indian Government. In this way, through various change and diversity there founded a separate a railway Board in 1905 and the Indian Railway got the status of an individual institution. (Malik, 1962, p. 58) In order to spread Railway communication network among the whole India, the Government of India handed over the duty to some non-government company like:

a. Eastern Bengal Railway (EBR)	: 1856 to 1947.
b. Northern Bengal State Railway (NBR)	: 1878 to 1947.
c. Bengal Central Railway (BCR)	: 1884 to 1947.
d. Assam Bengal Railway (ABR)	: 1892 to 1947.

Except the above mentioned companies there were other small companies which kept a vital role to connect different parts of India with a Railway network like: Shara to Sirajgonj, Mymensingh to Bhairab Bazar, Jessore to Zhenidah, and Khulna to Bagherhat etc. (Kabir, 2007, p. 30) In this way, these companies made a large network all over India within short time.

On the 1 January 1942, The Assam Bengal Railway was taken by the state and was amalgamated with the Eastern Bengal Railway under the name of "Bengal and Assam Railway". At the time of partition of India in 1947, Bengal Assam Railway was split up and the portions of the system about 1,618 miles (2,603.92 Km) long which fell within the boundary of erstwhile East Pakistan was named as Eastern Bengal Railway, the control remaining with the Central Government of Pakistan. Later, with effect from 1 February 1961, Eastern Bengal Railway was named as Pakistan Eastern Railway. Then, in the year,

1962, the control of Pakistan Eastern Railway was transferred from the Central Government by the Presidential Order of 9 June 1962, to the Government of the then East Pakistan and placed under the management of a Railway Board with effect from the financial year, 1962-1963. With the liberation of Bangladesh on 16 December 1971, Pakistan Eastern Railway naturally became Bangladesh Railway. (Information Book: Bangladesh Railway, 1985, p. 1) The years after liberation had been years of strain and stress for the Railway administration to rehabilitate the war damaged and financially crippled Railway. During the 9 months of Liberation in 1971, the Railway sustained heavy damages to its rolling-stock, track and bridges, signaling and telecommunication system and fixed structures. Admittedly, Railway was the single largest sector of the country which suffered the severest damage during the period. It might be mentioned that the Railway, at present within the territory of Bangladesh, had faced the most severe stresses and strains during the world war-II. The ceaseless Endeavour of the administration and all railway men during the year 1974-1975 were able to achieve an appreciable recovery in different sectors of the railway working and prepared a background that would facilitate speedier recovery of not only the Railway system alone but also the entire shattered economy.

Bangladesh Railway was a state-owned and state-managed organization. Before 17 November 1973, Bangladesh Railway was managed by the Bangladesh Railway Board functioning as an autonomous body under the direct control of Ministry of Communications, Government of the People's Republic of Bangladesh. The Board had it's headquarter in Dhaka. With effect from 17 November 1973, the organizational set up of the Bangladesh Railway had been revised. Under the new set up a Railway division had been created under the Ministry of Communications. The main function of the Railway division was to formulate a policy guideline for the Railway keeping in view the overall transport requirement of the country and also to keep a watch over the proper management of the Railway. Under the new arrangement there was a General Manager to function as the Chief Executive of Bangladesh Railway with headquarters at Chittagong. In the headquarters office, the General Manager is assisted by the heads of the different departments. In the field the Railway had been divided in to two zones, viz., East zone spreading over the entire territory on the east of the river Jamuna with its headquarters at Chittagong and West zone spreading over the entire region on the West of the river Jamuna with its headquarters at Paksey. (Information Book: Bangladesh Railway, 1975, p. 3) Till 2 June 1982, the management and development of the Railway was vested with a Rail Board, comprising a Chairman and four members. But for the administrative convenience and operational reasons, that Railway board was abolished with effect from 3 June 1982. Subsequently, two separate Administrative zones East and West, were created and two General Managers were appointed for the purposes of administration and operation of these zones. In addition, another General Manager was appointed for implementation of major development projects; in particular, foreign aided ones. But the overall management and development of the Railway was vested with a Director General. The Director General also acts as the Secretary to the Minister in Railway Division of the Ministry of Communications.

Some Important Historical Events of the diversity of Bangladesh Railway

(Information Book: Bangladesh Railway, 2012, p. 1-4)

15 Nov. 1862	:	Construction of 35.11 Km. of Broad Gauge line between Darsana and Jagati of Kushtia district by Eastern Bengal
		Railway.
01 Jan. 1871	:	Extension of Darsana-Jagati Railway line up to Goalanda by Eastern Bengal Railway.
1874-1879	:	Construction of Meter Gauge Railway line from Sara (near Paksey) to Chilahati, Parbatipur to Dinajpur and Parbatipur to Kaunia and construction of Broad Gauge Railway line from Damukdia (opposite to Sara) to Poradaha.
1882-1884	:	Bengal Central Railway Company constucted Benapole- Khulna Broad Gauge Railway line.
01 Jul. 1884	:	Government took over the management of Eastern Bengal Railway.
04 Jan. 1885	:	Railway Meter Gauge connection between Dhaka to Narayangonj, a
		distance of 14.98 Km. by Dhaka State Railway, which was later on merged with Eastern Bengal State Railway.
1885	:	Construction of Dhaka-Mymensingh railway section by Dhaka State Railway.
01 April 1887	:	Eastern Bengal Railway was merged with Northern Bengal State Railway.
1891	:	Construction of the Assam-Bengal Railway taken up with British
		Government assistance but was later on taken over by Assam-Bengal
		Railway Company.
01 Jul. 1895	:	Opening of 149.89 Km. Meter Gauge line between Chittagong and
		Comilla and 50.89 Km. Meter Gauge line between Laksam and
		Chandpur by Assam Bengal Railway.
03 Nov. 1895	:	Chittagong to Chittagong port line was constructed.
1896	:	Construction of Meter Gauge line from Comilla to Akhaura and Akhaura to Karimgonj.

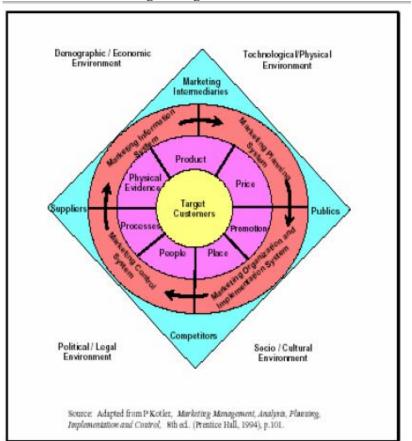
1897	:	Single line section between Darsana and Poradaha converted into double line section.
1907 1900		
1897-1899	:	Mymensingh-Jagannathgonj Meter Gauge Railway constructed.
1899-1900	:	Meter Gauge Railway line constructed between Santahar Jn. to Fulchari by Brahmaputra-Sultanpur Railway Company.
1903	:	Laksam-Noakhali section constructed by Noakhali (Bengal) Railway Company.
01 Apr. 1904	:	Bengal Central Railway Company and Brahmaputra-Sultanpur Railway Company were taken over by Govt. managed Eastern Bengal Railway.
1905	:	Opening of Kaunia-Bonapara Meter Gauge section. Govt. purchased the Noakhali (Bengal) Railway Company.
01 Jan. 1906	:	Noakhali (Bengal) Railway Company merged with Assam Bengal Railway.
1909	:	Poradoha-Bharamar single line converted into double line.
1910-1914	:	Akaura-Tongi Section opened. Conversion of Shakoli to Santahar meter gauge section into broad gauge.
1912-1915	:	Kulaura-Sylhet section opening.
01 Jan. 1915	:	Hardinge Railway bridge was opened over the river Padma at Paksey.
1915-1916	:	Sara-Sirajgonj line constructed by Sara-Sirajgonj Railway company.
1916	:	Bharamara-Raita broad gauge section opened.
1912-1918	:	Gouripur-Mymensingh-Netrokona and Shamgonj-Jharia-Janjail
1912-1910		section constucted by Mymensingh-Bhairab Bazar Railway company. Bharamara – Ishurdi- Abdulpur single line section converted into
	:	double line.
10 Jun. 1918	:	Rupsha- Bagerhat narrow gauge section constructed by a branch line company.
July 1924	:	Conversion of Santahar-Parbatipur meter gauge section into broad gauge.
Sep. 1926	:	Conversion of Parbatipur- Chilahati meter gauge section into broad
1020		gauge.
1928	:	Opening of Shaistagonj- Habigonj section.
1928-1929	:	Tista-Kurigram Narrow gauge section converted into broad gauge.
1929	:	Saistagonj- Balla & Chittagong- Hathazari section opened.
1930	:	Hathazari- Nazirhat meter gauge and Abdulpur- Amnura broad gauge sections opened.
1931	:	Sholashahar- Dohazari section opened.
06 Dec. 1937	:	Opening of King VI George Bridge connecting Bhairab Bazar and
		Ashugonj over the river Meghna.
1941	:	Jamalpur- Bahadurabad meter gauge section opened.
01 Jan. 1942	:	Assam- Bengal Railway taken over by Government and amalgamated
		with the Eastern Bengal Railway under the name "Bengal and Assam
		Railway".
01 Oct. 1944	:	Government took over Sara- Sirajgonj Railway Company.
1947	:	Bengal and Assam Railway was split up and the portion within the
- / . /	•	boundary of erstwhile East Pakistan was named as "Eastern Bengal
		Railway", the control remaining with central government of Pakistan.

1948-1949	:	Government took over Mymensingh- Bhairab Bazar Railway
		Company and Rupsha- Bagerhat Branch Line Company.
21 Apr. 1951	:	Jessore- Darsona Railway line opened to traffic.
Oct. 1954	:	Sylhet to Chatak Bazar Railway line opened to traffic.
01 Feb. 1961	:	Eastern Bengal Railway renamed as Pakistan Eastern Railway.
1962	:	A Railway board was formed and management of Railway was
		placed under the provincial government.
1972	:	Pakistan Eastern Railway was renamed as Bangladesh Railway after
		emergence of Bangladesh as sovereign state and continued to
		function under a Railway board.
03 Jun. 1982	:	The Railway board was abolished and its function was placed under
		the control of Railway Division of Ministry of Communications with
		the Secretary of the Division being Director General. For
		administrative convenience and operational reasons, BR was
		bifurcated into two zones, East and West zone, headed by two
		General Managers.
12 Aug. 1995	:	Bangladesh Railway Authority (BRA) was formed comprising 9
C C		members with honorable minister for Ministry of Communications as
		Chairman, for giving policy guidance of Bangladesh Railway.
23 Jun. 1998	:	East- West Railway connectivity over the mighty river Jamuna was
		established form the day one, the day of formal opening of Jamuna
		Multipurpose Bridge, after completion of construction of Broad
		Gauge track from Jamtoil to Ibrahimabad.
14 Aug. 2003	:	Direct communication between Dhaka (Joydebpur) and Rajshahi over
C C		Jamuna Multipurpose Bridge was established by introducing first
		inter-city passenger train after completion of construction of new
		Dual Gauge track form Ibrahimabad to Joydebpur.
14 Apr. 2008	:	Direct communication between Dhaka and Kolkata was established
-		by introducing "Maitree Express" Train.
04 Mar. 2010	:	Introduction of Ticket selling through Mobile Phone.

3.2.2 Marketing Management Process In A Railway Environment

Marketing seeks to improve corporate profitability by modifying the Marketing Mix, consisting of the four variables, the Seven P's, just described, in order to satisfy customer wants and needs. Clearly, units of the organization other than the Marketing or Commercial department will also have an important "Marketing" role. In the case of railways, those departments with a primary role in service delivery - mainly the Operations, Mechanical Engineering and Civil Engineering Departments - can crucially affect the quality and other characteristics of the Seven P's, and hence will have an important influence on the marketability of the railway product. However, it is the Marketing or Commercial

Department which must take primary responsibility for translating the needs of customers into service requirements which it must then communicate to the service providers, and for ensuring that the delivery of services satisfies customer needs.





Source: Philip Kotler; Book: Principles of Marketing

The above figure illustrates the main factors influencing the process of Marketing Management in any commercial organization. The single most important factor is the wants and needs of the organization's target customers, and hence these are shown at the epicenter of the diagram. The wants and needs of the target customers determine the specifications of the marketing mix, which is embodied in the Marketing Management System (comprising systems of Marketing Planning, Organization/Implementation and Control), as illustrated in the third innermost ring of the diagram. However, Marketing Management in developing a

strategy to satisfy the needs of its target market must also adapt to a microenvironment, as shown at the corners of the rectangle in the diagram, consisting of marketing intermediaries (or distribution channels), suppliers, competitors and publics (including stakeholders). It must further adapt to a macro-environment, shown at the outer extremities of the diagram, consisting of demographic and economic forces, political and legal forces, technological/physical forces, and social and cultural forces. Thus, Marketing Management must take into account all of the actors and forces in the marketing environment in developing its strategy to serve the target market. This applies as much in the case of a large global corporation as it does in the case of a small domestic business and within this range certainly applies to railway organizations. (Philip Kotler, Marketing Management. 11th ed, p. (159-175).

3.2.3 Need Of Marketing For Railways

It is an undeniable fact that railways worldwide are facing unprecedented competition from other transport modes, particularly from road transport. More than ever before, railways are being exposed to market forces and associated competitive pressures, which threaten their long-term survival. Their capacity to respond effectively to these forces depends mainly on their ability to transform themselves from the non-profit making agencies of government, which they have historically been, into vibrant, profit driven and market oriented commercial enterprises.

This transformation requires, among other things, a fundamental shift in the driving philosophy of railway organizations and their adoption of a marketing culture, systems and practices is a vital part of this process. It also requires a major change in the attitude and expectations of governments with respect to the future role of their railway organizations. There is a basic contradiction between requiring railways, on the one hand, to become commercial organizations, and on the other to continue, without explicit subsidy, the provision of loss making "welfare significant" services.

Among the more compelling reasons for the adoption of a market-led philosophy by railway organizations is the requirement, now increasingly being imposed on them by their owning

governments, to reverse the declining trend in their net financial results. Closely linked with this requirement is the need for railway organizations to be able to respond effectively to competition which could, if allowed to go unchecked, drive down their net financial results to levels which would be politically unsustainable and might therefore lead to their demise. In this context, this section outlines the recent experience of some railway organizations of the ESCAP region.

3.2.4 The Place Of Marketing In The Railway Organization

3.2.4.1 Considerations For Railway Marketing Unit

The position of the marketing unit in the railway organization chart and the structure of the marketing unit itself are important considerations, since they indicate very clearly the significance attached to the role of Marketing within the corporate organization and largely determine the effectiveness of the marketing function in achieving corporate goals. So, for the development of a Marketing capability, careful consideration should be given to the structure of the Marketing unit, the reporting relationships within this unit, and the reporting relationships between this Marketing unit and the senior corporate management positions in the overall organization. The structure and form of organization adopted desirably should permit:

- (i) Close and frequent communications between the Chief Executive Officer and the head of the Marketing unit, with both persons accepting a leading role in promoting a customer oriented marketing culture throughout the organization. (This is likely to require that the reporting line from the Chief Executive Officer to the head of the Marketing unit be as short as possible);
- (ii) Effective co-ordination of railway commercial and operational activities, perhaps suggesting that both functions should be integrated in an organizational sense;
- (iii) Integration of all elements of the marketing mix under a single management function, suggesting that responsibility for sales, market research and planning, pricing,

advertising and promotion, and physical distribution, should be centralized within the marketing unit.

3.2.4.2 The Position Of Marketing Within The Corporate Structure

There are numerous models, which can provide guidance for the organization of the marketing function within the overall corporate structure of railway organizations. However, three organizational models appear to have so far to have found favor within the region. They are:

Marketing as a functional department Marketing as a service department Marketing as a strategic business unit

The first of these models, the functional department model, is the most commonly applied form of organization for railways and is illustrated in figure 4-3. This form of organization has been adopted by a majority of the region's railways which have introduced a marketing/commercial function. It was also used extensively in Australia before a majority of the government owned railway systems in that country adopted a strategic business unit approach. The distinct advantage of this model is that integrates the railway marketing and operations functions under the management of a single senior corporate manager, who reports directly to the Chief Executive Officer. Of all the organizational models available, this type of arrangement is most likely to ensure that the activities of staff primarily responsible for maintaining an interface with railway customers and of staff primarily responsible for service delivery are effectively harmonized and coordinated. Amongst other things, this form of organization should facilitate (but cannot of itself ensure) effective and frequent communication between the personnel involved in each of these two functions.

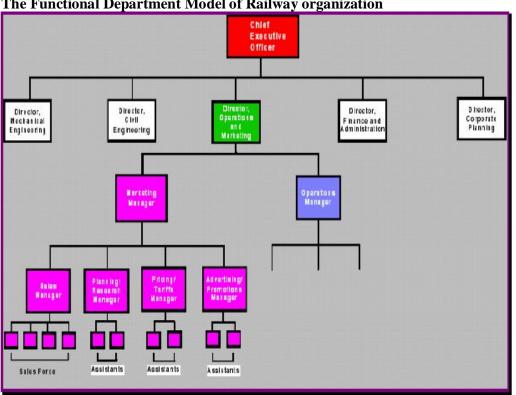


Figure-4 The Functional Department Model of Railway organization

Source: ESCAP: Guidelines for Development of Railway Marketing Systems and Procedures [http://www.unescap.org]

The second-listed form of organization, Marketing as a service department, involves a more passive role for Marketing in the corporate organization. Generally, this model integrates Marketing with the Corporate Planning function, under a single senior corporate manager reporting directly to the Chief Executive Officer. While this has the advantage of integrating the lead planning role of marketing within the corporate planning structure, it could threaten the close contact, which should exist between marketing staff and railway customers, thereby reducing the marketing plan to an "academic" exercise, devoid of customer inputs. It should be noted also that, almost by definition, a Corporate Planning inputs from all other units in the organization. Arguably, such a unit would be no less effective in discharging this role if Marketing were to be organizationally independent of it, in the sense that Marketing would be just like any other unit of the organization, contributing planning inputs under the co-ordination of the central Corporate Planning unit.

The last listed form of organization, Marketing as a strategic business unit, represents an extension of the concept of a product or brand-based organization, as featured in many Marketing textbooks and as applied mostly in the field of consumer product marketing in many western developed countries. From a railway perspective, it involves structuring an organization around key units of its business, which for the most part are capable of being managed separately. These units may be groups of core business services, such as Passenger and Freight services, or diversified activities, such as Real Estate or Commercial Property Development.

In the railway sector, however, few business segments are discrete in an operational sense and hence most consume shared resources such as track, signaling and motive power. Nevertheless, there are very often advantages in managing as separate units those businesses for which a large proportion of the resources consumed are specific to those businesses. For example, the costs associated with passenger stations and related facilities, as well as those associated with the passenger rolling stock fleet constitute a relatively large share of the total costs of operating passenger services, and specialized management of these resources is possible and desirable. Similar observations may be made about freight traffic, in respect of the management of marshalling yards, freight terminals, freight rolling stock and other freight dedicated resources.

In addition, the passenger and freight elements of railway business invariably require dedicated pricing policies, sales efforts and promotional campaigns. For this and the abovementioned reasons, better management of passenger, freight and other specialized elements of railway business (e.g. parcels, real estate) can possibly be achieved by separating them into Strategic Business Units, each with its own marketing and operational management components.

Of course it is possible to opt for various combinations of each of these three organizational forms. One railway, which has adopted a hybrid form of organization, is the Malayan Railway (KTM Berhad). The organizational structure of this railway combines features of

the third listed form of organization (business units) with features of the second listed type of organization (marketing as a service department).

In 1992, the Malayan Railway or Keretapi Tanah Melayu (KTM) was separated from direct government budgetary control and restructured as a business enterprise under government ownership. The new corporatized organization, designated KTM Berhad, was built around an entirely new organization structure, which included Strategic Business Units, or SBU's, but also embodied some features of an organization with a Marketing cell functioning as service department.

There are four SBU's, of which three - Passenger Services, Freight Services and Commuter Services have a reporting line to the Director, Operation and Customer Service who is also responsible for the Operations or Traffic function. The fourth SBU, Property, has a reporting line to the Director, Property Management. The three core business SBU's integrate marketing functions with some operating functions which are specific to their business (e.g. the Freight SBU has responsibility for wagon distribution, the Passenger SBU has responsibility for ticketing, etc). Responsibility for advertising and promotion is, however, exercised by the Corporate Services Division, which is also responsible for coordinating the preparation of the 5-year Corporate and annual Business Plans (with planning inputs from the SBU's which must prepare their own annual marketing plans). For this reason, the SBU's have a "dotted" reporting line to the Director, Corporate Services.

However, there are, both within and outside the region, examples of large railway systems which have opted for complete separation of management responsibility for the marketing and operations functions. One such is the National Rail Corporation Ltd of Australia which transports all interstate rail freight. It has a Corporate Headquarters located in Sydney, a Marketing Headquarters located in Melbourne, and an Operations Headquarters located in Adelaide (which is some 778 km by rail from Melbourne). The heads of the Marketing and Operations Divisions report directly to the Managing Director, based in Sydney. In this organization, only the operations and engineering functions are regionalized. To a large extent, the geographical environment in which the NRC operates, with a major concentration of railway customers in the east of the country, has dictated its organizational

form but the separation of the units responsible for customer service from those responsible for customer liaison will mean that there will be additional pressure on the Managing Director (the Chief Executive Officer) to ensure that service delivery meets customer expectations.

The geographical size of the railway system will clearly have a strong influence on the type of organization structure which is adopted. If it is considered desirable to integrate the marketing and operations functions, large regionalized railways need to have an organization structure which is duplicated at headquarters and regional level. For example, in the Indian Railways both functions are within the responsibility of the Board Member for Traffic at Headquarters level and he has assisting him an Additional Member (Traffic) and an Additional Member (Commercial), each with their own departmental organizations. This structure is duplicated in each of the nine zonal, or regional, railways, with an Operations Manager (responsible for operating functions) and a Commercial Manager (responsible for marketing functions), both having their own departmental organizations and reporting directly to the General Manager of the zonal railway, but with an informal reporting line to their respective counterparts at headquarters. Only by organizational duplication of this type can effective, and vital, coordination of operations and marketing functions be assured right down to the level of the smallest field unit in such a large organization.

In Bangladesh Railway, the corporate structure is somewhat like the functional department model, which is graphically shown in the appendix.

3.2.4.3 Structure Of The Marketing Unit

The structure of a typical Railway Marketing Department is also shown in figure 4-1. This structure is somewhat relevant to the organizational arrangements of Bangladesh Railway as well as many other railway organization of the world. Thus, it would be as applicable to a Marketing unit structured as a functional or service department as it would be to a Marketing unit structured as part of a Strategic Business Unit.

It is important that the Marketing unit should have responsibility for all seven elements of the Marketing mix. The unit will normally have four sections, each under a section manager, with responsibility for Sales, Planning/Market Research, Pricing and Advertising/Promotion. If justified by the workload, it may also be desirable to have a fifth department to provide advice to customers in logistics and materials handling matters (including the layout of rail loading/unloading facilities). Alternatively, responsibility for this function can rest with the Sales section.

3.2.5 Role Of Marketing In Railway Corporate Planning

3.2.5.1 Importance Of Corporate Plan

Not all of the region's railways have so far implemented a corporate plan, but an increasing number are embracing a corporate planning philosophy. A well structured, practical corporate plan will ensure that an organization's resources and activities are always directed to the achievement of its own goals on the one hand and those of governments (and by inference taxpayers) on the other. Marketing can and must play a leading role in the corporate planning process by translating customer requirements into railway requirements for human physical and financial resources and management actions. The Railway Marketing Unit will also have a key role, along with top-level management in developing the spirit of marketing in other departments of the railway, notably the Civil Engineering, Mechanical Engineering and Operations departments. It is therefore essential that the marketing system should be an integral part of the railway corporate planning structure, which embodies a mixture of "top down" and "bottom up" planning philosophy.

3.2.5.2 Corporate Plan Linkages

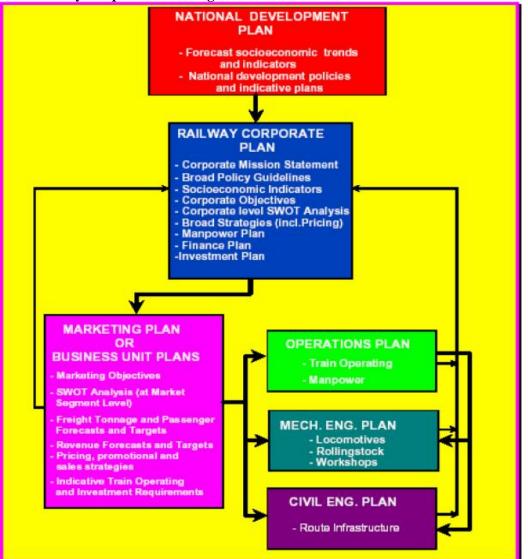
In essence, a corporate plan will link together the plans of the functional departments of a railway within a cohesive framework, which will also integrate planning inputs from external sources, such as the National Economic Development, or other government plans. One possible approach to a railway corporate planning process is illustrated in Figure 4-4. In this process, interlinked plans are prepared at four levels - at the macroeconomic level in

the case of the National Economic Development Plan, and at the corporate, marketing or business unit and functional department levels in the case of the railway organization.

The process begins with the **National Economic Development Plan, which** will usually be a product of specialist government planning agencies or of Ministries of Finance. National plans are generally prepared for at least a five-year time frame. They will usually signal the government's expectations with respect to the cost recovery goals of the railway and in some cases will specify in broad terms the commitment of investment funds to the railway. In addition they will provide government targets for the main macroeconomic indicators (including the general inflation rate and public expenditure limits), as well as a statement of regional development priorities. It is the last element which is of considerable significance to railways, since development priorities will provide some indication of the likely regional distribution of public funding for development. In some cases, National Plans will specify in detail the major infrastructure projects, such as new ports and associated land transport infrastructure, to be promoted as part of a government's regional development policy.

At the next level, the **Railway Corporate Plan** responds to policy guidelines contained in the National Economic Development Plan and provides guidelines in the form of corporate objectives, goals and strategies for the preparation of marketing or business unit plans.





Source: ESCAP: Guidelines for Development of Railway Marketing Systems and Procedures [http://www.unescap.org]

Next in the planning hierarchy below the level of the Corporate Plan, **Marketing or Business Unit** plans have the function of developing pricing, sales and promotional strategies aimed at satisfying customer needs and maximizing revenue for the railway organization. Most importantly, they have the key function of translating the needs of the marketplace into requirements for railway service and resources in the form of manpower, route infrastructure, locomotives and rolling stock. Service requirements identified in the marketing or business unit plans are then converted into manpower deployment and train operating plans at the level of the Traffic or Operations Department and are incorporated in the **Operations Plan**. The train operating plan in turn provides the basis on which maintenance and investment plans may be prepared by the Mechanical Engineering Department covering requirements for locomotives, rolling stock and workshops facilities and by the Civil Engineering Department covering track, structures and signaling requirements. These requirements are incorporated in the **Mechanical Engineering Plan** and the **Civil Engineering Plan**, respectively.

Necessarily, there is feedback from the functional department plans to the corporate plan, in order to provide a basis for the preparation of manpower, finance and investment plans at the corporate level. Similarly there is feedback from the Marketing or Business Unit plans to the corporate plan in terms of traffic and revenue forecasts, which provide the basis for the Finance Plan.

In most cases where a corporate planning system has been introduced, it works as shown in figure 4-4, although the planning timeframe and cycle often varies from railway to railway. Usually, the Corporate Plan covers a five-year rolling timeframe, in line with that of the National Economic Development Plans, but lower order plans can sometimes cover an annual timeframe. Similarly, the Corporate Plan is usually revised at intervals less frequent than annually, whereas the lower order plans are usually revised on an annual basis.

Ideally, a corporate plan should also provide a framework for the preparation of annual revenue and expenditure budgets for railways, with the targets of the first year of the corporate plan timeframe providing the budget base.

3.2.5.3 Corporate Plan Elements

Important elements of a corporate plan providing guidelines for the marketing and functional department plans of railway may be described as follows:

3.2.5.3.1 The Corporate Mission Statement

This indicates the organization's overall purpose and direction. It answers basic questions such as: "Why does this organization exist?" and "What business should it be in?" It is necessarily expressed in broad terms, but should not be so broadly phrased as to lack focus. Statements such as "We want to provide the highest quality service at the cheapest fares" will not be particularly helpful to management seeking practical guidelines in order to be able to make difficult decisions. Kotler, a marketing expert, suggests that the mission statement should define the major competitive scopes within which the organization will operate. These include: the industry scope or range of industries in which the organization will consider operating; the products and applications scope, or the range of products (services) and applications in which the organization will participate; the competencies scope, or the range of technological and other core competencies that the organization will master and apply; the market segment scope, or the type of markets or customers the organization will serve; the vertical scope, or the extent of vertical integration to be allowed in the organization's activities; and finally, the geographical scope, or the range of regions (or countries) in which the organization will operate. Kotler also suggests that the corporate mission statement should stress the policies, which the organization wishes to apply in dealing with customers, suppliers, distributors, competitors and other important groups. Above all, he considers that the mission statement should provide a vision and a direction for the organization for the next 10-20 years.

The Corporate Mission Statement which may be adopted by Bangladesh Railway can be best described as follows:

Our aim is to be the best transport service provider in the country All day, every day, we aim to offer a reliable, welcoming and value for money service Our business will prosper because customers use us repeatedly and recommend the service to others This type of mission statement should be backed up with more specific statements of the corporate aims of the organization.

3.2.5.3.2 Corporate Objectives

While the Corporate Mission Statement should define the broad purpose and direction of the organization in the longer term, the Corporate Objectives will have a more specific focus. They should indicate the specific targets, both physical and financial, to be achieved by the organization within the tenure of the corporate plan. For example, they could incorporate cost recovery objectives, such as "Reduction of the operating deficit to \$ W million, by year X" or productivity improvement objectives, such as "Increase gross tones per annum per employee to Y, by year Z". They will provide a clear target at which the strategies and plans of all components of the organization will be aimed during the timeframe of the corporate plan.

3.2.5.3.3 Corporate Level SWOT Analysis

At the corporate level, a SWOT Analysis should provide a realistic assessment of the strengths, weaknesses, opportunities and threats working for or against the organization in its quest to achieve its corporate objectives. SWOT factors may be assessed in relation both to the organization's external and internal environments. For an external SWOT analysis, the organization would need to assess the likely influence of factors external to the organization, which might present opportunities or threats for the organization. An example of an external opportunity might be the imposition by the government of increased road user charges on commercial road transport operators, since this might have the effect of improving the competitiveness of rail in relation to road transport operators.

Conversely, an increase in allowable axle loads for trucks might be an externally imposed threat for rail, since it would reduce its competitiveness with road transport. Internal SWOT analyses on the other hand are intended to identify the SWOT factors of the organization, in relation to those of its major competitors. They are intended to identify any positive or negative characteristics of the organization which must either be exploited or corrected to enable the organization to achieve its stated corporate objectives. An example of an internal weakness might be the railway's inability to price flexibly in order to obtain additional traffic (when this would be a major strength for the competition). On the contrary, an example of an internal strength might be the railway's ability to guarantee the security of freight consignments against damage or pilferage, when its competitors might not be able to provide such guarantees.

3.2.5.3.4 Corporate Strategies

Broad corporate strategies must be devised in order to ensure achievement of the corporate objectives. The important point about corporate strategies is that they must **directly** address specific corporate objectives. Thus, for example if the relevant objective is to reduce the incidence of in-service locomotive failures, the corresponding strategy might be to redeploy fitters or diesel maintainers to outstations, where they can carry out routine preventative maintenance. Similarly, an objective to improve wagon turn rounds might be addressed by a strategy to increase block train running by offering rate incentives to selected major customers to accumulate loading for block train operation.

3.2.5.3.5 Manpower Plan

The Manpower plan component of the corporate plan is intended to identify the overall manpower requirement for the railway organization in terms of numbers of employees required by grade/skill category and by location. These manpower requirements should be derived directly from the functional department plans and have their basis in the marketing or business unit plan.

3.2.5.3.6 Finance Plan

The Finance Plan establishes a basis for managing the organization's cash flow during the tenure of the corporate plan. It incorporates revenue and expenditure forecasts derived directly from the functional department and marketing/business unit plans.

Where relevant, it will also set out the forecast requirement for PSO/CSO supplements to revenue during the tenure of the corporate plan.

3.2.5.3.7 Investment Plan

The Investment Plan details the organization's requirement for investment in new capital assets during the tenure of the corporate plan. The physical requirement of rolling stock and locomotives, extra track capacity or new line construction, and terminal infrastructure is identified and costed in the plan. Again, these requirements are sourced from the assessment of a train operating plan which has its origins in the appraisal of customer needs in the Marketing plan.

3.2.5.4 The Railway Marketing Plan

3.2.5.4.1 Rationale & Goal

Apart from its importance as the primary source of input of customer related data as well as of traffic and revenue forecasts to the Corporate Plan, the Marketing Plan has a vital role as the vehicle for expression of: the organization's commercial objectives; the strategies for realization of these objectives; and the actions (with assigned responsibilities) necessary to implement the strategies. Necessarily, the focus of the Marketing Plan is at the level of individual traffic, or market, segments, and indeed an important element of the Marketing Plan is the definition of these segments. Realization of objectives set for individual segments will collectively result in achievement of the overall corporate objectives as identified in the Corporate Plan. An essential requirement of any Marketing Plan is that it must be both practical and actionable.

3.2.5.4.2 Market Segmentation

A good Marketing Plan must contain techniques for segmenting the market. Markets consist of buyers and buyers are not homogeneous in terms of their demographic profiles, wants, purchasing power, geographical location, buying attitudes, and buying practices. Therefore it is unlikely that a broad marketing strategy applied across the entire spectrum of a railway's customers will succeed, because the needs of some (or probably most) customers will not be met in this process. By contrast, separate marketing strategies focused on individual customer groups, each consisting of customers with similar characteristics and needs, are more likely to succeed. These customer groups are called market segments and the process of identifying and separating these groups for the purposes of developing marketing plans and strategies and of managing sales force activities is called market segmentation.

Any, or all, of the six above-listed characteristics may be used to segment a market. In the case of railways, however, a two-tier process is likely to be involved. First, the railway's customers will be segmented into broad market or business groups, such as:

- Commuters
- Medium-Long Distance Passengers
- Freight Customers
- Parcels and Express Freight Customers
- Commercial Property Leaser
- Others (e.g. advertisers using railway property)

Next, these broad groups will be divided into market segments. For Commuter traffic, it is unlikely that there will be any need for further subdivision of the market, although in the case of a few of the region's railways (notably that of Indonesia), premium or first class commuter services are provided with the aim of capturing higher income business travelers, who might otherwise use private automobiles.

For Medium-Long Distance Passenger traffic, segments based on demographic/ income characteristics may be appropriate. Again, some of the region's railways have focused on business travelers, while some (e.g. the Indian railways) have very successfully targeted group tour travelers and in conjunction with tour and hospitality agencies have developed specialized services to cater for the needs of this segment. Many of the region's railways have an obligation to provide "welfare significant" services, such as economy class services catering to the needs of low and lower middle income passengers and linking villages or district towns with key cities and the capital.

Within the higher income, business or tourist segments thus identified in the Medium-Long Distance Passenger market, there may be a further subdivision into service-based segments (e.g. air-conditioned sitting car services and air-conditioned sleeping car services).

For Freight customers, the subdivision into market segments is likely to be based on a combination of commodity type and handling mode (bulk, break-bulk and container). Almost all of the region's railways now identify container traffic as a segment in its own right.

Other segments are mainly commodity-based. For example, in addition to containers, the Thai and Malaysian railways identify about 14-15 commodity-based segments and the Indian Railways 10 or 11 commodity based segments. Each freight segment generally has its own requirements in terms of loading/transport cycle, wagon type, handling method and tariff (price). Bangladesh Railway can easily identify several commodity-based services like garments, bulk commodities and other exportable goods. The commodity segments actually identified will be of particular significance to the railway seeking to segment its markets.

While there appears to be no obvious basis for the segmentation of parcels and express freight traffic, it is likely that this market may be subdivided on the basis of time sensitivity (e.g. overnight delivery, second day delivery, etc.).

The Commercial Property Leasing market will desirably be segmented in terms of end use, e.g. Warehousing, Retail Trade, Office accommodation, Hotel accommodation, etc., and possibly also in terms of lease tenure (short, medium and long term). Such as the Indonesian Railways with their Parahyungan and Argogede executive services between Jakarta and Bandung, and the Indian Railways with their Shatabdi and Rajdhani premium services between significant business centers and between the capital and significant business centers, respectively.

3.2.5.4.3 Importance Of The Railway Marketing Plan

The formal *Marketing Plan* is one of the most important outputs of the marketing process. As indicated previously, it is desirable, if not essential, that the Marketing Plan should be developed as an integral part of a Railway Corporate Plan, and that it should identify marketing objectives and strategies which will support the achievement of the corporate objectives, as outlined in the Corporate Plan. However, unlike the Corporate Plan which will not normally be revised every year, the Marketing Plan should be revised annually, although it should also cover a longer planning timeframe (e.g. five years).

The purpose of the plan will be to: review past operational performance; assess the potential of the railway for improved performance and traffic growth, relative to competitors; define or re-define (as necessary) marketing objectives; specify probable earnings, pricing and promotional strategies to achieve growth projected in the plan; develop a program of action to put the plan into effect; and establish methods and systems to monitor performance against the plan.

Bangladesh Railway should be rational and careful in preparing its marketing plan to cope with future uncertainty and to be more competitive and market-oriented and is expected to serve both as a commercial enterprise and as a public utility service.

3.2.5.4.4 Marketing Strategies

As with Marketing Objectives, the strategies devised to achieve these objectives must be practical, actionable (realistically capable of implementation) and, above all, relevant and responsive to customer needs. They must also relate directly to marketing objectives identified for each market segment. Marketing strategies include actions taken to modify elements of the marketing mix -product, price, place and promotion - in order to achieve marketing objectives.

The Indian Railways provides an example of one of the region's railway systems, which has defined clear objectives for each of its market segments and has then successfully applied strategies to achieve these objectives. Bangladesh railway can follow this strategy.

The present age is the age of tough competition. BR has to develop and apply some specific strategic marketing plan to hold and increase market share. Some of the major strategies are as follows:

- 1 Inherited physical and structural weakness will be reduced to a minimum level by constructing new direct link route on priority basis.
- 2 Giving proper attention to time schedule, passenger comfort, and risk analysis quality of service will be increased.
- 3 Expired locomotives, coaching vehicles, wagons will be replaced urgently.
- 4 Efficient and coordinated management system will be developed.
- 5 Special attention will be given to container handling in both zones.
- 6 Ensuring security and comfort as well as better services new markets will be attracted.
- 7 Proper utilization of railway lands and properties should be ensured.

3.2.5.4.5 Action Programs

Another important element of the Marketing Plan is the statement of actions needed to put the plan into effect and the assignment of responsibilities for these actions. This feature of the Marketing Plan recognizes the vital role of Marketing in leading and coordinating all of the railway activities aimed at delivery of railway services to satisfy customer needs. Thus, actions will be required of all functional departments, but especially the Operations, Mechanical Engineering and Civil Engineering departments, to support achievement of the organization's commercial objectives. For example, if high standards of locomotive availability are necessary in order support frequent high volume traffics, then the Marketing Plan will require actions on the part of the Chief Mechanical Engineer and his staff to assure the necessary level of availability.

3.2.5.4.6 Traffic, Revenue And Profit Projections

Forecasts of traffic volume, revenue and financial contribution are important outputs of a Marketing Plan (and important inputs to the Corporate Plan). They are market segment related and are usually prepared as annual totals over a five year timescale. In most organizations, their preparation will be the responsibility of the Marketing Planning Manager and his staff. While sophisticated mathematical models may be employed to generate traffic forecasts, experience has shown that these techniques rarely produce reliable results. Better results have usually been obtained when the traffic forecasts prepared by railways have been based on information received from customers in the case of freight traffic and on a combination of government demographic studies and market surveys in the case of passenger traffic. In the case of freight traffic, there is no better substitute for the production and/or distribution plans of customers (or potential customers) as a basis for traffic forecasts, but access to this information depends upon the establishment of a strong working relationship between a railway's customers and its sales force.

Preparation of revenue forecasts is a comparatively uncomplicated task. It requires making assumptions about the inflation of passenger fares and freight rates and applying the projected rates to the physical traffic forecasts.

Forecasts of market segment financial contributions are vital inputs for the forecasts of the corporate profit and loss position in the Corporate Plan. Their preparation depends upon the availability of suitable up-to-date estimates of traffic costs, by market segment.

3.2.5.4.7 Determination Of Railway Resource Requirements

The key role of the Marketing Plan in providing information on customer requirements as a basis for determining the railway's needs of human and physical resources is highly important. This is not to suggest, however, that the Marketing Plan will be capable of identifying all of the needs. For example, the number and type of locomotives required in a railway system's fleet must be determined as part of a specialized locomotive fleet planning process which will incorporate information on train sizes, train scheduling, maintenance scheduling and running performance characteristics, in addition to traffic forecasts by route. Marketing inputs will nevertheless be vital for the preparation of functional department plans on a consistent foundation of traffic forecasts which reflect actual customer needs. In addition, the Marketing Plan must be capable of directly transferring to these functional department plans details of customer needs for specialized resources, such as specialized wagons or specialized equipment for the loading and discharge of wagons.

CHAPTER FOUR

METHODOLOGY

The method of the study depends on the nature and purpose of the study. So every research study has its own individual method respectively. Methodology is the systematic and logical study of the principles of guiding scientific investigation, (Gould and Kolb, 1964, p. 425)

Methodology plays a vital role in any research, but the methods in practical uses somehow differ from one research to another. Any scientific investigation requires one or more research methods which enable a researcher to conduct the study systematically. Research is a disinterested or unbiased search for knowledge. It is a scientific effort of finding the truth. (Abedin, 1996, p.11)

Documentary analysis' (Kothari, p. 117, Good and Scates, 1954, p. 670) is used in the present study. This is defined as an attempt to find out what has happened in the course of time and to correlate the events, within the limits of available material on the one hand and of the researchers' intelligence and understanding on the other, into a meaningful sequence.(Abedin, p. 53)

A potential practical situation observation (Kothari, 1996, p. 117) and documentary analysis (Kothari, p. 117, Good and Scates, 1954, p. 670) was conducted for descriptive analysis.

Hence selection of a well-defined method is inevitable for conducting any research work. The documentary method is widely used here to draw the inference from the compilation, analysis and interpretation of assembled data. Here, 'Opinion Survey' (Kothari, p.118) is also used for qualitative judgments (Rummel, 1994, p.2) from the lower class passengers, upper class passengers and middle class passengers at the field of Railway sector. For opinion survey 400 respondents were selected randomly from the two divisions (Pakshi and Lalmonirhat) of the west zone of Bangladesh Railway.

At last a simple social survey method has been followed. At first, a questionnaire has been prepared on different research oriented issues. Then it has been applied on 120 respondents to evaluate the acceptability of the issues primarily through a pilot study (Kothari, P.125). In the next stage, the questionnaire has been finalized modifying the different element as necessity and set accordingly the five P's of Marketing. The P's are product, price, place, promotion and people.

4.1 Nature Of Study

The study is descriptive in nature. In the present Study, qualitative data are considered to be the "rough materials researchers collect from the world they are studying; that are the particulars which is the basis of analysis (Bogdan and Biklen, 1992, p.106). Depending on the basic philosophical approach of the qualitative research, many methods are needed for analyzing data. Following method of qualitative data analysis, the researcher has strictly maintained the concept of "three concurrent flows of activity; data reduction, data display and conclusion drawing/verification" (Miles and Huberman, 1994, p. 10). Further, the researcher has converted the qualitative data into quantitative data for statistical analysis. It can be said that there lies a mixed approach for both of qualitative and quantitative data. So, the present research study is qualitative and quantitative (mixed approach) by nature.

4.2 Study Area And Period

The west zone of Bangladesh Railway has been selected as the study area for this research. On the basis of data collection, the two divisional head quarters (Pakshi and Lalmonirhat) of Bangladesh Railway, have been considered as the study areas.

One of the most important parts of this research work is selection of time period. The study intends to cover the period from 1971 to 2012. It has been mentioned earlier that Bangladesh has a long experience about Railway communication enterprise of nearly the middle of 19th century. But Bangladesh Railway started its operation as the major sector of

communication in 1971 after the independence of the country through the liberation war of 1971. So, the research period is considered from 1971 to 2012.

4.3 Population

All the passengers (lower class, upper class and middle class) traveling by Bangladesh Railway are considered as the population of the present study.

4.4 Sampling Technique

To analyze the First Objective of the study, Secondary data has been taken. A questionnaire related to the 2nd and 3rd objectives of the study has been prepared by the researcher. Having prepared the questionnaire, a pilot study in the form of a preliminary try out has been conducted on a small sample of 120 respondents. The items of the questionnaire have been selected on the basis of the findings of a pilot study. Then it has been implemented on the respondents and collected the raw data from their response. Another questionnaire has been framed also to find out the customer care satisfaction of passengers (lower, upper and middle class) regarding the problems of Service Marketing of Bangladesh Railway. After that the primary data has been put for analysis. In the present study, the Simple Random Sampling (SRS) technique has been followed for collecting primary data.

4.5 Sample Size

A total of 400 respondents constitute the sample of the present study. Among them 100 are the lower class passengers, 100 are the upper class passengers, and the rest 200 respondents are the middle class passengers traveling by railway in different times. The reason behind selecting more number of middle class passengers than that of other classes is that, researchers found this group of passengers replied more enthusiastically to them. Passengers of Bangladesh Railway are classified into three groups as upper, middle and lower class considering the Ticketing value differences.

4.6 Research Tools

An opinion survey method has been implemented to conduct the present study. The Likert type (Summated Scales) Scale (Kothari, 1996, p.104, Edwards and Kenney, 1946, p. 30, Best and James, 1986, p. 183) has been considered suitable and adopted for the present study. It consists of selecting and editing a large number of statements for which the scale values, on the psychological continuum having both valence and multiplicity. The statements have been selected in such a way that it covers the whole dynamic of the construct having positive connotation on the focal issue. In this method each proposition usually calls for a response by checking and underlining one of the five alternative responses (Kothari, p. 105) such as: Neutral, Disapprove, Approve, Strongly approve and Very strongly approve. In such a five point continuum, weights of 0, 1, 2, 3, and 4 are assigned. Weights are assigned in proper order to several expressions and the direction of weighting being determined by the favorableness or un-favorableness of the statements (Bartee, T. C., 1981, p. 119). The scale is been self-administering and all the items are positive.

Then, another closed questionnaires (Kothari, p. 125) has been reformed to find out the satisfaction, belief and opinion of different kinds of passengers. Each of the questions have two alternative answers as 'Yes' and 'No' (Kothari, p. 125).

Practical situation observation and documentary evidence observation are other major activities to accomplish this research work. These observations have been conducted for descriptive analysis.

Measuring Instruments

The selection of the instrument for measurement depends on several considerations. Firstly, objectives of the study are the basic consideration for instrument selection. Secondly, the samples used in the study are the determining factor that the investigator might take into account. Thirdly, the amount of time at the investigator's disposal should get priority in

selecting measuring instruments. Fourthly, personal competence of the investigator and ethical consideration for using the scale may account for selecting a particular type of measuring instrument. Lastly, the accuracy for scoring the data, the feasibility of using appropriate statistical technique and the interpretation of results may influence the instrument selection in an empirical study. In view of above considerations, a questionnaire has been developed by the researcher for measuring the problems and has been used for data collection in the present study.

Construction Of The Questionnaire From Pilot Study

A Pilot study (Kothari, p. 125) has been conducted in order to select the items of the questionnaire. First, the researcher has collected a range of information regarding the issue through interview, consultation and observation. 120 persons have been interviewed (35 lower class passengers, 35 upper class passengers, and 50 middle class passengers). All of them have been asked to express their opinion about the existing service marketing situation of Bangladesh Railway. The statements have been noted on the basis of their opinion and 49 items have been consisted under the supervision of the supervisor of the present study.

Then, the method of finding the Discriminative Power (DP) (Good and Hatt, p. 276) of each statement has been followed for primary item analysis. The method involves the process of identifying a statement, which consistently separates those who are high from those who are low on the characteristics to be measured. That kind of item analysis used a technique different from correlation technique. Here, each item has been subjected to a measurement of its ability to separate the "Highs" from the "Lows". This is called the Discriminative Power (DP) of an item. Each item has been arbitrarily weighted on a 5-point scale ranging from 0 to 4 depending on unwilling to answer, low support, support, High support and Very High support. This is called arbitrary method of weighting the response. After the first application on a sample of 120 respondents each item has been scored on the 0 to 4 scale points (Kothari, p. 105). The technique of finding the DP of the item the arbitrarily scored item for each subject has been summed up and the total scores for all the individuals have been arranged in order from the highest to the lowest. The first and the fourth quartiles of these scores have been calculated. So, who fall above Q1 and those who fall below Q3 have

been sorted out. The range above the upper and below the lower quartile has been then compared. The score for each individual who falls above Q1 have been summed for all the items and then averaged out. Similarly the scores for each individual who has fallen below Q3 have been summed for all items and then averaged out. Thus two means of the scores have been obtained one for the uppermost quartile group and the other for the lowermost quartile group. These two means have been compared for item selection. The difference between the means obtained by this method is known as the Discriminative Power (DP). An item with a high DP has been selected for the scale. It is safer to use quartile and as many item as possible above D.P value, and few, if any, should drop below 0.50 (Good and Hatt, 1952, p. 277).

Table-2
Calculation of Discriminative Power (D.P.) value of the questions:

Item No.	Total of first 30 respondents (Highest)	Highest Average (Score/30)	Total of Last 30 respondents (Lowest)	Lowest Average (Score/30)	Dicriminative Power (D.P.) = Highest Avervage – Lowest Average
Q.1	91	3.03	72	2.40	0.63
Q.2	89	2.97	68	2.27	0.70
Q.3	87	2.90	54	1.80	1.10
Q.4	103	3.43	72	2.40	1.03
Q.5	95	3.17	61	2.03	1.13
Q.6	107	3.57	81	2.70	0.87
Q.7	89	2.97	76	2.53	**0.43
Q.8	96	3.20	69	2.30	0.90
Q.9	101	3.37	73	2.43	0.93
Q.10	83	2.77	79	2.30	**0.47
Q.11	79	2.63	72	2.40	**0.23
Q.12	105	3.50	67	2.23	1.27
Q.13	76	2.53	68	2.27	**0.27
Q.14	89	2.97	71	2.37	0.60
Q.15	91	3.03	66	2.20	0.83
Q.16	86	2.87	73	2.43	**0.43
Q.17	102	3.40	76	2.53	0.87
Q.18	76	2.53	65	2.17	**0.37
Q.19	79	2.63	67	2.23	**0.40
Q.20	85	2.83	61	2.03	0.80
Q.21	99	3.30	58	1.93	1.37
Q.22	86	2.87	59	1.97	0.90
Q.23	100	3.33	71	2.37	0.97
Q.24	87	2.90	68	2.27	0.63

Q.25	84	2.80	75	2.50	**0.30
Q.26	93	3.10	62	62 2.07	
Q.27	79	2.63	68	2.27	**0.37
Q.28	85	2.83	59	1.97	0.87
Q.29	76	2.53	64	2.13	**0.40
Q.30	106	3.53	73	2.43	1.10
Q.31	108	3.60	69	2.30	1.30
Q.32	103	3.43	72	2.40	1.03
Q.33	78	2.60	65	2.17	**0.43
Q.34	96	3.20	63	2.10	1.10
Q.35	103	3.43	68	2.27	1.17
Q.36	99	3.30	74	2.47	0.83
Q.37	87	2.90	58	1.93	0.97
Q.38	81	2.70	55	1.83	0.87
Q.39	72	2.40	63	2.10	**0.30
Q.40	86	2.87	67	2.23	0.63
Q.41	89	2.97	65	2.17	0.80
Q.42	103	3.43	78	2.60	0.83
Q.43	84	2.80	72	2.40	**0.40
Q.44	73	2.43	58	1.93	0.50
Q.45	88	2.93	52	1.73	1.20
Q.46	94	3.13	66	2.20	0.93
Q.47	85	2.83	53	1.77	1.07
Q.48	97	3.23	61	2.03	1.20
Q.49	73	2.43	62	2.07	**0.37

Source: Survey data

The above analysis shows that 14 items have been excluded which show DP below 0.50, as a result, final lists of questionnaire contains 35 items. The selected 35 questions are classified into five major groups according to the Five Marketing Mixes as product, price, place, promotion and people. That has been remained in final form of questionnaire to be applied on selected respondents finally for collecting primary data.

4.7 Ethical Consideration

Throughout history, research has been shaped by ethical issues as these 'ethical decisions necessarily involve one's personal morality' (Taylor and Bogdan, 1975, p. 29). Ethics has become a cornerstone for conducting effective and meaningful research. As such, the ethical behavior of individual researchers is under unprecedented scrutiny (Best and Kahn, 2006;

Field and Behrman, 2004; Trimble and Fisher, 2006), the researcher has followed 'the code of conduct or expected norms of behavior while conducting the research' (Sekaran, 2009, p. 16). So, in planning and conducting research, as well as in reporting research findings, the researcher has to maintain several ethical issues. First, the researcher has planned the research study so that the chance for misleading results is minimized. Second, the study has been planned so that it meets ethical acceptability. Third, steps have been taken to protect and ensure the dignity, social norms and welfare of all participants, as well as those who may be affected by the results of the research study. In the present study, qualitative data have been considered depending on the basic philosophical approach of the qualitative researcher and many methods exist for analyzing data. The researcher has strictly followed the guidelines of concurrent flows of activity (Miles and Huberman, 1994, p. 10) to convert qualitative data into quantitative data through statistical analysis.

The researcher has followed the suggestion that 'data can be coded descriptively or interpretively' (Miles and Huberman, 1994, p. 12). The researcher has coded data according to categories and details of settings; types of situation observed; perspectives and views of subjects of all manner of phenomena and objects; processes, activities, events, strategies and methods observed; and social relationships. The researcher has gone to the close contact and has collected the primary data from the lower class, upper class and middle class passengers with potentiality, accuracy and competency. The researcher has depended on the clients to be honest in presenting the reasons for doing the research and in describing the research field situation (Zikmund, Babin, Carr and Griffin, 2011, p. 90). The researcher is ultimately responsible to ensure that no ethical violations occur in the study because the researcher must receive institutional approval where the focus is on protecting human subjects. The researcher has always kept in mind that, 'Confidentiality is a tool to help ensure truthful responses' (Zikmund, Babin, Carr and Griffin, 2011, p. 91) and has strictly maintained privacy of the respondents. According to the guideline of Erlandson (Erlandson et al., 1993, p. 28), the researcher has been conscious enough to maintain privacy, confidentiality and avoid harm, deception, and informed consent. During the execution of the present study, the researcher has tried to keep away from plagiarism and has maintained integrity very carefully using material from others and ensures that it is adequately referenced. The researcher has not misrepresented anything purposefully in the research work to impress anybody and has not undertaken the research involving the collection, analysis, and interpretation of data what is known as academic fraud.

The researcher has followed appropriate statistical techniques and methods for analyzing data. Computing of various percentages corresponding, coefficient of variation (CV), one sample t-test, pair t-test etc. have been done by applying SPSS and Excel software. The researcher finds out the relationship or differences supporting or conflicting with original or new situation should be tested to determine with what validity data can be said to indicate any conclusion. Overall, the researcher has abided by the golden rule of 'Highly ethical behavior can be characterized as being fair, just and acceptable' (Robin and Babin, 1997, p. 563).

CHAPTER FIVE

RESULTS AND DISCUSSION

Different statistical methods and techniques have been applied for the analysis of data such as Percentage corresponding, Mean Deviation, Standard Deviation, One-sample T-test, Paired T-test, and Co-efficient of Variation (CV) analysis through Excel and SPSS analysis. By this process, the problems that are more significant and possible solutions have been identified. These research procedures are subjected to modify as per suggestions of the honorable Supervisor concerned as well as through seminar. Documentary analysis and practical situation observation are also conducted for secondary data analysis. Various statistical tables, the data as well as their analysis have been presented to show the information gotten from the research study.

This research work has widely used various printed document published by BR. Both of primary and secondary data have been used in this study. Primary sources include unpublished official documents, interviews, discussions with the Railway officials, executives and higher officials related to the Ministry of Communication and the Ministry of Establishment of the People's Republic of Bangladesh, experts and scholars on the regarded subject, media people, manuscripts and dissertations. To get primary data, the researcher has framed structured questionnaire that has been filled by the related respondents (lower class, upper class and middle class passengers) who are selected randomly. Observation method has been also used to analyze the problems faced by BR as well as to identify the customer's perception towards the service given by BR.

Secondary sources contain published official statistics, reports, documents, annual reports of BR (1972-2012), materials collected from Rajshahi Railway Bhaban and from different stations of two divisional Headquarters (Lalmonirhat and Pakshi) of west zone of BR, Ministry of Communication, Ministry of Establishment, Bangladesh Economic Association (BEA), Bangladesh Institute of International Strategic Studies (BIISS), Asian Development Bank (ADB) office, Dhaka, international Monetary Fund (IMF) office, Dhaka, Bangladesh Economic Review (1973-2012) etc. in addition to above, Laws and ordinance books,

articles, published dissertations written by eminent scholars have been also considered as source.

Data Analysis Procedures

The Present research study has followed the chronological order of the specific objectives for the analysis of Data.

<u>Objective One</u> To Analyze The Existing Service Structure Of Bangladesh Railway.

During the last decades, the shares of different modes have undergone major changes and in compensation with other countries, Road transport of the country has grown rapidly and rail's share has slipped down considerably. Critical analysis of the efficiency of Bangladesh Railway points up the dramatically worsening operating ratio over the last decades. This raises the question 'how far will the present trends continue?' and 'is it not possible to upgrade the overall operating performance of BR at all?'

The pessimism as to whether Bangladesh Railway can, infact turn itself around its based on a number of consideration. The three critical ones appear to be:

The ongoing decline in Bangladesh Railway's operating performance. BR's failure to meet its action plan commitments on reform processes: and BR's inability to get the political attention to resolve its problems.

Although some of the problems are well documented, others have curiously received little attention of any governments in the past.

In the post liberation period and till early eighties Bangladesh Railway seemed to perform well, optimally realizing its full potential, of course, subjected to inherited structural and physical constraints. Current poor performance is usually a reflex of poor operating performance due to inefficiencies/lower productivities of both physical and human capital cost by development resource and institutional and policy constraints. This in term

adversely affects the financial performance of BR. However, in the process, after a certain stage, vicious circle starts when poor financial health causes poor operational health and Vice Versa.

Bangladesh may also play an increasingly important role as a hub for sub-regional transport, more effectively linking Bhutan, India, and Nepal; providing access to ports; and offering transit routes for India to its eastern states, inter-regional rail traffic (freight traffic) between Bangladesh and India has already been increased at a considerable rate. Further rail traffic (both passenger and freight) increases are contained by political issues as well as outdated operational procedures and cumbersome administrative arrangements at border crossings between Bangladesh and India which should be resolved as early as possible.

The main factors behind reduced the competitiveness of rail transport are institutional shortcomings and physical bottlenecks resulting from poor infrastructure and antiquated rolling stocks. Bangladesh railway is also severely restricted by its two different gauge systems (Broad and Meter Gauge), which is a legacy from the development of the railway network on the Indian sub-continent prior to its partition in 1947. To maintain a competitive position, railway's concentrate on long haul transport, particularly freight movements and intercity passenger traffic. Rail has also a potential role to play in mass transit for people in greater Dhaka, which experiences rapid increase in motorized traffic. Experience else where shows that rail transport creates less environmental damage than road traffic and can reduce pollution, congestion, accidents and fatalities.

To fulfill the investigation of the mentioned objective, the researcher has conducted practical situation observation and documentary analysis. Inherited physical structural problems.

5.1 The Existing Service Structure Of Bangladesh Railway

5.1.1 The Network

Bangladesh Railway has a total of 2,835 route kilometers at the end of the year 2009-2010. East zone has 1,266 route kilometers of MG track only and West zone has 535 route kilometers of MG and 659 route kilometers of BG and 375 route kilometers of DG track. The total length of running track including tract on double line, in the yards and sidings is 3,974 kilometers. (Information Book: Bangladesh Railway, 2012, p. 13)

5.1.2 Route Length By Civil Districts

Bangladesh Railway is not connected with all the civil districts of the country. At the end of 2008-2009 only 44 civil districts of the country could be connected by Railway. (Information Book: Bangladesh Railway, 2012, p. 13)

5.1.3 Tract Maintenance

Sophisticated tract maintenance methods are under active consideration of the Railway Administration to replace conventional methods. Mechanical tract lifting, slewing, tamping and laying machines have been introduced to Dhaka-Chittagong main line for tract maintenance. A tract recording trolley car is in use. (Information Book: Bangladesh Railway, 2012, p. 14)

5.1.4 Bridges

At the end of 2009-2010, there were a total of 3,380 bridges, of which 2,903 are minor and 477 are major ones. Foot over-bridges are provided in important cities and district towns. (Information Book: Bangladesh Railway, 2012, p. 14)

5.1.5 Level Crossings

At the end of 2009-2010, there were 1,413 level crossings of which 207 level crossings having heavy road and rail traffic are manned round the clock and 1,206 with light traffic are casually manned. Busy level crossings are being gradually provided with quick operating lifting barriers. Safety devices which are being provided at very busy level crossings are being gradually provided with quick operating lifting barriers. Safety devices which are being provided at very busy level crossings are being provided at very busy level crossings. (Information Book: Bangladesh Railway, 2012, p. 14)

5.1.6 Stations

Bangladesh Railway had a total of 440 stations at the end of the year 2008-2009. These include one block hut, 13 train halts and 4 goods booking points. (Information Book: Bangladesh Railway, 2012, p. 14)

5.1.7 Signaling

The importance of the line between Dhaka and Chittagong increased immediately after the partition of India in 1947 as this connected the capital city of Dhaka and the principal port city of Chittagong. To meet the needs of the speed and density of the traffic, signaling on the section were modernized in phases starting from the early sixties. The entire sections between Dhaka-Chittagong are provided with color light signaling & relay interlocking with token less block working. Double wire upper quadrant mechanical signaling is provided in sections Tongi-Mymensingh, Akhaura-Sylhet, Santahar-Bonarpara & Khulna-Darsana, Relay interlocking system exists at three major stations in West Zone viz. Parbatipur, Ishurdi & Santahar and at six stations in Mymensingh-Jamalpur section in East Zone. Most important and busy level crossing gates are also provided with interlocking system including approach warning and road signal. Replacement and modernization works of 7 stations from Jamtail to Moladuli have been converted into solid state interlocking signaling system. Besides these, 14 color light interlocking from Paksey to Darshona junctions in pipe line. On the contrary, 22 stations in Akhaura-Sylhet section have been taken in hand to

modernize with computerized signaling and interlocking system. In first phase of the work 10 stations have already introduced computer base interlocking system including Akhaura and Sylhet station. Among the rests of 12 stations, 3 stations have already introduced computer base interlocking system and in other 9 stations, signaling works are in process.

In Laksham-Noakhali branch line section in 8 stations, Mechanical Semaphore Arm signal have already replaced by non interlocked color light signaling system.

In Joydebpur-Dhaka section, introduction of Duel gauge double line computer base interlocking system have been taken in hand & works progressing under PMO (Information Book: Bangladesh Railway, 2012, p. 14,15)

5.1.8 Telecommunication

Till late eighties, Bangladesh Railway's most of the Telecommunication facilities used to be taken on lease from Bangladesh Telegraph & Telephone Board (BTTB). These facilities were land line based, prone to interference and unreliable. In 1984 BR went for the modernization of its Telecommunication facilities. BR has an optical fiber based digital telecommunication network. The telecommunication network spans approximately over 1800 kms. And connects about 300 Railway stations. The system also serves about 1100 users through 10 exchanges. In addition to 1100 dial up type digital telephones, BR's. Telecommunication system provides about 300 train control Telephones and the same station to station telephones. Copper conductors are used for Block Instruments and the Block Telephones. Computerized Seat Reservation and Ticketing System (CSRTS) and Computerized Wagon Control System (CWCS) have been installed using this network. (Information Book: Bangladesh Railway, 2012, p. 16)

5.1.9 Locomotives

Bangladesh Railway now has basically two types of locomotives viz diesel Electric (DE) & Diesel Hydraulic (DH). The total fleet as on 30th June 2009 comprised 253 Diesel Electric (69 BG, 185 MG) and 26 Diesel Hydraulic (3 BG& 23 MG) locomotives.

Pahartali and Dhaka Diesel Workshops undertake repairs of MG Diesel Locomotives while Parbatipur Diesel Workshop undertakes repairs of both BG & MG Diesel locomotives. Heavy repairs and overhauls of diesel locomotives are done at central Diesel Workshop, Parbatipur. The existing main line locos are all DE type manufactured by ALCO (USA), MLW/Bombardier Inc. (Canada) & Hitachi (Japan) for MG and General Motors (USA/Canada), MLW (Canada), Hitachi (Japan), ABB Herschel (Germany), DLW (India) and Hyundai (S. Korea) for MG. (Information Book: Bangladesh Railway, 2012, p. 17)

5.1.10 Coaching Vehicles

At the end of the year 2008-2009, BR had a total of 1,486 coaching vehicles out of which 1,451 were for conveyance for passengers and 35 were for conveyance of luggage, parcels, mails etc. as well as for departmental use. (Information Book: Bangladesh Railway, 2012, p. 18)

5.1.11 Freight Wagons

At the end of the year 2008-2009, BR had a total of 8,998 wagons comprising of 6,175 covered, 988 open and 1,835 special type wagons. (Information Book: Bangladesh Railway, 2012, p. 18)

5.1.12 Containers

Bangladesh Railway has entered into a new era in transportation of freight traffic in containers from Chittagong to Dhaka. Special type of flat wagons required for container movement was initially arranged by converting some existing wagons. Subsequently 80 bogie container flats were procured from China and another 100 bogie container flats were procured from India. An Inland Container Depot has been opened at Dhaka with custom and port facilities for clearance of container traffic. Exclusive container train was introduced on 5th August, 1991. Since then, volume of container traffic gained momentum. (Information Book: Bangladesh Railway, 2012, p. 18)

5.1.13 Mechanical Workshops

Bangladesh Railway has sheds, depots and workshops for maintenance of Rolling Stock, Locomotives are maintained in 3 (Three) places viz shed, shop and CLW, Carriage and Wagons are maintained in two places i.e. C & W Depot and Workshop. (Information Book: Bangladesh Railway, 2012, p. 18)

I) Locomotives Are Maintained In Following Workshops

- 1. Central Locomotive Workshop at Parbatipur, Dinazpur (CLW)
- 2. Diesel Workshop at Pahartali, Chittagong.
- 3. Diesel Workshop, Dhaka.
- 4. Diesel Workshop at Parbatipur, Dinazpur.
- ii) Carriage & Wagons are maintained in following workshops
 - 1. C & W Shop at Saidpur, Nilphamari.
 - 2. C & W Shop at Pahartali, Chittagong.

5.1.14 Railway Ferry Services

There were 28 marine vessels under Mechanical Department at the end of the year 2008-2009. The fleet of the marine vessels consists of two passenger vessels, 4 Tugs, 4 Wagon Ferry Barges, 5 Pontoon ramps, 4 Flats and 2 Berthing pontoon and 7 other crafts. (Information Book: Bangladesh Railway, 2012, p. 18)

5.1.15 Stores

Railway Material Management Department known as the Store Department of Bangladesh Railway carries out the responsibilities of assessment, purchasing, inspecting, stocking, preservation and supply of the materials as required and demanded by different using departments. Apart from the non-recruiting items, about 35,000 items are stocked in the main depots at Pahartali and Saidpur and also at Diesel Sub Depots at Parbatipur, Dhaka and Pahartali for diesel spares.

The department also owns a modern offset printing press where intercity tickets, Printed Card Tickets and all sorts of money value forms are printed and supplied against the demand received from the user departments.

5.1.16 Passenger Traffic

Bangladesh Railway is the principal mode of transportation of the country. With the development of road transport facilities there has been a shift in the trend of passenger traffic with short distance passengers preferring road transport, because of their frequent and point to point services. During 2008-2009 about 65 million passengers were transported by Bangladesh Railway against about 54 million during 2007-2008. In order to render better services to the passengers, Bangladesh Railway introduced Intercity Train services in 1985. At present there are 70 Intercity Trains. Around 36.8% of the total passengers of Bangladesh Railway are being carried by the intercity trains which contribute approximately 79.2% to the total earning of passenger traffic. (Information Book: Bangladesh Railway, 2012, p. 19)

5.1.17 Trade Union

There are 8 registered trade unions in BR to maintain a healthy relation between the employees and administration to pave the way for congenial working atmosphere on the system. (Information Book; Bangladesh Railway, 2012, P-23)

5.1.18 Social Cost

The BR is one of the largest government enterprises in the country and constitutes so to say the 'life line' of the nation. The network of Railway not only serves the country's trading community but also plays a vital role in the socio-economic development and industrialization of the country. Although BR is expected to serve both as a commercial enterprise and as a public utility service but, as a commercial enterprise, it has an obligation to generate sufficient revenue to meet the cost of operation, pay interest on the capital of the government and foreign loans and provide funds for renewal of assets and modernization of the system as a whole.

However, as a foremost public utility service, The Railway has a special responsibility to provide the transport services for the carriage of commodities of mass consumption and large number of passengers. Tariff of the Railway is no cost-based and is dictated by the wider social and economic interest of the country. Consequently it has not been possible for BR to balance the earning and the expenditure due to the continuation of operation of non-profitable services, especially, the un-economic branch lines or train services and few other similar non-economic factors. Besides, as a matter of national policy, BR is required to provide transport of essential commodities on top priority basis in emergent situation also to provide concession transport facilities for essential commodities of common consumption by the economically weaker sections of the community. This kind of inevitable services on the part of BR is of the concern of any commercial enterprise. (Information Book; Bangladesh Railway, 2012, P-24)

5.1.19 Security

The Government Railway Police

Prevention and detection of crime committed against passengers traveling by train and their properties and also maintenance of law and order in the Railway premises are the direct responsibilities of the Railway Police working under the control of National Police Head Quarters as well as Ministry of Home Affairs.

The general duties of the staffs and jurisdiction of Railway Police have been enumerated in the Police Regulation of Ben-al 1943. The duties are as under:-

- 1. Control of Passenger Traffic inside the Station Premises more particularly on the platforms, in the booking office, waiting halls at the entrance and exit gates and where ever especially required on emergency by the station officials.
- 2. The control of vehicular and other traffic in the station compound.

- 3. The maintenance of law and order at stations and in standing passengers trains, prevention of overcrowding.
- 4. Watching, loaded passenger trains when standing in the station.
- 5. The arrest of those found committing nuisances or suffering from infectious disease and keeping the Station Premises clear of Idlers and Beggars.
- 6. The examination of all empty carriages on arrival at terminal station for property left behind by passengers and to see that carriage fittings have not been tampered with.
- 7. The removal of bodies and persons dying in the train and on station premises and the conveyance to hospital of the sick people.
- 8. Investigation into cognizable offences committed with Railway limits and presentation of the same.
- 9. The Arrest offenders in cognizable cases and detention of them in custody as well as persons arrested by Railway officers and made over to the police, and their production before the Magistrate.
- 10. The Reporting of no cognizable case or infringement of byelaws of the line to proper authorities as also all instances of oppression or fraud on the part of Railway subordinates or others.
- 11. The prosecution of cognizable case as well as no cognizable cases under Railway Act, 1890 on behalf of the management. (Information Book: Bangladesh Railway, 2012, p. 25)

The Railway Nirapatta Bahini

The responsibility of producing security to the Railway men, Railway properties and the properties entrusted to it for carrying falls under the duties of Railway Nirapatta Bahini (RNB).

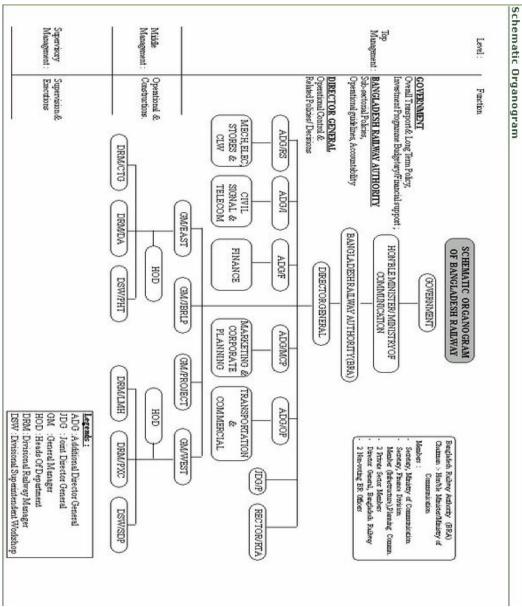
Railway Nirapatta Bahini Is Responsible For

- 1. Prevention and detection of crime on the Railway.
- 2. Protection and safeguarding the Railway properties.

- 3. Removing any obstruction in the movement of Railway, its properties and the properties entrusted to it for carriage.
- 4. Escorting of cash movement and protecting pay officers of the Railway.
- 5. Providing security to the goods trains and luggage & Parcel Vans of passenger trains.
- 6. Assisting during Block Check and mobile Court.
- Eviction of unauthorized occupants in the Railway premises, under command of Railway Estate Officer/Magistrate.
 (Information Books Bonels dock Boilways 2012, p. 20)

(Information Book: Bangladesh Railway, 2012, p. 26)

Figure-6 Organizational Structure Of Bangladesh Railway



Source: Information Book: Bangladesh Railway, 2012, p.9

Table-3	
Organizational Structure Of Bangladesh Railway Staffs	

		Designation	Duty
Sl.			
01	a.	Potter	Office Bearer of Goods Carrier
	b.	MLSS	Office Bearer of Goods Carrier
02	a.	Tally Clerk	Counting Goods
	b.	Train Number Taker (TNT)	Counting Loaded Goods in Trains
03.	a.	Goods Clerk (Grade: II)	Booking Goods
	b.	Parcel Clerk (Grade: II)	Booking Parcel
	с.	Booking Assistant (Grade: II)	Selling Ticket
	d.	Ticket Collector (T. C)	Collecting or Checking Ticket at
			the Stations
	e.	TRC	Counting the Shifted Goods
04.	a.	Goods Clerk (Grade: I)	Booking Goods
	b.	Parcel Clerk (Grade: I)	Booking Parcel
	с.	Booking Assistant (Grade: I)	Selling Ticket
05.	a.	Head Goods Clerk	Supervising of GCs
	b.	Head Parcel Clerk	Supervising of PCs
	с.	Head Assistant Clerk	Supervising of BAs
	d.	Head Ticket Collector	Supervising of TCs
	e.	Train Ticket Examiner (T. T. E)	Collecting or Checking Ticket in
			the Trains
06.	a.	Junior Traffic Inspector of	Supervising of TTEs
		Commercial (JRI)	
07.	a.	Senior railway Inspector (SRI)	Supervising of TTEs
	b.	Traffic Inspector of Commercial	Supervising all below commercial
		(TIC)	Staffs
	c.	Traffic Inspector of Transportation	Supervising all below
	d.	(TIT) Traffic Increasion of Audit (TIA)	Transportation Staffs
08.		Traffic Inspector of Audit (TIA)	Auditing the Commercial Accounts
Uð.	a.	Assistant Commercial Officer (ACO)	Supervising all below commercial Staffs
	b.	Assistant Chief Commercial Manager	Management of Commercial Staffs
	0.	(ACCM)	Wanagement of Commercial Starts
	с.	Traffic Account Officer (TAO)	Auditing the Commercial Accounts
	d.	Accounts Officer (AO)	Auditing the Commercial Accounts
09.	a.	Divisional Commercial Officer	Supervising all below commercial
07.	u.	(DCO)	Staffs
	b.	Additional CCM	Management of Commercial Staffs
	с.	Divisional Finance Advisor (DFA)	Financial Advisor
	d.	Divisional Accounts Officer (DAO)	Auditing the Commercial Accounts
	e.	Additional FA & CAO	Financial Advisor
10.	a.	Divisional Railway Manager (DRM)	Supreme Management
11.	a.	Chief Commercial Manager (CCM)	Top Most Management
	b.	FA & CAO	Top Most Financial Advisor
Course		taffing Pattern of BR Traffic -Com	· · · · · · · · · · · · · · · · · · ·

Source: Staffing Pattern of BR Traffic -Commercial Sector: Ascending Order

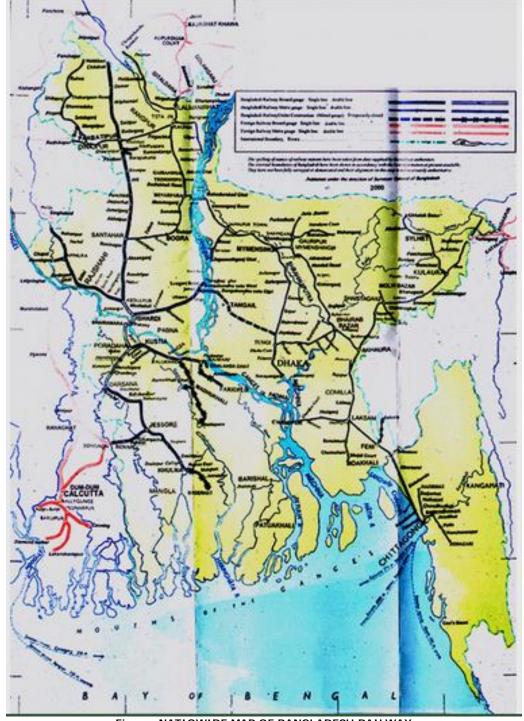


Figure-7 Nation Wide Map Of Bangladesh Railway

Figure: NATIOWIDE MAP OF BANGLADESH RAILWAY

Source: Information Book: Bangladesh Railway, 2012, p.122

5.1.20 Number Of Officer And Staff

As on 30th June, 2012 there are 409 Officers and 27562 Staff of different categories. The Staffs are graded/Classified as Class-III and Class-IV Staff. The ratio of officers and staffs is about 1.67 (Information Book: Bangladesh Railway, 2012, P-22)

5.1.21 Training

Bangladesh Railway has got a built in system of imparting training to Railway officials including BCS officers and all categories of non-gazette staff to enable them to improve their skills and ability. For safe and efficient operation of the Railway a well equipped and modern railway training academy has been established in 1984 which is now located at Halishahar, Chittagong. Four workshop Training units at Pahartali, Dhaka, Parbatipur and Ishurdi have been transferred under the control of Rector/Railway Training Academy, Halishahar, Chittagong w.e.f 03.01.04 for imparting training in locomotive maintenance and operations staffs of mechanical department. In the year 2011-12 total 309 persons of different categories were trained including 34 no. BCS cadre Officers (Information Book; Bangladesh Railway, 2012, P-22)

5.1.22 Financial Summary

The total operating revenue without considering the effect of public service obligation (PSO) and welfare grant of Bangladesh Railway for the year 2009-10 amounted to TK. 563.04 million. After meeting the total operating expenses of TK. 11272.79 million, the net operating income for the year came to (-) TK. 5609.75 million.

On the other hand, Government paid an amount of Tk. 860.00 million and Tk. 208.57 million as PSO compensation and welfare grant respectively. As a result, total operating revenue duly considering the effect of PSO and welfare grant for the year 2009-10 amounted to Tk. 6731.62 million. So, after meeting the total operating expenses of Tk. 11272.79 million, the net operating income for the year came to (-) Tk. 4541.17 million.

The interests and installments on foreign loans taken on replacement account amounted to Tk. 371.76 million and Tk. 572.96 million respectively.

During 2009-10 average revenue per passenger as well as revenue per passenger-Km. decreased as compared to those of 2008-09. Revenue per passenger decreased from Tk. 44.45 to Tk. 41.77 and revenue per passenger-Km increased from 38.47 paisa to 38.58 paisa. i.e. 0.29%. Average distance traveled by passenger from 104.6 Kms. in 2008-09 to 111.3 Kms. in 2009-10.

In goods traffic, there was increase in revenue per tonne and increase in revenue per tonnekm. Average revenue per tonne decreased by 1.57% Form Tk. 435.63 in 2008-09 to Tk. 428.74 in 2009-10 and revenue per tonne-km. increased by 0.44% i.e. form 158.4 paisa in 2008-09 to 157.7 paisa in2009-10. The average haul of freight traffic decreased form 265.8 Kms. in 2008-09 to 261.6 Kms. in 2009-10.

The total operating revenue without considering PSO and welfare grant for the year 2009-10 amounted to Tk. 5663.04 million as compared to Tk. 6253.53 million in 2008-09 representing an increase of 9.44%. Passenger earnings in 2009-10 amounted to Tk. 2917.69 million, showing an increase of 7.43% as compared to the earning 2008-09 amounting to Tk. 2715.96 million. Other coaching (Parcel and luggage) earnings in 2009-10 was Tk. 116.58 million as compared to Tk. 107.98 million in 2008-09 representing an increase of Tk. 7.96%. Miscellaneous earnings also showed a decrease of 30.86% from Tk. 2115.91 million in 2008-09 to Tk. 1463.00 million in 2009-10.

The total operating expenses for the year 2009-10 amounting to Tk. 11272.79 million, exhibits a decrease of 3.88% as compared to the working expenses of 2008-09 amounting to Tk. 11728.09 million The operating ratio and increased over the previous year from 187.5% in 2008-09 to 199.05% in 2009-10 without considering the effect of PSO and welfare grant. The operating ration becomes 167.46% in the year 2009-10 if the effect of PSO and Welfare Grant is considered.

Source: Information Book; Bangladesh Railway, 2012, P-26

Table- 4 FINANCIAL SUMMARY

Item		1969-70	2008-09	2009-10	(+)/(-)	Comparison with
						2009-10 to 2008-09
PLANT :						
Route kilometers		2,858.23	2,835.04	2,835.04		
Track-kilometers		4,448.02	3,973.49	3,973.49		
Locomotives						
Steam		343				
Diesel		143	279	248	(-)	11.11
Coaching vehicles (in uni	its)					
Passenger carriages		1,165	1,451	1,445	(-)	0.41
Other coaching vehicles		478	35	33	(-)	5.71
(including departmental						
vehicles)						
Freight wagons (includin	g					
departmental wagons)						
In units		16,823	8,998	8,902	(-)	1.07
In terms of four-wheelers		19,616	11,909	11,821	(-)	0.74
Service (Figures in millio	ns)					
Passenger carried		72.9	65.0	65.6	(+)	0.92
Passenger kilometers		3,317	6,801	7,305	(+)	7.41
Tonnes carried	4.88	3.01	2.71	(-)	9.97	
Tonne kilometers	1,265	800	710	(-)	11.25	
Operations :						
Vehicle-kilometers						
per-vehicle day on line						
Passenger BG		243	366	368	(+)	0.55
Carriages MC	3	211	264	265	(+)	0.38
Other coaching BG		145	144	145	(+)	0.69
Vehicles MC	5	79	90	90		
Operations-Contd.						
Average number	BG	16	23	39	(+)	69.57
of passengers per	MG	19	26	30	(+)	15.38
4-wheeled vehicle						
Average number of	BG	220	409	434	(+)	6.11
passengers per train	MG	315	505	549	(+)	8.71
Wagon kilometers per BG		24.5	136.0	29.2	(-)	78.50
wagon day on line MG		29.3	10.7	17.3	(+)	61.68
Average wagon load BG		13.7	25.7	25.1	(-)	2.33
during the run(in tones) MG		9.3	10.4	8.58	(-)	17.5
Wagons per train BG		41.9	50.4	50.5	(+)	0.20
	MG	50.1	46.9	46.9		
Net load per	BG	338	752	733	(-)	2.53
train (in tonnes)	MG	320	397	317	(-)	20.15
Net tonne kilometers	BG	229	2043	424	(-)	79.2

per wagon day	MG	190	91	117	(+)	8.57
Net tonne kilometers	BG	7898	10082	10328	(+)	2.44
Item	20	1969-70	2008-09	2009-10	(+)/(-)	Comparison with
						2009-10 to 2008-09
Per train hour	MG	3,550	4801	4088	(-)	14.85
Engine kilometers per	BG	130	182	199	(+)	9.34
day per engine on line	MG	137	172	168	(-)	2.32
Engine kilometers per	BG	230	286	282	(-)	1.40
day per engine in use	MG	206	238	235	(-)	1.26
Engine kilometers per	BG	155	170	162	(-)	4.71
day per goods engine	MG	143	174	173	(-)	0.57
in use						
RATES AND LEAD :						
Revenue per passenger(Taka)	1.38	41.77	44.45	(+)	2.68
Revenue per passenger		2.04	20.47	20 50	(\cdot)	0.20
Kilometers(Poisha)	(0)	3.04 33.54	38.47 435.63	38.58	(+)	0.29
Revenue per tonne (Tal Revenue per tonne Kilo		33.54	435.03	428.74	(-)	1.58
(Poisha)	JIIIelei	12.7	158.4	157.7	(-)	0.44
Average number of Kil	ometers				()	
a						
passenger Kilometers		45.5	104.6	111.3	(+)	6.40
Average number of Kil	ometers					
a					()	
tonne of goods carried EARNINGS AND EXPENSES		259.3	265.8	261.6	(-)	1.58
EARNINGS AND EXP	EINSES					
(Figures in Crore Taka)						
Total Operating Reven						
(without						
Considering PSO & we	lfare					
grant)		30.3	625.35	566.30	(-)	9.44
Total Operating Reven						
(Considering PSO & we	elfare		727 02	673.16	()	
grant)	coc .	- 25 20	737.93 1172.75		(-)	8.77
Total Operating Expenses : Net operating income(without		25.28	11/2.75	1127.27	(-)	3.87
	minour					
Considering PSO & we	lfare		(-)	(-)		
grant)		5.03	547.40	560.97	(-)	2.47
Net operating						
income(Considering			()			
PSO & welfare grant)			(-) 430.97	(-) 454.11	(-)	5.36
Operating ratio(percent		100.77	11.707	(7)	5.50	
(with PSO & welfare gr		83.4	187.5	199.05	(+)	6.16
Operating ratio(percent		00.4	107.3	177.03	(*)	0.10
(without	,					
PSO & welfare grant)		-	158.1	167.5	(+)	5.94

Item	1969-70	2008-09	2009-10	(+)/(-)	Comparison with
					2009-10 to 2008-09
EMPLOYEES:					
Number of employees	55,825	30444	27971	(-)	8.12
Number of employees per					
1,000 train kilometers	3.23	1.93	1.76	(-)	8.80
Cost of Employees in crore (Taka)	12.37	401.89	435.56	(+)	8.37
Average cost per employee					
per month (Taka)	185	12711	12976	(+)	2.08
Percentage of cost of employees to	48.9	39.6	38.6	(-)	2.52

Source: Information Book; Bangladesh Railway, 2012, P-26

From the following tables some facts and figures of Bangladesh Railway service can be seen:

Table-5

Railway Stations

Year	BG		MG		T	otal System	n
July-June		East	West	Total	East	West	Total
		Zone	Zone		Zone	Zone	
1969-70	158	-	-	312	-	-	470
2001-02	130	243	81	324	243	211	454
2002-03	134	239	81	320	239	215	454
2003-04	134	239	81	320	239	215	454
2004-05	134	239	81	320	239	215	454
2005-06	134	239	81	320	239	215	454
2006-07	134	226	81	307	226	215	441
2007-08	134	226	81	306	226	214	440
2008-09	134	226	81	306	226	214	440
2009-10	134	226	81	306	226	214	440

		Tal	Table-6 (Sou	urce: Infoi	mation Be	(Source: Information Book, Bangladesh Railway, 2012, P-33)	ladesh Rai	lway, 201	2, P-33)			
					ROUTE F	ROUTE KILOMETERS	ERS					
										Figure	Figures are in Kilometers	llometers
Year		MG			BG			DG		Ţ	Total System	ш
July-June	East Zone	West Zone	Total	East Zone	West Zone	Total	East Zone	West Zone	Total	East Zone	West Zone	Total
2000-2001	1279.09	553.03	1832.12	I	936.25	936.25	ı	I	I	1279.09	1489.28	2768.37
2001-2002	1276.71	553.03	1829.74	I	936.25	936.25	ı	-	-	1276.71	1489.28	2765.99
2002-2003	1276.71	553.03	1829.74	I	660.22	660.22	I	365.00	365.00	1276.71	1578.25	2854.96
2003-2004	1276.71	553.03	1829.74	I	660.22	660.22	ı	365.00	365.00	1276.71	1578.25	2854.96
2004-2005	1276.71	553.03	1829.74	I	660.22	660.22	I	365.00	365.00	1276.71	1578.25	2854.96
2005-2006	1266.21	534.67	1800.88	I	659.33	659.33	ı	374.83	374.83	1266.21	1568.83	2835.04
2006-2007	1266.21	534.67	1800.88	I	659.33	659.33	ı	374.83	374.83	1266.21	1568.83	2835.04
2007-2008	1266.21	534.67	1800.88	I	659.33	659.33	ı	374.83	374.83	1266.21	1568.83	2835.04
2008-2009	1266.21	534.67	1800.88	I	659.33	659.33	I	374.83	374.83	1266.21	1568.83	2835.04
2009-2010	1266.21	534.67	1800.88	I	659.33	659.33	I	374.83	374.83	1266.21	1568.83	2835.04
	(MG =	Metre Ga	(MG = Metre Gauge, BG = Broad Gauge, DG = Dual Gauge (Both Broad and Metre Gauge mixed)	Broad Ga	uge, DG =	= Dual Gaı	ıge (Both	Broad and	l Metre G ⁵	uge mixec	1)	

Sl.	District	Station	Kilometers	Sl.	District	Station	Kilometers
No.				No.			
1	Bagerhat	-	40.53	23	Rangpur	9	69.40
2	Khulna	7	27.24	24	Gaibandha	16	80.50
3	Jessore	11	56.42	25	Bogra	18	84.00
4	Jhenaidaha	5	43.40	26	Tangail	5	68.00
5	Chuadanga	9	44.25	27	Jamalpur	18	102.90
6	Faridpur	-	42.80	28	Netrokona	13	65.00
7	Gopalganj	-	32.13	29	Kishorgonj	11	73.75
8	Rajbari	9	92.13	30	Mymensingh	23	128.33
9	Kushtia	10	58.35	31	Gazipur	11	73.80
10	Serajganj	9	49.00	32	Dhaka	7	30.00
11	Pabna	10	61.00	33	Narayanganj	2	9.5.
12	Chapai-	6	69.00	34	Narsingdhi	12	38.97
	nawabgang						
13	Rajshahi	13	63.00	35	Sunamganj	3	13.90
14	Natore	8	37.00	36	Brahmanbaria	11	74.64
15	Naogaon	5	29.00	37	Habiganj	21	72.92
16	Joypurhat	4	54.00	38	MoulviBazar	14	125.33
17	Thakurgaon	7	50.00	39	Shylet	8	50.64
18	panchagarh	3	22.00	40	Noakhali	8	29.40
19	Nilphamari	9	65.68	41	Chandpur	11	40.66
20	Kurigram	9	51.00	42	Comilla	16	106.40
21	Dinajpur	18	152.00	43	Feni	5	51.73
22	Lalmonirhat	14	110.00	44	Chittagong	45	178.45

Table-7District Wise Route Kilometers

Source: Information Book: Bangladesh Railway, 2012, p.34

Table-8 Locomotives

Year	В	G	Μ	[G	Т	otal Syste	m
July-June	Steam	Diesel	Steam	Diesel	Steam	Diesel	Total
1969-70	121	18	222	125	343	143	486
2001-02	-	75	-	202	-	277	277
2002-03	-	75	-	202	-	277	277
2003-04	-	78	-	197	-	272	272
2004-05	-	78	-	208	-	286	286
2005-06	-	78	-	208	-	286	286
2006-07	-	78	-	208	-	286	286
2007-08	-	78	-	208	-	286	286
2008-09	-	78	-	208	-	286	286
2009-10	-	78	-	208	-	286	286

N. B. 38 nos. of locomotives awaiting for condemnation.

	Stock	В	G	N	IG	To	otal
ives	Steam	-	-		-		-
Locomotives	Diesel	7	8	2	08	2	86
Loc	Total	7	8	2	08	2	86
S	Passenger Carriages	32	22	11	50	14	72
Carriages	Other Coaching Vehicles	2	1	3	33	3	37
C	Total	326		11	83	15	509
		Units	4-W	Units	4-W	Units	4-W
Freight	Covered Wagons	1190	1642	5760	6283	6950	7925
Frei	Special Type Wagons	726	1025	2294	4158	3020	5183
	TOTAL	1916	2667	8054	10441	9970	13108
	Natas 4 W	F arra	XX/L a al				

Table-9Summary Of Rolling Stock

Note: 4-W = Four Wheelers

Table-10 Passenger Trains And Train-Kilometers (BG)

During the year 2009-2010 a total of 20777 passenger trains runs on the broad gage, (intercity 8135, mail express 5595 and local 7047). They covered a total of 4059688 train kilometers, (intercity 2359490, mail express 1093540 and local 606658). These figures do not include 1380 train kilometers run on departmental account. The passenger proportion of local train kilometer was 563537 and the goods proportion 43121 kilometers. Year wise position is indicated below:

Year	1	Number of	trains ru	n	Trair	h kilomete	rs (Thous	ands)
July- June	Inter- city trains	Mail & Express trains	Local trains	Total	Inter- city trains	Mail & Express trains	Local trains	Total
1996-97	4504	4736	15701	22950	1192	1027	1547	3766
2001-02	5303	4991	8216	18510	1367	1058	679	3104
2002-03	5103	4902	7363	17368	1364	1075	642	3081
2003-04	5347	50668	8328	18743	1568	1097	655	3320
2004-05	5317	5071	8200	18588	1585	1095	664	3344
2005-06	5310	5051	7785	18146	1576	1095	642	3313
2006-07	5561	4878	7194	17633	1630	1129	613	3372
2007-08	7378	5846	7464	20688	2118	1100	614	3832
2008-09	7675	5631	7249	20555	2346	1083	607	4036
2009-10	8135	5595	7047	20777	2359	1094	607	4060

Note: Daily no. of trains run in June 2010 was 64 including 28 intercity trains.

Source: Information Book: Bangladesh Railway, 2012, p.63

Table-11

Passenger Trains And Train-Kilometers (MG East & West Zone Combined)

	ľ	Number of	trains ru	1	Trair	n kilomete	rs (Thous	ands)
Year		I				1		1
	Inter-	Mail &	Local	Total	Inter-	Mail &	Local	Total
July- June	city	Express	trains		city	Express	trains	
	trains	trains			trains	trains		
2000-01	12158	13737	42462	68357	3344	3016	3531	9891
2001-02	12655	14090	44097	70842	3392	3046	3504	9942
2002-03	12601	14225	40918	67744	3391	3085	3473	9949
2003-04	13038	14574	37160	64772	3475	3064	3519	10058
2004-05	14878	16748	33488	65114	4021	3080	3481	10582
2005-06	16867	16599	34142	67608	4195	3212	2783	10190
2006-07	14340	16777	34138	65255	4193	3228	2698	10119
2007-08	18430	16687	34147	69264	4233	3304	2682	10219
2008-09	19929	16627	33125	69681	4263	3338	2594	10195
2009-10	20332	17817	30755	68904	4259	3336	2650	10245

Note: Daily no. of trains run in June 2010 was 205 including 44 intercity trains. Source: Information Book: Bangladesh Railway, 2012, p.64

Year		BG			MG	
July- June	Intercity Trains	Mail & Express Trains	Local Trains	Intercity Trains	Mail & Express Trains	Local Trains
1969-70	-	90.5	90.1	-	72.4	79.0
2001-02	77.5	31.7	54.2	73.8	65.3	63.1
2002-03	61.8	37.2	44.4	70.7	57.5	63.3
2003-04	64.5	43.8	40.7	79.8	60.9	59.7
2004-05	61.4	44.3	31.7	69.8	60.5	57.2
2005-06	78.9	48.8	38.0	62.8	50.7	58.9
2006-07	81.9	59.5	47.4	68.9	50.9	68.4
2007-08	90.7	89.4	68.8	63.2	63.7	79.0
2008-09	88.3	83.6	62.3	61.0	65.5	83.1
2009-10	67.3	71.4	58.5	69.3	57.5	72.0

Table-12 Punctuality Of Passenger Trains (BG & MG)

Note: The figures of the passenger and mixed trains for the year 1969-70 have been included in local trains.

Source: Information Book: Bangladesh Railway, 2012, p.68

YEAR JULY- JUNE	per vehic	ilometers le day on ne	average n vehicle u awaiting re to avera	tage of number of inder or epairs daily age total : on line	passenger	Average number of passenger per train
	passenger carriages	other coaching	passenger carriages	coaching		
1969-70	243	vehicles 145	12.6	vehicles 11.0	16	220
2001-02	245	145	31.7	11.0	10	192
2002-03	229	152	28.1	19.0	15	209
2003-04	257	192	20.6	22.0	17	242
2004-05	276	147	20.0	9.52	16	256
2005-06	278	157	23.25	14.2	19	303
2006-07	296	169	24.4	8.12	20	322
2007-08	343	151	25.5	8.16	22	398
2008-09	366	144	20.5	19.0	23	409
2009-10	368	145	22.1	14.3	39	434

Table-13Coaching Vehicle Performance (BG)

Table-14
Locomotives Performance (BG)

YEAR JULY-JUNE	engine kilometers	0	eters per day ne in use	percentage of average	hours worked per day per
	per day per engine on line	all engines	goods engines	number of engine under or awaiting	engine available for use
				repairs daily to average total number	
1969-70	130	230	154	on line 8.3	10.3
2001-02	150	259	159	20.5	10.3
2002-03	156	262	152	19.9	14.7
2003-04	163	279	160	18.5	11.4
2004-05	162	289	162	24.8	12.3
2005-06	165	283	166	24.5	12.5
2006-07	163	295	178	26.0	13.0
2007-08	183	285	169	26.2	16.2
2008-09	182	286	170	20.3	17.0
2009-10	199	282	162	21.2	13.2

Source: Information Book: Bangladesh Railway, 2012, p.85

Table-15Passenger And Freight Revenue

YEAR July-June	Revenue from Passenger s carried (thousand Taka)	Revenue per passengers (Taka)	Revenue per passenger kilometer (poisha)	Revenue from freight Tonnes carried (Thousan ds Taka)	Revenue per tonne (Taka)	Revenue per tonne kilometer (poisha)
1969-70	101711	1.38	3.04	163831	33.54	12.7
2001-02	1598163	41.05	38.65	1459162	397.92	147.5
2002-03	1611062	41.14	38.54	1443246	393.68	146.2
2003-04	1732435	39.89	38.20	1339865	385.79	144.8
2004-05	1661041	39.31	38.00	1258367	392.46	149.2
2005-06	1749986	39.31	38.08	1263845	413.42	149.5
2006-07	1831477	40.03	38.19	1241965	418.59	155.8
2007-08	2240468	41.63	38.50	1406455	428.54	156.4
2008-09	2715962	41.77	38.47	1311236	435.63	158.4
2009-10	2917686	44.45	38.58	1163612	428.74	157.7

Exclude other goods earnings consisting of demurrage, wharf age, sundries such as sidings, crane charges etc.

	TAKA IN THOUSANDS	Total		% tk.	- 303039	- 3883985	- 4200976	- 3941715	- 4456241	- 4442753	- 4527606	- 5616441	- 6253528	0100222
	TAKA IN	Rec-	eiva- ble	tk.	1	1		I	I	I	I	1	1	
.102)	-			%	1	1	1	ı	ı	ı	1		I	
, 2012, p AGE		Sale	ot Land	tk.	1		1	ı	ı	-	1	I	I	
Railway				%	12.04	18.9	24.8	19.3	32.1	29.9	30.03	33.27	33.84	75 07
TABLE NO: 16 (Source: Information Book: Bangladesh Railway, 2012, p.102) OPERATING REVENUE AND OTHER PERCENTAGE		Miscell-	aneous earnings	tk.	6169	733077	1040167	761384	1431677	1326860	1359815	1868589	2115911	11/////1
on Book: AND C				%	55.9	37.7	34.5	34.1	28.3	28.6	27.51	25.11	21.00	00 50
e: Informati EVENUE		freight	earnings	tk.	169422	1465862	1449546	1343592	1262223	1268717	1245363	1410375	1313678	11/5770
l6 (Source TING R				%	8.49	2.50	2.40	2.60	2.30	2.10	2.01	1.73	1.73	200
SLE NO: 1 OPERA		other	coach- ing	earnings tk	25737	95883	100201	104304	101300	97190	90951	97029	107977	116577
TAB				%	33.6	40.9	38.3	44.0	37.3	39.4	40.45	39.89	43.43	51 50
		passen-	ger earnings	tk.	101711	1589163	1611062	1732435	1661041	1749986	1831477	2240468	2715962	7072100
		YEAR	JULY- JUNE		1969-70	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	0000

A construct of the probability probability of the probability properoprobability probability probability properoprobabilit				TABLE NO		17 (Sou	rce: Infc	rmation	Book: B	anglades	h Railw	 17 (Source: Information Book: Bangladesh Railway, 2012, p.103) 	p.103)			
					OPEF	SATINC	J EXPI	ENSES	& THE	JR PER	CENT	AGE				
														Tai	ka in Th	ousands
A Taka % Taka % Taka % Taka % 927437 17.70 1678280 32.20 766224 14.60 726108 13.90 378920 7.10 761801 14.50 $ 960688$ 17.90 175368 32.20 766224 14.70 779538 14.60 378920 7.10 761801 14.50 $ 960688$ 17.90 175768 32.30 78637 14.70 779538 14.60 738352 14.60 71953 7.40 819193 14.00 $ 985715$ 16.64 235.81 873703 13.55 87455 14.13 495455 7.40 819193 14.00 $ 1025463$ 16.24 28.31 10.334 13.55 432485 14.13 495455 <t< th=""><th>Year</th><th>Gené Admini:</th><th>eral stration</th><th>Repa Mainte</th><th>irs & mance</th><th>Operatic</th><th>on Staff</th><th>Operatio</th><th>on Fuel</th><th>Operatic than F Sta</th><th>n other uel & úff</th><th>Miscella</th><th>aneous nses</th><th>Deprec</th><th>iation</th><th>Total</th></t<>	Year	Gené Admini:	eral stration	Repa Mainte	irs & mance	Operatic	on Staff	Operatio	on Fuel	Operatic than F Sta	n other uel & úff	Miscella	aneous nses	Deprec	iation	Total
92743717.70167828032.2076622414.6072610813.903789207.1076180114.5096068817.9017596832.807886714.7077955814.603938457.4067609112.6096058816.82197884533.7079613213.5085485514.604323927.4081919314.0098571516.82197884535.41103400313.6790369414.134954557.7580590412.60102542016.04228988035.41103400314.8892074013.25462486.6594282313.56112951316.25271826428.31617396.43120808612.5896220110.02145048115.11264563227.55271826428.316170396.43120808617.255541315.02145048115.11 <th>July- Inne</th> <th>Taka</th> <th>%</th> <th>Taka</th>	July- Inne	Taka	%	Taka	%	Taka	%	Taka	%	Taka	%	Taka	%	Taka	%	Taka
96068817.90175596832.8078868714.7077955814.603938457.4067609112.6098571516.82197884533.7079613213.5085485514.604323327.4081919314.00102542016.04228988035.8187370313.6790369414.134954557.7580590412.60112951316.04228988035.41103400314.8892074013.254654566.6594282313.56264563227.55271826428.316170396.43120808617.25554125.9416.1120138558214.8531525233.7897834810.48160930717.25554125.9416510117.70137065312.5939556536.716043895.55187028717.1810845299.96196003418.01	2000-01	927437	17.70	1678280	32.20	766224	14.60	726108	13.90	378920	7.10	761801	14.50		1	5238770
985715 16.82 1978845 33.70 796132 13.50 854855 14.60 432392 7.40 819193 14.00 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	2001-02	960688	17.90	1755968	32.80	788687	14.70	779558	14.60	393845	7.40	676091	12.60	,	1	5354837
1025420 16.04 2289880 35.81 873703 13.67 903694 14.13 495455 7.75 805904 12.60 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	2002-03	985715	16.82	1978845	33.70	796132	13.50	854855	14.60	432392	7.40	819193	14.00			5867132
1129513 16.25 2461130 35.41 1034003 14.88 920740 13.25 462648 6.65 942823 13.56 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	2003-04	1025420	16.04	2289880	35.81	873703	13.67	903694	14.13	495455	7.75	805904	12.60	,	ı	6394056
2645632 27.55 2718264 28.31 617039 6.43 1208086 12.58 962201 10.02 1450481 15.11 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	2004-05	1129513	16.25	2461130	35.41	1034003	14.88	920740	13.25	462648	6.65	942823	13.56		ı	6950857
1385582 14.85 3152522 33.78 978348 10.48 1609307 17.25 554312 5.94 1651201 17.70 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	2005-06	2645632	27.55	2718264	28.31	617039	6.43	1208086	12.58	962201	10.02	1450481	15.11	,	ı	9601703
1370653 12.59 395565 36.71 604389 5.55 1870287 17.18 1084529 9.96 1960034 18.01 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	2006-07	1385582	14.85	3152522	33.78	978348	10.48	1609307	17.25	554312	5.94	1651201	17.70		1	9331272
1514424 12.91 3376287 33.91 713582 6.09 2214313 18.88 1025440 8.74 2283448 19.47 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	2007-08	1370653	12.59	3995565	36.71	604389	5.55	1870287	17.18	1084529	96.6	1960034	18.01			10885457
1725467 13.72 4339518 34.52 809309 6.44 2058057 16.37 988879 7.87 2650817 21.09	2008-09	1514424	12.91	3976287	33.91	713582	60.9	2214313	18.88	1025440	8.74	2283448	19.47			11727494
	2009-10		13.72	4339518	34.52	809309	6.44	2058057	16.37	988879	7.87	2650817	21.09		1	12572047

		TABLI	JE-18 (Sou DEPART	rrce: Inforr MENT W	E-18 (Source: Information Book: Bangladesh Railway, 2012, p.110) DEPARTMENT WISE NUMBER OF EMPLOYEES	k: Banglad MBER O	lesh Railwa F EMPLC	y, 2012, p. DYEES	110)		
YEAR	Admin- istration	Nirapat- ta bahini	accounts	engineer ing	signal & Tele-	estate	mecha- nical	Traffic	Electrica 1	Medical	Stores
JULY-				ρ	commun				1		
					lcation						
1969-70	3138	I	1440	12019	ı	I	20005	11885	2160	3204	1974
2001-02	1240	2029	1364	6747	1440	213	10926	7147	1897	1505	1032
2002-03	1238	2031	1341	6560	1420	208	10624	2006	1841	1446	1012
2003-04	1223	2043	1289	6303	1425	195	10534	7000	1781	1400	975
2004-05	1260	2587	1257	6150	1472	201	10952	6977	1865	1429	1022
2005-06	1223	2449	1214	5982	1443	198	10749	6703	1821	1403	1021
2006-07	1178	2408	1150	5775	1409	195	10409	6481	1814	1332	1044
2007-08	1129	2401	1089	5500	1412	190	0066	6255	1760	1250	988
2008-09	1052	2369	1019	5285	1379	181	9392	6012	1644	1180	931
2009-10	866	2273	941	4918	1305	170	8519	5361	1493	1132	861

Chapter: 5

YEAR	Total operating	Total Operating		Net operating income
July-June	Revenue	expenses		
	Taka	Taka		
1969-70	303039	252751	+	50288
2001-02	3883985	5354837	-	1470852
2002-03	4200976	5867132	-	1666156
2003-04	3941715	6394056	-	2452341
2004-05	4456241	6950857	-	2494616
2005-06	4442753	9601703	-	5158950
2006-07	4527606	9331272	-	4803666
2007-08	5616441	10885457	-	5269016
2008-09	6253528	11737494	-	5473966
2009-10	5663042	11272790	-	5609748

Table-19
Net Operating Income (Without considering PSO & Welfare grant)

Source:	Information	Book:	Bangladesh	Railway.	2012, p.104
					· / F · · ·

Table-20Net Operating Income And Operating Ratio(Considering PSO compensation & Welfare grant)

YEAR July- June	Public service obligation compensa- tion	Welfare grant	Total operating Revenue	Total operating expenses		Net operating income	Total operatin g ratio
1998-99	860000	149361	4518433	4333642	-	184791	95.9
2001-02	860000	157043	4901028	5354837	-	453809	109.3
2002-03	860000	166127	5227103	5867132	-	640029	112.2
2003-04	860000	174075	4975790	6394056	-	14182661	28.5
2004-05	860000	133209	5449450	6950857	-	1501407	127.6
2005-06	860000	210100	5512853	9601703	I	4088850	174.2
2006-07	860000	164819	5552425	9331272	-	3778847	168.1
2007-08	860000	266112	6742553	10885459	-	4142904	161.4
2008-09	860000	265745	7379273	11727494	1	4348221	158.9
2009-10	860000	208578	6731620	11272790	-	4541170	167.5

Table-21 Number And Cost Of Employees

YEAR July- June 1969-70	Total number of employees	Total cost of employees (Thousands Taka)	Number of employees per 1000 train kilometers	Average cost per employee per month (Taka)	Percentages of cost of employees to total operating expenses (percent)
1969-70	55825	123715	3.23	185	48.9
2001-02	35540	2417578	2.41	5669	45.1
2002-03	34727	2451926	2.37	5864	41.8
2003-04	34168	2569673	2.28	6267	40.2
2004-05	35172	2882108	2.28	6829	41.5
2005-06	34206	3259014	2.25	7940	33.9
2006-07	33195	3680800	2.19	9240	39.4
2007-08	31874	4237606	2.05	11079	38.9
2008-09	30444	4018992	1.93	12711	39.6
2009-10	27971	4355686	1.76	12976	38.6

* Excludes cost of superannuation allowances and pensions, contribution to provident fund and gratuities.

<u>Objective Two</u> To Know The Opinions Of The Customer Towards Bangladesh Railway.

5.2 Statistical Analysis

Different statistical methods and techniques have been applied for the analysis of data such as Percentage corresponding, Mean Deviation, Standard Deviation, One-sample T-test, Paired T-test, and Co-efficient of Variation (CV) analysis through Excel and SPSS analysis. By this process, the problems that are more significant and possible solutions have been identified.

Variable	on of Scores of Product (Railw Variable Description	Lower Class	Middle Class	Upper Class
no.		Passengers (100) (%)	Passengers (200) (%)	Passengers (100) (%)
Q.1	The existing Service structure of Bangladesh Railway is weak in proportion to the demand of age.	88.50	93.88	96.00
Q.2	In order to achieve the expected goal of Bangladesh Railway it is needed to change the overall service structure of the organization.	87.00	93.13	94.00
Q.3	The standard of customer care is being highly hampered due to lack of good service structure.	88.00	93.50	89.25
Q.4	The overall existing service structure of Bangladesh Railway is dissatisfactory for the passengers.	87.00	90.88	91.25
Q.5	It is quite possible to overcome the challenges of Bangladesh Railway through the execution of establishment of a good service structure.	88.25	91.13	88.75
Q.6	Bangladesh Railway is failed to achieve its expected goals as it is directed with an	86.75	92.38	93.75

Table-22:Calculation of Scores of Product (Railway Service)

Q.7	unsuitable service structure. Punctuality of trains is not	87.75	91.00	92.25
	impressive.			
	Maximum Support	88.50	93.88	96.00

Source: Survey data

Table exhibits the percentage corresponding to the opinions of the respondents on existing Service offered by Bangladesh Railway.

Here the variable Q.1 is highly supported (96.00%) by the Upper class passengers Q.2 is highly supported by (94.00%) by the Upper class passengers. Q.3 is highly supported (93.50%) by the Middle class Passengers; Q.4 is highly supported (91.25%) by the Upper class passengers. Q.5 is highly supported (91.13%) by the Middle class passengers, Q.6 is highly supported (93.75%) by the Upper class passengers and Q.7 is highly supported (92.25%) by the Upper class passengers.

Table-23:

No. of	Standard	Mean	CV
Respondent	Deviation		
100	2.110364036	24.53	8.6031962
100	1.454321321	25.81	5.6347203
200	1.317747049	25.835	5.1006272
	Respondent 100 100	Respondent Deviation 100 2.110364036 100 1.454321321	Respondent Deviation 100 2.110364036 24.53 100 1.454321321 25.81

Source: Survey data

Table exhibits the CV of Lower Class, Upper Class and Middle Class Passengers. From the CV of different kinds of respondents, the Middle Class Passengers CV is less than that of others which indicate the opinions of Middle Class passengers are homogeneous and more consistent than that of Lower Class and Upper Class Passengers.

Table-24:

One Sample T-test of the Scores on Product (Railway service)

Respondents		Test Value = 0							
	t	df	Sig	Mean		Confidence			
			(2-tailed)	Difference		val of the ference			
					Lower	upper			
						••			
Lower Class	116.236	99	.000	24.53000	24.113	24.9487			
Passengers									
Upper Class	177.471	99	.000	25.81000	25.5214	26.0986			
Passengers									
Middle	277.263	199	.000	25.83500	25.6513	26.0187			
Class									
Passengers									

Source: Survey data

The above Table exhibits the one Sample T-test corresponding to the existing service of Bangladesh Railway. The table shows that the opinion of each kind of respondent is significant at p < .05 level

Table-25: Paired Samples T-test of the Scores on Product (Railway Service)

Respon	dents	Paired D	oifferences				t	df	Sig.
		Mean	Std. Deviation	Std. Error Mean	95% confidence interval of the Difference				(2- tailed)
					Upper	Lower			
Pair-1	LCP-	-	2.64032	.26403	-1.80390	75610	-	99	.000
UCP		1.28000					4.848		
Pair-2	LCP-	-	2.53323	.25332	-1.87265	86735	-	99	.000
MCP		1.37000					5.408		
Pair-3	UCP-	09000	1.95967	.19597	47884	.29884	459	99	.647
MCP									
a	a	•							

Source: Survey data

The above Table Shows the paired sample T-test corresponding to the Product (Railway Service). Here, it shows that the opinions between Lower-Upper class passengers and Lower-Middle class passengers are associated and significant at the p<.05 level. But the

association of opinion between Upper class passengers and Middle class passengers is not significant at p<.05 level.

Variable no.	Variable Description	Lower Class Passengers (100)	Upper Class Passengers (100)	Middle Class Passengers (200)
Q.1	The existing pricing structure of Bangladesh Railway is inappropriate for the present situation.	91.50%	97.25%	96.00%
Q.2	In order to achieve the goal of Bangladesh Railway there needs a change of pricing structure of Bangladesh Railway.	92.00%	93.75%	94.13%
Q.3	In spite of being a modern transportation system, the overall pricing structure of Bangladesh Railway is too week.	88.75%	92.75%	92.63%
Q.4	The passengers of Bangladesh Railway are being deprived of getting proper customer care and service according to the value (price) they are paying.	89.00%	91.00%	91.75%
Q.5	Bangladesh Railway will be able to play a vital role in the way of communication sector much effectively than the present situation if it changes its current pricing structure.	90.00%	90.50%	93.25%
Q.6	The weaker pricing structure of Bangladesh Railway acts as an impediment to establish good service.	87.25%	93.25%	94.00%
Q.7	Bangladesh Railway will be able to play a vital role in the sector of internal communication of the country if it changes its pricing structure.	89.75%	94.50%	91.50%
	Maximum Support	92.00%	97.25%	96.00%

Table-26: Calculation of Scores on Price

Source: Survey data

Table exhibits the percentage corresponding to the opinion of the respondents on Pricing of the service of Bangladesh Railway.

Here the variable Q.1 is highly supported (97.25%) by the Upper class passengers, Q.2 is highly supported (94.13%) by the Middle class passengers, Q.3 is highly supported (93.50%) by the Upper class passengers, Q.4 is highly supported (91.75%) by the Middle class passengers, Q.5 is highly supported (93.25%) by the Middle class passengers, Q.6 is highly supported (94.00%) by the Middle class passengers and Q.7 is highly supported (94.50%) by the Upper class passengers.

Table-27:

Co-efficient of Variation (CV) of the Scores on Price

Respondent	Number of Respondents	Standard Deviation	Mean	CV
Lower Class	100	2.158633125	25.13	8.5898652
Upper Class	100	1.357954493	26.12	5.1989069
Middle Class	200	1.408195681	26.13	5.3891913

Source: Survey data

Table exhibits the CV of Lower, Upper and Middle class passengers. From the CV of different kinds of respondents, the Upper class passengers CV is less than that of others which indicate the opinions of Upper class passengers are homogeneous and more consistent than that of Lower and Middle class passengers.

Table-28:One-Sample T-test of the Scores on Price

Respondents		Test Value = 0								
	t	df	Sig. (2-	Mean	95% Co	onfidence				
			tailed)	Difference	Interv	al of the				
					Diffe	erence				
					Lower	Upper				
Lower	116.416	99	.000	25.13000	24.7017	25.5583				
Upper	192.348	99	.000	26.12000	25.8506	26.3894				
Middle	262.417	199	.000	26.13000	25.9336	26.3264				
n n	1 4									

Source: Survey data

The above Table indicates the One-Sample T-test corresponding to the Price of the service of Bangladesh Railway. The table shows that the opinion of each kind of respondents is significant at p < .05 level.

Table-29:Paired Samples T-test of the Scores on Price

Respondents		Paire	d Differe	nce		t	df	Sig.
	Mean	Std.	Std.	95% Co	95% Confidence			(2-
		Deviation	Error		Interval of the			tailed)
			Mean	Diffe	rence			
				Upper	Lower			
Pair1	99000	2.49644	.24964	-	49465	-	99	.000
Lower-				1.48535		3.966		
Upper								
Pair2	73000	2.39888	.23989	-	25401	-	99	.003
Lower-				1.20599		3.043		
Middle								
Pair3	.26000	2.12070	.21207	16079	.68079	1.226	99	.223
Upper-								
Middle								

Source: Survey data

The above Table exhibits the paired sample T-test corresponding to the price of the service of Bangladesh Railway. Here, it shows that the opinions between Lower-Upper class passengers and Lower-Middle class passengers are associated and significant at the p<.05 level. But the association of opinion between Upper class passengers and Middle class passengers is not significant at p<.05 level.

Table-30:Calculation of Scores on Place (Channels of Distribution)

Variable no.	Variable Description	Lower Class Passengers (100)	Upper Class Passengers (100)	Middle Class Passengers (200)
Q.1	Bangladesh Railway fails to achieve its goals due to lack of time oriented places (distribution channels)	91.00%	94.75%	91.75%
Q.2	Good channels of distribution (Place) will	89.00%	93.75%	90.13%

	play better role to run the organization well.			
Q.3	Channels of distribution (Place) are not customer oriented.	89.75%	92.00%	87.88%
Q.4	The existing channels of distribution (Place) are not appropriate for the present situation.	89.25%	89.25%	87.63%
Q.5	The present channels of distribution (Place) should be changed.	87.25%	93.25%	88.00%
Q.6	The organization will be more benefited if the present distribution channel is changed.	88.25%	89.75%	88.00%
Q.7	The present distribution channel (place) fails to achieve optimum levels of customer attraction.	91.00%	92.75%	87.00%
	Maximum Support	91.00%	94.75%	91.75%

Source: Survey data

Table exhibits the percentage corresponding to the opinion of the respondents on Place (Channels of Distribution) of Bangladesh Railway.

Here the variable Q.1 is highly supported (94.75%) by the Upper class passengers, Q.2 is highly supported (93.75%) by the Upper class passengers, Q.3 is highly supported (92.00%) by the Upper class passengers, Q.4 is highly supported (89.25%) by both Lower class and Upper class passengers, Q.5 is highly supported (93.25%) by the Upper class passengers, Q.6 is highly supported (89.75%) by the Upper class passengers and Q.7 is highly supported (92.75%) by the Upper class passengers.

Table-31:

Co-efficient of Variation (CV) of the Scores on Place (Channels of Distribution)

Respondent	Number of	Standard	Mean	CV
	Respondents	Deviation		
Lower Class	100	1.948736965	25.02	7.7887169
Upper Class	100	1.388116957	25.82	5.3761307
Middle Class	200	2.095886136	24.815	8.4460453
Source: Survey	data			

Source: Survey data

Table exhibits the CV of Lower, Upper and Middle class passengers. From the CV of different kinds of respondents, the Upper class passengers CV is less than that of others which indicate the opinions of Upper class passengers are homogeneous and more consistent than that of Lower and Middle class passengers.

Table-32:
One-Sample T-test of the Scores on Place (Channels of Distribution)

Respondents		Test Value = 0								
	t	df	Sig. (2- tailed)	Mean Difference	Interva	nfidence al of the rence				
					Lower	Upper				
Lower	128.391	99	.000	25.02000	24.6333	25.4067				
Upper	186.007	99	.000	25.82000	25.5446	26.0954				
Middle	167.441	199	.000	24.81500	24.5228	25.1072				

Source: Survey data

The above Table indicates the One-Sample T-test corresponding to the Place (Channels of Distribution) of Bangladesh Railway. The table shows that the opinion of each kind of respondents is significant at p < .05 level

Table-33:Paired Samples T-test of the Place (Channels of Distribution)

Respondents		Paire	d Differe	nce		t	df	Sig.
	Mean	Std. Deviation	Std. Error	95% Confidence Interval of the				(2- tailed)
		Deviation	Mean	Difference				tuneu)
				Upper	Lower			
Pair1	80000	2.28301	.22830	-	34700	-	99	.001
Lower-				1.25300		3.504		
Upper								
Pair2	.36000	3.04020	.30402	24324	.96324	1.184	99	.239
Lower-								
Middle								
Pair3	1.16000	2.68449	.26845	.62734	1.69266	4.321	99	.000
Upper-								
Middle								

Source: Survey data

The above Table exhibits the paired sample T-test corresponding to the Place (Channels of Distribution of Bangladesh Railway. Here, it shows that the opinions between Lower-Upper class passengers and Upper-Middle class passengers are associated and significant at the p<.05 level. But the association of opinion between Lower class passengers and Middle class passengers is not significant at p<.05 level.

Table-3:

Variable no.	Variable Description	Lower Class Passengers (100)	Upper Class Passengers (100)	Middle Class Passengers (200)
Q.1	The existing promotional policy is inappropriate for the present situation.	89.75%	96.50%	93.38%
Q.2	Advertising program is necessary.	88.50%	93.25%	91.50%
Q.3	The Salesmanship is not available and inefficient.	87.25%	89.75%	90.13%
Q.4	The present promotional policy is not customer oriented.	88.00%	90.25%	89.50%
Q.5	The existing promotional policy should be changed.	87.00%	90.50%	89.75%
Q.6	New promotional policy will make the organization more profitable.	89.25%	91.25%	90.00%
Q.7	New promotional policy will be able to attract more customers.	88.75%	91.75%	90.38%
Ν	Iaximum Support	89.75%	96.50%	93.38%

Calculation of Scores on Promotion

Source: Survey data

Table exhibits the percentage corresponding to the opinion of the respondents on Promotion of Bangladesh Railway.

Here the variable Q.1 is highly supported (96.50%) by the Upper class passengers, Q.2 is highly supported (93.25%) by the Upper class passengers, Q.3 is highly supported (90.13%)

by the Middle class passengers, Q.4 is highly supported (90.25%) by Upper class passengers, Q.5 is highly supported (90.50%) by the Upper class passengers, Q.6 is highly supported (91.25%) by the Upper class passengers and Q.7 is highly supported (91.75%) by the Upper class passengers.

Table-35:

Respondent	Number of Respondents	Standard Deviation	Mean	CV
Lower Class	100	2.062752892	24.74	8.3377239
Upper Class	100	1.420307265	25.75	5.5200438
Middle Class	200	1.786823632	25.385	7.0388955

Co-efficient of Variation (CV) of the Scores on Promotion

Source: Survey data

Table exhibits the CV of Lower, Upper and Middle class passengers. From the CV of different kinds of respondents, the Upper class passengers CV is less than that of others which indicate the opinions of Upper class passengers are homogeneous and more consistent than that of Lower and Middle class passengers.

Table-36:One-Sample T-test of the Scores on Promotion

Respondents	Test Value = 0						
	t	df	Sig. (2-	Mean	95% Co	onfidence	
			tailed)	Difference		al of the crence	
					Dille		
					Lower	Upper	
Lower	119.937	99	.000	24.74000	24.3307	25.1493	
Upper	181.158	99	.000	25.73000	25.4482	26.0118	
Middle	200.914	199	.000	25.38500	25.1358	25.6342	

Source: Survey data

The above Table shows the One-Sample T-test corresponding to the Promotion of Bangladesh Railway. The table shows that the opinion of each kind of respondents is significant at p < .05 level

Respondents		Paire	d Differe	nce		t	df	Sig.	
	Mean	Std. Deviation	Std. Error	95% Confidence Interval of the				(2- tailed)	
			Mean	Diffe	_				
				Upper	Lower				
Pair1	99000	2.60727	.26073	-	47266	-	99	.000	
Lower-				1.50734		3.797			
Upper									
Pair2	67000	2.92345	.29235	-	08992	-	99	.024	
Lower-				1.25008		2.292			
Middle									
Pair3	.32000	2.30011	.23001	13639	.77639	1.391	99	.167	
Upper-									
Middle									

Table-37:Paired Samples T-test of the Scores on Promotion

Source: Survey data

The above Table exhibits the paired sample T-test corresponding to the Promotion of Bangladesh Railway. Here, it shows that the opinions between Lower-Upper class passengers and Lower-Middle class passenger are associated and significant at the p<.05 level. But the association of opinion between Upper class passengers and Middle class passengers is not significant at p<.05 level.

Table-38:

Calculation of Scores on People (Staffs)

Variable no.	Variable Description	Lower Class Passengers (100)	Upper Class Passengers (100)	Middle Class Passengers (200)
Q.1	People (Staffs) of Bangladesh Railway are not efficient up to the mark.	89.50%	98.00%	96.13%
Q.2	There is lack of co- ordination among the people (Staffs) of different departments.	88.00%	96.75%	93.38%
Q.3	People (Staffs) are not putting their full potential to the service.	86.75%	93.75%	94.38%
Q.4	People (Staffs) do not	88.25%	90.25%	93.00%

	respond to the needs of customers accordingly.			
Q.5	Bangladesh Railway has a less number of staffs to give the required service.	87.50%	95.50%	92.75%
Q.6	The Staffs need training on regular basis to perform their duties well.	89.00%	93.50%	93.25%
Q.7	Staffs have less customer awareness.	89.25%	95.75%	93.50%
	Maximum Support	89.50%	98.00%	96.13%

Source: Survey data

Table exhibits the percentage corresponding to the opinion of the respondents on People (Staffs) of Bangladesh Railway.

Here the variable Q.1 is highly supported (98.00%) by the Upper class passengers, Q.2 is highly supported (96.75%) by the Upper class passengers, Q.3 is highly supported (94.38%) by the Middle class passengers, Q.4 is highly supported (93.00%) by Middle class passengers, Q.5 is highly supported (95.50%) by the Upper class passengers, Q.6 is highly supported (93.50%) by the Upper class passengers and Q.7 is highly supported (95.75%) by the Upper class passengers.

Table-39:

Respondent	Number of	Standard	Mean	CV
	Respondents	Deviation		
Lower Class	100	1.830466077	24.73	7.4018038
Upper Class	100	1.175679473	26.54	4.4298398
Middle Class	200	1.227808032	26.255	4.4764732

Source: Survey data

Table exhibits the CV of Lower, Upper and Middle class passengers. From the CV of different kinds of respondents, the Upper class passengers CV is less than that of others which indicate the opinions of Upper class passengers are homogeneous and more consistent than that of Lower and Middle class passengers.

Respondents	Test Value = 0						
	t	df	Sig. (2- tailed)	Mean Difference	Interv	onfidence val of the ference	
					Lower	Upper	
Lower	135.102	99	.000	24.73000	24.3668	25.0932	
Upper	225.742	99	.000	26.54000	26.3067	26.7733	
Middle	302.410	199	.000	26.25500	26.0838	26.4262	

Table-40:One-Sample T-test of the Scores on People (Staffs)

Source: Survey data

The above Table shows the One-Sample T-test corresponding to the People (Staffs) of Bangladesh Railway. The table shows that the opinion of each kind of respondents is significant at p < .05 level

95% Co Interva Diffe Upper	l of the			(2- tailed)
Upper	Lower			
-	-	-	99	.000
2.26097	1.35903	7.964		
-	-	-	99	.000
1.87991	1.02009	6.692		
.05427	.66573	2.336	99	.021
				1.87991 1.02009 6.692

Table-41: Paired Samples T-test of the Scores on People (Staffs)

Source: Survey data

The above Table exhibits the paired sample T-test corresponding to the People (Staffs) of Bangladesh Railway. Here, it shows that the opinions between Lower-Upper class passengers and Lower-Middle class passenger are associated and significant at the p<.05 level. But the association of opinion between Upper class passengers and Middle class passengers is not significant at p<.05 level.

Table-42Calculation of the Score of 100 Lower Class Passengers

Variable	Variable Description	Yes	No
no.		Opinion	Opinion
	Product(Railway Service) Related Questions	5	
Q.1	Is the service of Bangladesh Railway able to satisfy	16%	84%
	you and capable of accomplishing your expectation?		
Q.2	Is Bangladesh Railway giving you better service than	14%	86%
	other transportation?		
Q.3	Do you think that Bangladesh Railway has enough	19%	81%
	equipment and manpower to give your desired service?		
Q.4	Is it possible to formulate a fundamental development	23%	77%
	of Bangladesh Railway without constructing its		
	infrastructural change, modification and enlargement?		
	Price Related Questions		
Q.5	Are you happy paying the price for that standard of	15%	85%
	service you are getting from Bangladesh Railway?		
Q.6	Are you getting proper customer care for the price you	18%	82%
	are paying?		
Q.7	Do you see any advancement of Bangladesh Railway	26%	74%
	service with the present pricing structure?		
Q.8	Is the current pricing structure of Bangladesh Railway	17%	83%
	low?		
	Place(Channels of distribution) related Question	ons	
Q.9	Are you satisfied with the number of ticket counters	15%	85%
	BR has?		
Q.10	Do you think that the railway stations are modern	14%	86%
	enough to deliver satisfactory services?		
Q.11	Do you think Railway stations are safe enough for you	14%	86%
	and for your luggage?		
Q.12	Does Bangladesh Railway ensure door to door services	16%	84%
	for the passengers and commodities like road sector?		
	Promotion Related Questions		
Q.13	Do you see any advertisement of BR which motivates	20%	80%
	you to take their service?		
Q.14	Do you think that the existing promotional activities	21%	79%
	are enough to attract customers towards the		
	organization?		
Q.15	Do you think that BR will be able achieve a	17%	83%
	commanding position in transport sector without		
	taking any significant promotional program?		
Q.16	Do you see any seasonal discount, or any sort of	16%	84%
	discount fare rate for regular passengers?		
	People(Staffs) Related Questions		
Q.17	Is the manpower structure of BR is huge enough to	16%	84%

	ensure customer care?		
Q.18	Do you think that the existing railway executives and employees are performing their duties and responsibilities with sound co-ordination?	15%	85%
Q.19	Are the existing appointed officers and employees of BR performing their relevant professional duties proficiently as well as with accountability?	12%	88%
Q.20	Are the Officers and sub-ordinates of BR capable enough of playing effective role in providing their service to satisfy you more?	18%	82%
	Average	17.10%	82.90%

Source: Survey data

The above table exhibits the percentage corresponding to the overall problems of Bangladesh Railway through the opinion of Lower Class Passengers

Interpretation Scale

For analyzing Lower Class Passengers attitude towards the existing overall problems of Bangladesh Railway three different interpretation scales (Karl Pearson's Quartile deviation interpretation scale) are presented (Pearson, 1957, P.162 as follows)

74% to 78% is Negative79% to 83% is Highly Negative84% to 88% is Very Highly Negative

Negative	Highly Negative	Very Highly Negative
(74-78)%	(79-83)%	(84-88)%
Q.4, Q.7	Q.3, Q.6, Q.8, Q.13, Q.14,	Q.1, Q.2, Q.5, Q.9, Q.10,
	Q.15, Q.20	Q.11, Q.12, Q.16, Q.17,
		Q.18, Q.19

The above Table shows that the Lower Class Passengers apply negative attitude of the existence of the variable Q.4, Q.7, Highly negative attitude to the variables Q.3, Q.6, Q.8, Q.13, Q.14, Q.15, Q.20 and Very Highly negative attitude to the variables Q.1, Q.2, Q.5, Q.9, Q.10, Q.11, Q.12, Q.16, Q.17, Q.18, Q.19

Talbe-43:Calculation of the Score of 100 Upper Class Passengers

Variable	Variable Description	Yes	No		
no.		Opinion	Opinion		
Product(Railway Service) Related Questions					
Q.1	Is the service of Bangladesh Railway able to satisfy				
-	you and capable of accomplishing your expectation?	15%	85%		
Q.2	Q.2 Is Bangladesh Railway giving you better service than				
-	other transportation?	13%	87%		
Q.3	Do you think that Bangladesh Railway has enough				
-	equipment and manpower to give your desired service?	17%	83%		
Q.4	Is it possible to formulate a fundamental development				
	of Bangladesh Railway without constructing its				
	infrastructural change, modification and enlargement?	20%	80%		
	Pr	rice Related	Questions		
Q.5	Are you happy paying the price for that standard of				
C	service you are getting from Bangladesh Railway?	14%	86%		
Q.6	Are you getting proper customer care for the price you				
c	are paying?	16%	84%		
Q.7	Do you see any advancement of Bangladesh Railway				
c	service with the present pricing structure?	22%	78%		
Q.8	Is the current pricing structure of Bangladesh Railway				
c	low?	15%	85%		
	Place (Channels of distribution) Related Quest	ions			
Q.9	Are you satisfied with the number of ticket counters				
-	BR has?	14%	86%		
Q.10	Do you think that the railway stations are modern				
-	enough to deliver satisfactory services?	13%	87%		
Q.11	Do you think Railway stations are safe enough for you				
	and for your luggage?	14%	86%		
Q.12	Does Bangladesh Railway ensure door to door services				
-	for the passengers and commodities like road sector?	15%	85%		
	Promotion Related Questions	•			
Q.13	Do you see any advertisement of BR which motivates				
-	you to take their service?	21%	79%		
Q.14	Do you think that the existing promotional activities				
	are enough to attract customers towards the				
	organization?	19%	81%		
Q.15	Do you think that BR will be able achieve a				
-	commanding position in transport sector without				
	taking any significant promotional program?	16%	84%		
Q.16	Do you see any seasonal discount, or any sort of				
-	discount fare rate for regular passengers?	14%	86%		
	People (Staffs) Related Questions				
Q.17	Is the manpower structure of BR is huge enough to				
•	ensure customer care?	15%	85%		
			0070		

0.10			
Q.18	Do you think that the existing railway executives and		
	employees are performing their duties and		
	responsibilities with sound co-ordination?	13%	87%
Q.19	Are the existing appointed officers and employees of		
	BR performing their relevant professional duties		
	proficiently as well as with accountability?	13%	87%
Q.20	Are the Officers and sub-ordinates of BR capable		
	enough of playing effective role in providing their		
	service to satisfy you more?	14%	86%
	Average		15.65%

Source: Survey data

The above table exhibits the percentage corresponding to the overall problems of Bangladesh Railway through the opinion of Upper Class Passengers

Interpretation Scale:

For analyzing Upper Class Passengers attitude towards the existing overall problems of Bangladesh Railway three different interpretation scales (Karl Pearson's Quartile deviation interpretation scale) are presented (Pearson, 1957, P.162 as follows)

74% to 78% is Negative79% to 83% is Highly Negative84% to 88% is Very Highly Negative

Negative	Highly Negative	Very Highly Negative
(74-78)%	(79-83)%	(84-88)%
Q.7	Q.3, Q.4, Q.13, Q.14	Q.1, Q.2, Q.5, Q.6, Q.8, Q.9, Q.10, Q.11, Q.12, Q.15, Q.16, Q.17, Q.18, Q.19, Q.20

The above Table shows that the Upper Class Passengers apply negative attitude of the existence of the variable Q.7, Highly negative attitude to the variables Q.3, Q.4, Q.13, Q.14 and Very Highly negative attitude to the variables Q.1, Q.2, Q.5, Q.6, Q.8, Q.9, Q.10, Q.11, Q.12, Q.15, Q.16, Q.17, Q.18, Q.19, Q.20

Table-44: Calculation of the Score of 200 Middle Class Passengers

Variable no.	Variable Description	Yes Opinion	No Opinion
	Product(Railway Service) Related Question		
Q.1	Is the service of Bangladesh Railway able to satisfy		
C	you and capable of accomplishing your expectation?	17%	83%
Q.2	Is Bangladesh Railway giving you better service than		
	other transportation?	16%	84%
Q.3	Do you think that Bangladesh Railway has enough		
C	equipment and manpower to give your desired service?	15%	859
Q.4	Is it possible to formulate a fundamental development		
C	of Bangladesh Railway without constructing its		
	infrastructural change, modification and enlargement?	20%	809
	Price Related Questions		
Q.5	Are you happy paying the price for that standard of		
2.0	service you are getting from Bangladesh Railway?	17%	839
Q.6	Are you getting proper customer care for the price you		
X ••	are paying?	19%	819
Q.7	Do you see any advancement of Bangladesh Railway	1070	01
X •1	service with the present pricing structure?	19%	819
Q.8	Is the current pricing structure of Bangladesh Railway	1070	01
Q .0	low?	17%	839
	Place (Channels of distribution) Related Quest		00
Q.9	Are you satisfied with the number of ticket counters		
Q•2	BR has?	15%	859
Q.10	Do you think that the railway stations are modern	1070	00
Q.10	enough to deliver satisfactory services?	15%	859
Q.11	Do you think Railway stations are safe enough for you	1070	00
Q.11	and for your luggage?	17%	839
Q.12	Does Bangladesh Railway ensure door to door services	1770	00
Q.12	for the passengers and commodities like road sector?	18%	829
	Promotion Related Questions	1076	02
0.13	Do you see any advertisement of BR which motivates		
Q.15	you to take their service?	470/	0.00
0.14	Do you think that the existing promotional activities	17%	839
Q.14	are enough to attract customers towards the		
		1 5 0/	0.50
0.15	organization?	15%	859
Q.15	Do you think that BR will be able achieve a		
	commanding position in transport sector without	400/	070
0.1/	taking any significant promotional program?	13%	879
Q.16	Do you see any seasonal discount, or any sort of	400/	0.00
	discount fare rate for regular passengers?	12%	88
	People (Staffs) Related Questions		

	ensure customer care?		
Q.18	Do you think that the existing railway executives and		
c	employees are performing their duties and		
	responsibilities with sound co-ordination?	16%	84%
Q.19	Are the existing appointed officers and employees of		
	BR performing their relevant professional duties		
	proficiently as well as with accountability?	19%	81%
Q.20	Are the Officers and sub-ordinates of BR capable		
	enough of playing effective role in providing their		
	service to satisfy you more?	24%	76%
	Average	16.95%	83.05%

Source: Survey data

The above table exhibits the percentage corresponding to the overall problems of Bangladesh Railway through the opinion of Middle Class Passengers

Interpretation Scale:

For analyzing Middle Class Passengers attitude towards the existing overall problems of Bangladesh Railway three different interpretation scales (Karl Pearson's Quartile deviation interpretation scale) are presented (Pearson, 1957, P.162 as follows)

74% to 78% is Negative79% to 83% is Highly Negative84% to 88% is Very Highly Negative

Negative	Highly Negative	Very Highly Negative
(74-78)%	(79-83)%	(84-88)%
Q.20	Q.1, Q.4, Q.5, Q.6, Q.7, Q.8,	Q.2, Q.3, Q.9, Q.10, Q.14,
	Q.11, Q.12, Q.13, Q.17,	Q.15, Q.16, Q.18
	Q.19	

The above Table shows that the Middle Class Passengers apply negative attitude of the existence of the variable Q.20, Highly negative attitude to the variables Q.1, Q.4, Q.5, Q.6, Q.7, Q.8, Q.11, Q.12, Q.13, Q.17, Q.19 and Very Highly negative attitude to the variables Q.2, Q.3, Q.9, Q.10, Q.14, Q.15, Q.16, Q.18

5.3 Triangulation

In the present study, the researcher has collected both Qualitative Data and Quantitative Data. Then the Researcher has analyzed Data using the mixed approach (Creswell, 2009) of Creswell. Analyzing data, the researcher has interpreted data and their result to formulate the findings of the research study.

Qualitative (Data & Result) + Quantitative (Data & Result) = Interpretation (Findings) (Creswell, 2009)

First the researcher has framed three individual questionnaires and has collected primary data form the respondents in Qualitative approach. Then the researcher has calculated the scores of the opinions of the respondents in Quantitative approach. The researcher has formulated the matrix of the beneficiaries using both percentage and mean corresponding of the scores.

Matrix of Beneficiaries and the functions of Service Marketing of Bangladesh Railway:

BENEFICIARIES			
Lower Class	Upper Class	Middle Class	
Passengers	passengers	passengers	
82.00 %	83.75 %	83.00 %	
81.00 %	83.25 %	82.00 %	
85.25 %	86.00 %	83.75 %	
81.50 %	82.50 %	85.75 %	
84.75 %	86.25 %	80.75 %	
	Passengers 82.00 % 81.00 % 85.25 % 81.50 %	Lower Class Upper Class Passengers passengers 82.00 % 83.75 % 81.00 % 83.25 % 85.25 % 86.00 % 81.50 % 82.50 %	

 Table-45:

 Triangular Analysis by Percentage Corresponding

Source: Survey data

The triangular analysis of the scores of the respondents shows that they are closely related in their opinion. So, it can be said that the opinions of the respondents are highly significant.

Table-46:

Triangular Analysis by Mean corresponding

	Functions of Business Education					
Beneficiaries	Product Price Place Promotion People					
Lower Class	24.53	25.13	25.02	24.74	24.76	
Passengers						
Upper Class	25.81	26.12	25.82	25.73	26.54	
Passengers						
Middle	25.835	26.13	24.815	25.385	26.255	
Class						
Passengers						

Source: Survey data

The triangular analysis of the scores of the respondent's shows that they are closely related in their opinion. So, it can be said that the opinions of the respondents are highly significant.

Then the researcher has converted the highly stressed opinions into Qualitative mode and has interpreted as findings.

5.4 Problems Of Bangladesh Railway

Objective Three

To Identify The Problems Faced By Bangladesh Railway.

5.4.1 Problems Identified From The Opinions Of Customers.

1. The existing Service structure of Bangladesh Railway is weak in proportion to the demand of age and fails to achieve organizational goals: Route covered by BR, its service frequency, the achieved transit time, the carriage seating standard and configuration, the decor, cleanliness and riding comfort of rolling stock, the standard of meals provided enroute, the comfort, cleanliness and convenience of stations or terminal facilities and the convenience of connections with other rail services or with other transport modes, the security provided for consignments, the availability of a convenient

delivery service to the final destination, all these need to be developed more in proportion to the demand of age which fails to achieve organizational goals currently.

- 2. The standard of customer care is being highly hampered due to lack of good service structure and Punctuality of trains: According to the number of trains operated and route kilometers, the existing supplies of locomotives, carriage and wagons are not sufficient. Due to unavailability of locomotives, carriage and wagons, number of train is limited and sometimes few trains in some routes are cancelled. Due to insufficient supply of stores of spear parts, timely and proper outputs of workshops are interrupted. As a result, the objective of comfortable, safe movement is not always achieved and trains fail to maintain punctuality (departure and arrival time).
- **3.** The existing pricing structure of Bangladesh Railway is inappropriate and also is a hindrance to achieve organizational goals: BR faces problems in pricing, they are:
 - a. Constraints on charges imposed through government regulation: BR has no commercial freedom to impose charges for their services other than to abide by government regulations. BR is not able to do commercial utilization of assets and land area by its own choice.
 - b. Provision of services at below marginal cost: Tariff of the Railway is not cost based and is dictated by the wider social and economic interest of the country. Consequently, it has not been possible for BR to balance the earning and expenditure due to the continuation of operation of non profitable services, especially, the uneconomic branch lines or train services and few other similar non economic factors. Besides, as a matter of national policy, BR is required to provide transport of essential commodities on top priority basis in emergent situations and also to provide concession transport facilities for essential commodities of common consumption by the economically weaker sections of the community.
 - c. Ineffective in collecting revenues: BR has not been able to collect its revenues properly because of many malpractices done by its staffs.
 - d. Over manning: Like many other government organizations BR has huge number of staffs which is an overburden for the organization causing more expenditure.

- e. Inadequate or non-existent pricing objectives or statement of pricing policy: Over the years BR has not been able to set pricing objectives or fail to formulate policy for profit maximization, for recovering capital costs, losses or expenditure.
- f. BR has structural inability to retain/reinvest surplus funds.
- 4. The passengers of Bangladesh Railway are being deprived of getting proper customer care and service according to the value (price) they are paying and current pricing structure is not playing effective role for this communication sector: The problem regarding pricing here is:
 - a. No discriminatory pricing policy provided by BR.
 - b. No discounts and allowances provided by BR.
 - c. Customers are not getting the quality, availability, safety, comfort and speedy services as it is desired against what they are paying.
- 5. Bangladesh Railway has less number of distribution channels and it is not customer oriented: Bangladesh Railway has a total of 2,835 kilometers route covering 44 civil districts of the country. The railway route networking is not customer oriented. The then British Government made the railway network for their own interest to carry goods but not for the convenience of the adjacent cities (i.e. major portion of the present rail route of BR is inherited from the British Indian Government). The route is missing many important locations in modern times.
- 6. The Present channels of distribution (Place) is not playing sufficient role to run the organization well and it is not benefiting the organization properly: The Railway service has a high demand in all over the country, but the organization has limited outlets/ Sales centers at some defined railway stations, which is inconvenient and insufficient for the customers. Number of Sales centers/ outlets should be provided for the customers all over the country.

"Place" means not just the locations of producer facilities, but the locations of all points of sale at which customers may have access to the product or service. In the case of railways, these will include not only passenger stations and freight terminals, but corporate/regional/divisional headquarters, centralized railway reservations offices, hotels, travel agents, and freight forwarders' offices and terminals.

Railway has internal channels of distribution and external channels of distribution.

Internal channels of distribution includes: Passenger Stations and Freight Terminals, Corporate/Regional/Divisional headquarters, Centralized railway reservation offices, Call centers, Websites, fax and email.

External channels of distribution includes: Hotels, Travel agents and Freight forwarders', Offices and Terminals.

BR does not provide all these above mentioned Internal and External channels of distributions for its customers.

- 7. Absence of Advertisements in the media and the Salesmanship is not available and inefficient: For any organization advertisements play a vital role to attract customers towards it and ultimately to increase sales volume. In case of BR, no advertisement is seen in the media. Railway sales forces have a passive or reactive, rather than a proactive role, serving existing customers rather than seeking out and securing new customers, order taking rather than order generating. Furthermore, these sales forces have not been organized in a way which would assist them to actively promote railway services and secure new business. Most Railway sales forces have not been able to develop the specialized knowledge of individual market segments needed to be able to effectively sale railway services to these segments.
- 8. The present promotional policy is not customer oriented and ineffective: Promotion includes advertising, sales force representation and public relations. Only a relatively few railway organizations have encouraged market segment specialization by their sales

personnel. Public relation activity is not sufficient. Advertising program is very traditional and is almost negligible.

- **9.** People (Staffs) of Bangladesh Railway are not efficient enough as well as they are not putting their full potential to the service: In modern times customer needs quick or fast an accurate service from the employees or officers from a service generating organization. Practically customers are not finding this from Bangladesh Railway when it is required. Especially it is more felt by the customers during holidays and when festival vacations starts and more number of customers travel from one part of the country to another. People are to wait long time to get a ticket. Computer based ticket reservation system sometimes fails to work faster than manual ticketing. Sometimes it is felt by the customers that employees could do better if they use their potential in the best way but they are not doing that. Sometimes more time is taken by the authority to clean the trains to start. Customers have to pass their valuable time then.
- 10. The Staffs of Bangladesh Railway are not having training on regular basis to perform their duties moreover they have less customer awareness: Staffs of Bangladesh Railway need training on a regular basis to uplift their efficiency time to time which is felt by its customers when they see the inability of the staffs who are providing services. It will not matter how advanced and sophisticated are a railway organization's management systems if the Railway's existing and potential customers do not feel that railway stuffs are listening and responding to their needs.

5.4.2 Problems Identified From Secondary Data

1. (a) Inherited Physical Problems

Bangladesh Railway is made up of truncated portions of the then British-Indian rail system, which after 1971 War of Liberation fell in Bangladesh territory. In the process, BR inherited a number of structural and physical weaknesses as a part of its legacy, since it was not specially designed and constructed to serve Bangladesh. Presently there are a number of missing links for direct through traffic. Due to truncation from the main system, BR is

handicapped to serve the country effectively and efficaciously without proper re-orientation and development

1. (b) Gauge Problems

Bangladesh Railway has been suffering from various operating bottlenecks. The railway system comprises two gauges, Broad and Metre which involves transshipments of traffic at the break of gauge points. Similarly transshipments are also involved at riverain points. Besides, during rainy season direct route links are often disrupted in many points.

2. (a) Managerial Problems

Bangladesh Railway management system is under experiment for a long time. Till June 2, 1982, the management and development of railway was vested with a Railway Board, comprising of a Chairman and four members. But, for administrative convenience and operational reason the Railway Board was abolished with effect from June 3, 1982 and the function of the Railway Board was vested with the Railway Division of the Ministry of Communications with the Secretary of the Division working of as the Director General of Bangladesh Railway. For the same purpose the Railway bifurcated into two zones, East & West, under the administrative control of two General Managers (GMs), who are responsible/ accountable to the Director General (DG) of Bangladesh Railway. Subsequently on August 12, 1995, Railway was separated from the Ministry and entrusted with Director General drawn from the Railway professionals. For policy guidance, a 9 (nine) member Bangladesh Railway Authority (BRA) was formed with the Minster of Communications as its Chairman. The Director General is assisted by in Additional Director Generals and second Joint Directors Generals. Frankly speaking, the DG holds little control over different activities especially related to planning & policy formulation. This creates operational as well as planning and development problems.

2. (b) Lack Of Coordination

Bangladesh railway is a large organization comprising of two zones- East & West, divided by the river Jamuna, under the administrative control of two GMs who are accountable to DG. Each zone is further divided into a numbers of divisions under the control of Divisional Railway Managers (DRMs) in association of different Departmental Heads & subordinates. This large amalgamation frequently creates coordination problems.

In the railway services, the Railway cadre is composed of two BCS cadres: BCS (Railway Engineering) and BCS (Transportation & Commercial). The Engineering Cadres are composed of 5 sub-cadres: Civil, Mechanical, Signal & Telecom, Electrical and Stores. All day-to-day operation and maintenance of BR are performed as a concerted effort of these different Departments. Besides, a strong Audit & Accounts Department (BCS Audit and Accounts Cadre) is responsible for keeping railway accounts. Moreover, RNB (Railway Nirapapatta Bahini) in addition of Railway Police, Medical Department etc. are to help in BR's operation. Due to the combination of large number of departments, there is always a possibility of internal clash on different issues.

3. (a) Lack Of Govt. Attention

Bangladesh Railway is a neglected sector for a long period. Road infrastructure has developed tremendously for huge invest during the last decades. On the other hand, negligible allocation of resources to rail sector compared to roads has led to paralyze the rail transportation system of the country year after year. No remarkable project/program has been taken to develop and strengthen the railway network; on the contrary, existing railway infrastructures cannot be properly maintained due to lack of resource. As a result, railways are always at a disadvantage compared to road transport.

3. (b) Lack Of Modernization & Development

The expansion of BR has been blocked since 1947. Only 80 kms rail line has been constructed for last 50 years. On the other hand, more than 1200 kms rail lines are under risk for operation due to lack of proper maintenance and attention which is mainly for insufficient fund allocation. As a result, derailment has become common. This has adverse impact on the efficiency and reliability of railway services.

On of the major problems, presently faced by the Bangladesh Railways is a serious shortage of locomotives and route capacity. Far from having insufficient traffic on its trunk routes, the BR suffers an excess of traffic in relation to the capacity of these routes. Operating priority on these routes is given to passenger trains, and freight trains incur major delays and frequent cancellations as a result.

Since the liberation of Bangladesh, instead of constructing new rail-routes, some of the branch line railway sections were declared redundant and subsequently closed and no proper attention to maintain the existing asset was being given. The condition of locomotives (rail engines) is also miserable. The musclemen are occupying railway land and properties. Already 12,000 acres lands have been illegally dispossessed out of its 23,900 acres land. No guardian stands to say for BR, to see its future. At present, BR owns 170 trains of which 34 are Intercity, 40 are Mail & Express and rest 96 are local trains (66 in East zone and 30 in West zone). The serviceable life of the locomotives of 140 trains out of 170 has already been expired. Most of the locomotives are running over 50 years. Presently, railway owns 1400 carriages/bogies (400 for Intercity, 400 for Mail & Express and 576 for local trains) and most of them are backdated.

4. Financial Problems

BR has to maintain it's track, building, locomotives, coaches & wagons, signaling system, electric substations etc. by its own cost, which cause increase in operating expenses as well as decreases net operating income. Furthermore, the yearly financial budget is too small to maintain only overhead and variable costs. Development works cannot move forward due to insufficient budget. It needs huge investment to come to a standard position and then it can be move smoothly. Budget constraints act as a barricade towards all the necessary development works.

CHAPTER SIX

FINDINGS, RECOMMENDATIONS AND CONCLUSION

Findings

The study has been done keeping in mind the objectives of the research. So, the findings have been furnished below according to the order of the objectives:

Findings (Objective-1)

The service structure of BR is analyzed on the basis of secondary data and practical situation observation. The followings are found from the study:

- 1. Bangladesh railway is a large organization comprising of two zones- East & West, divided by the river Jamuna, under the administrative control of two GMs who are accountable to DG. Each zone is further divided into a numbers of divisions under the control of Divisional Railway Managers (DRMs) in association of different Departmental Heads & subordinates. This large amalgamation frequently creates coordination problems. DG of BR holds little control over different activities especially related to planning and policy formulation. This creates operational as well as planning and development problems. Restructuring of BR i.e. organizational reform is very much necessary to develop efficient and active management system.
- 2. BR system comprises two gauges, Broad and Meter which involves transshipments of traffic at the break of gauge points. Similarly, transshipments are also involved at riverain points. In BR there a number of missing links for direct through traffic. Dual gauge has to be constructed to ease the gauge problem. For proper utilization, a number of links should be constructed.
- **3.** BR is a neglected sector. No remarkable project/program has been taken to develop and strengthen the railway network; on the contrary, existing railway infrastructures cannot be properly maintained due to lack of resource.

- **4.** After the liberation war of 1971, BR has not been able to expand its route network significantly. At present, 1200 kms rail lines are under risk for operation due to lack of proper maintenance, As a result, derailment has become common. BR has a serious shortage of locomotives and route capacity. Far from having insufficient traffic on its trunk routes, the BR suffers an excess of traffic in relation to the capacity of these routes. Operating priority on these routes is given to passenger trains, and freight trains incur major delays and frequent cancellations as a result.
- **5.** Since the liberation of Bangladesh, instead of constructing new rail-routes, some of the branch line railway sections were declared redundant and subsequently closed and no proper attention to maintain the existing asset was being given. The musclemen are occupying railway land and properties. Already 12,000 acres lands have been illegally dispossessed out of its 23,900 acres land. No guardian stands to say for BR, to see its future.
- 6. The condition of locomotives (rail engines) is miserable. At present, BR owns 170 trains of which 34 are Intercity, 40 are Mail & Express and rest 96 are local trains. The serviceable life of the locomotives of 140 trains out of 170 has already been expired. Most of the locomotives are running over 50 years. Presently, railway owns 1400 carriages/bogies (400 for Intercity, 400 for Mail & Express and 576 for local trains) and most of them are backdated. Old engines consume excessive amount of fuel due to leakage, wear and tear and sudden engine breakdown/ failure happens and backdated carriages fail to attract customers and needs excessive maintenance which causes more expenditure.
- 7. Most of the route networks are single line based, which reduces traffic density and increase running time. BR has to introduce double line at main route network to increase traffic density and reduce running time. New locomotives, coaches and wagons should also be provided to match the growing demands. Modern color light signaling system should also be introduced in all stations. BR needs to improve physical structure and to remove bottlenecks resulting from inadequate infrastructure and outdated rolling stock & workshop facilities. It needs to build adequate infrastructure in rail track signaling, telecommunication, e-commerce & business, manufacturing & maintenance workshops etc. BR needs to strengthen its existing facilities of workshop and machineries to cope

up with the future demands through local assembling and manufacturing. If possible electric locomotives should be introduced to be an economical, speedy and convenient transport.

- **8.** BR needs technical assistance to overcome the institutional shortcomings through organizational reform. Some key reform measures may be taken such as a reduction in personnel size, organizational restructuring and other organizational reforms to improve BR's financial and operational performance on a sustainable basis. BR cannot take any financial and operational decisions as it is under the ministry of communications. So, it takes long time and faces various bureaucratic difficulties to reach a vital decision.
- **9.** Public service obligations on railway in the form of the compulsory provision of unprofitable routes or services need to be addressed by policymakers when implementing economic reforms aimed at commercializing the industry.
- **10.** BR has to maintain its track, building, locomotives, coaches & wagons, signaling system, electric substations etc. by its own cost, which cause increase in operating expenses as well as decreases net operating income. Furthermore, the yearly financial budget is too small to maintain only overhead and variable costs. Development works cannot move forward due to insufficient budget. It needs huge investment to come to a standard position and then it can move smoothly. Budget constraints act as a barricade towards all the necessary development works.
- **11.** BR is also suffering from lack of investment for proper maintenance of tracks. The span of service life of maximum locomotives, carriages, vehicles, tracks, bridges, workshops etc. have already been expired and outdated. Sufficient funds have not been allocated for their maintenance and smooth operation for a long time.
- **12.** The organization is trying to maintain their service quality. But the budget constraints and bureaucracy limits the quality, as it desires.
- **13.**The route networking should be expanded, Number of passenger, freight terminals, head quarters, centralized reservation offices, ticket counters should be increased and modernized to give proper and smooth service.

Findings (Objective-2)

Product (Service Of Bangladesh Railway):

The results form the study on Product (Service of Bangladesh Railway) suggest that:

- 1. The existing Service structure of Bangladesh Railway is weak in proportion to the demand of age.
- 2. In order to achieve the expected goal of Bangladesh Railway it is needed to change the overall service structure of the organization.
- 3. The standard of customer care is being highly hampered due to lack of good service structure.
- 4. Punctuality of trains is not impressive.

Price:

The results form the study on Price show that:

- 1. The existing pricing structure of Bangladesh Railway is inappropriate for the present situation.
- 2. In order to achieve the goal of Bangladesh Railway there needs a change of pricing structure of Bangladesh Railway.
- 3. The passengers of Bangladesh Railway are being deprived of getting proper customer care and service according to the value (price) they are paying.
- 4. Bangladesh Railway will be able to play a vital role in the way of communication sector much effectively than the present situation if it changes its current pricing structure.

Place (Channels Of Distribution):

The results form the study on Place (Channels of Distribution) explains that:

- 1. Bangladesh Railway fails to achieve its goals due to lack of time oriented places (distribution channels)
- 2. Channels of distribution (Place) is not customer oriented.
- 3. The organization will be more benefited if the present distribution channel is changed.
- 4. Good channels of distribution (Place) will play better role to run the organization well.

Promotion:

The results form the study on Promotion explains that:

- 1. Advertising program is necessary.
- 2. The Salesmanship is not available and inefficient.
- 3. The present promotional policy is not customer oriented.
- 4. The existing promotional policy should be changed.

People (Staffs):

The results form the study on People (Staffs) suggested that:

- 1. People (Staffs) of Bangladesh Railway are not efficient up to the mark.
- 2. People (Staffs) are not putting their full potential to the service.
- 3. The Staffs need training on regular basis to perform their duties well.
- 4. Staffs have less customer awareness.

Findings (Objective-3)

The finding of Objective-3 has shown in the data analysis and discussion part of the study.

Findings (Objective-4)

The Findings of Objective-4 are discussed in Recommendations.

Recommendations

There is a lot of scope to increase the efficiency of Bangladesh Railway. Most important way is to strengthen BR's operational capacity and efficiency through reducing its inherited physical & structural weakness by rehabilitation as well as reorientation and all the way through institutional and organizational reform processes and developing & implementing effective integrated multimodal transport policy emphasizing the importance of railway transportation in respect to our socio-economic context. The adoption of market-led philosophy can make BR more competitive and market-oriented commercial viable organization. This reorientation and reform processes may be appeared as blessing to BR as well as to country's transport sector for the sustainable development of the country. Operational efficiency of BR would be improved through optimizing the use of assets. Thus railway would be more responsive to market needs through organizational reform incorporating structural changes and sound business practices.

In this context, a transportation act and appropriate regulatory institutions have to be in place for enforcing and overseeing objectives of the transport sector. Legislation must be properly implemented and enforced for proper functioning of transport internal market. An independent Commission for Integrated Transport should be established to advise Government and to monitor progress on the implementation of policy. Present deficiencies of sector bias, improper modal mix, unsustainable development, and un-integrated development should be removed through strategic planning. Although Bangladesh Railway is a vastly prospective transport organization in Bangladesh, but for the lack of proper marketing applications it has failed to achieve its objectives and goals. Based on findings and conclusions of the study, the following recommendations are seen feasible for the improvement of the existing service marketing of Bangladesh Railway.

Recommendations are given in accordance with the objectives of the study.

Recommendations Against The Problems Identified From The Opinions Of The Customers:

- 1. BR should try to increase route area or network. It should maintain punctuality (departure and arrival time), transit time. The carriage seating standard, configuration, the decor, cleanliness and riding comfort of rolling stock should be made better by manufacturing or importing better quality rolling stock. The nature and type of meals provided enroute should have proper standard and demand. Station or terminals should provide comfort, cleanliness, convenience and the convenience of connections with other rail services or with other transport modes. BR should provide the essential security for consignments (e.g. against pilferage and damage); the convenience and efficiency of loading/unloading facilities at rail freight terminals; and the availability of a convenient delivery service to the final destination (i.e. door to door delivery service).
- 2. New locomotives, wagons and carriages need to be replaced by old ones or should be added to increase number of trains. Workshop's capacity should be developed. Supply of spare parts in stores should be maintained according to the demand. This way the service structure should be developed for proper customer care.

Service offerings should be increased. Offering traditional transport services is no longer enough in a globally competitive industry BR needs to deliver advanced services and solutions that help it stand apart from the competition and attract new revenue streams. The world's most successful Rail enterprises now offer freight or passenger customers a variety of new services that enhance the speed, reliability and cost effectiveness of rail transportation. For example, many freight lines are providing offer to the customers that they can arrange, track and pay for shipments while providing complete visibility via the Internet. And many passenger lines offer journey planning, advance ticketing and e ticketing, to make it easier for consumers to arrange rail travel.

3. a) BR should have full commercial freedom in imposing charges for their services. Government should not interfere in that by rules and regulations.

b) Public service obligations on Railway in the form of the compulsory provision of unprofitable routes or services need to be addressed by policy makers when implementing economic reforms aimed at commercializing the industry. The price must be paid to BR by government for performing public service obligations.

c) BR should declare incentives for staffs for fulfilling duties or for increasing sales volume, this way malpractice can be stopped and the amount of revenue collection can be made effectively.

d) Employee size should be rational for every organization. Over-staffing is a problem in BR. In many countries, experience has shown that fare and equitable treatment of adverse effects on labor is absolutely crucial to the successful completion of a railway restructuring effort.

e) A profit driven pricing objectives or policy has to be formulated aimed at profit maximization, to recover capital costs, losses or expenditures.

f) De-politicization and Commercialization is desirable in order to create a stable and credible basis for the commercial operation which will help BR to be capable to retain /reinvest surplus funds.

- 4. Discounts may be provided for: ticket bulk purchases (e.g. weekly, monthly, yearly tickets); off-pick travel (time of day or seasonal); group travel and tours; discriminatory pricing may be provided for student/old aged passengers. BR must ensure quality, availability, safety, comfort and speedy services to the customers who are paying prices for those. BR should be able to convince them that, what they are paying to get the desired service is alright.
- **5.** The route network should be modified to connect more commercial cities and to reduce distance between destinations which will reduce running time and can provide door to door service for the customers.
- 6. In the wider sense, "place" means channels of distribution for the product. Outside of the railway organization itself, the most effective channels of distribution for the railway "product" are likely to be travel agents in the case of rail passenger services and freight forwarders, in the case of rail freight services. The main advantage of using external channels of distribution is that business volume can be maximized through a relatively small number of direct customers, who act as wholesalers, on-selling space on trains to a much larger group of final consumers, accepting the credit and business risk and arranging storage and feeder transport (to/from railheads), where required. By directing a greater proportion of their business through such "wholesalers", railway managements can often achieve significant reductions in their operating costs, with commensurate improvements in the overall corporate financial result.

BR has recently introduced e-ticketing or mobile ticketing facilities. But BR can also provide call centers, fax, email facilities which will provide information for the customers. BR has websites but it should be developed more. This way BR will be more benefited.

- 7. Advertising program is very much necessary to communicate customers effectively and efficiently. So, BR needs to have advertisement in electronic and print media. Sales motivational program is not very much effective in the distribution system. At present, there is no sales motivational program in the distribution system. The field level employees and officers are loosing their interests and confidence. Due to lack of motivational program, the field level employees are being involved with many malpractices. So, effective motivational program should be established.
- **8.** BR has to give effort to Increase customer satisfactions. Traditionally, BR devoted little time to understand their customer's requirements. But now it is competing against customer-centric organizations such as airlines, parcel services, inland transport and over the road carriers, it is essential to dig deeper into the minds and motivations of the passengers and business it serves. Successful rail enterprises have built their business models around the principle of proactively giving customers everything they want and more. BR can improve knowledge of their customer bases through the use of comprehensive customer data, by offering enhanced customer care through a wide range of channels-including call centers, web sites, fax, e-mail, and mobile devices, BR can develop segmented marketing campaigns that offer passengers and business special promotions targeted to their interests. Railway management is expected in future to allocate an increasing proportion of their operating budgets to promotion. At the same time, they are expected to employ more sophisticated technique (such as on-board passenger sample surveys) to measure the effectiveness and reach of their promotional campaigns, in order to maximize the value of future campaigns. Public relation activity needs to be increased.
- **9.** Efficiency is not that, how much you are doing but the amount of work that has been done with respect to time. Sometimes, lack of motivation in work results inefficiency, then staffs are seen doing work without using their full potentiality. BR can remove this problem by declaring extra benefits or allowances against better performance of the

staffs. If it is done, people will be self motivated to be more efficient and will try their best to use their potential at most.

10. The Staffs of BR should be provided training on regular basis which will help them to be upgraded to perform their duties more efficiently. The staffs of BR have less customer awareness. What is required, therefore, is total customer awareness from the very top to the lowest levels of staffs in the railway organization. Inevitably, this in turn will require that a customer awareness culture be installed throughout the railway organization by its senior management, who in most cases must first make the mental transition themselves, or be prepared to be swept aside by personnel who already have.

Recommendations Against The Problems Identified From Secondary Data:

1 (a) Bangladesh Railway cannot serve the country in full swing, as it was not designed to serve this present geographic territory. Due to truncation from the main railway system, there are a numbers of missing links in different sections of the present railway network. For proper utilization a number of links should be constructed. Besides, due to lack of proper maintenance for a long time, BR has become paralyzed. For this reason, urgent action program should be taken for the rehabilitation of branch lines and modernization of signaling & interlocking systems of different stations to make BR more efficient and functioning.

1 (b) The railway link over the Bangabandhu Jamuna Bridge connecting the East and West zones through the construction of 99 km new dual gauge line and rehabilitation and conversion of 245 km Broad Gauge line from Jamtoil to Parbatipur to Dual Gauge has eased out these operational problems considerably. Further improvement will be achieved after completion of the following on going/ proposed work, viz.9a) railway link between western side of Jamuna Bridge to Bogra,(b) railway link between eastern side of Jamuna Bridge to Tarakandi. Recently, Dual Gauge (DG) has been constructed in some important sections to ease the problems.

Towards rationalization of gauges in Bangladesh, the on-going program of dualization from Parbatipur to Dhaka, should be extended up to Chittagong, to facilitate regional integration, and provide uninterrupted broad gauge rail services from neighboring countries, to sea ports in Bangladesh. In addition, there is a need to standardize the coupling and braking system, as these restrict operating speeds for Indian trains hauling Bangladeshi wagons. In case regional traffic opens up quickly, BR should plan to buy compatible BG wagons for the purpose, instead of changing all its assets to Indian standard.

2 (a, b)

BR management should be given full commercial freedom including authorities for hiring and firing, and at the same time made answerable for agreed performance targets. The infrastructure and operations of BR need to be segregated and both operated on commercial principles. Institutional separation is needed in BR. This method separates the infrastructure and railway operations into autonomous entities with separate capitalization, balance sheets and staff.

The setting of political objectives should be separated from the management of railway enterprises. This can be achieved by combining commercial objectives with management autonomy within performance agreements.

Railway's role as the dominant mode of transport has to be restored by targeted action plans and in this regard further detail studies are required.

3 (a, b)

The organization is trying to maintain their service quality. But the budget constraint and bureaucracy limits the quality, as it desires. So, the government should take a close look to enhance the development budget and BR should remove all the bureaucratic limitations.

Bangladesh Railway needs to improve physical structure and to remove bottlenecks resulting from inadequate infrastructure and outdated rolling stock & workshop facilities. It needs to build adequate infrastructure in rail track signaling, telecommunication, e-commerce & business, manufacturing & maintenance workshops etc. BR needs to strengthen its existing facilities of workshop and machineries to cope up with the future demands through local assembling and manufacturing.

The present railway infrastructure should be changed to modernize BR. Most of the route networks are single line based, which reduces traffic density and increase running time. BR has to introduce double line at main route network to increase traffic density and reduce running time. Modern color light signaling system should also be introduced in all stations. New locomotives, coaches and wagons should also be provided to match the growing demands. If possible electric locomotives should be introduced to be an economical, speedy and convenient transport.

BR is also suffering from lack of investment for proper maintenance of tracks. The span of service life of maximum railway locomotives, carriages, vehicles, tracks, bridges, workshops etc. have already been expired. Sufficient funds have not been allocated for their maintenance and smooth operation for a long time. Thus BR was forced to face the uneven competition with other modes of transport. Recently, derailment has become very common. This has adverse impact on efficiency and reliability of services. Improved services should be ensured by aggressive development and rehabilitation of existing assets. Government has to patronize BR to reduce its operating bottlenecks and help to build its glorious image. As a huge financial involvement is required to increase the overall efficiency of BR, donor agencies should be invited to invest.

Action plan concerning legal, regulatory and institutional measures to achieve the policy objectives of sustainable transport are to be enforced by the government through legislative means.

4. Railway's operational, managerial, Political or Bureaucratic and Financial problems can be removed significantly if private sector participation or involvement in Railway can be ensured:

Private sector participation should be allowed. Many railway activities traditionally reserved for monolithic public railways can be more effectively performed by the private sector. In practice, it is possible to identify a range of different institutional arrangements to facilitate private participation in railway activities: (a) A key to private sector participation (PSP) in railways is separating or "unbundling" rail transport activities. One example is the separation of the ownership of fixed facilities (stations and the railway network) from operations, as was done in Sweden. It relieves the railway of its base of fixed assets and long term debt, freeing it to function commercially; permits the establishment of profit and cost centers for improved financial information and accountability; makes the railway structurally more like competing modes; and enhances the opportunities for intra-modal or inter-modal competition.

In monolithic sectors such as the state railways, the first steps towards lowering costs may have to be limited to the 'unbundling' of functions. Unbundling of railway and non-railway activities; of different lines of business, functions or regions will allow for competition in the supply of inputs. Those components for which scale economies are lowest can then be subcontracted on a competitive basis. This can be done by the following ways:

(i) In maintenance - particularly in the contracting out of track maintenance to the private sector;

(ii) In system planning – by separating system development and planning from rail operations; and

(iii) In ancillary service provision (marketing, ticketing, and catering).

(b) The railway can make contract for almost any activity with the private sector. This can be done with infrastructure, wagon, and locomotive maintenance. Such properly designed contracts can be made competitive and can incorporate incentives for good performance.

(c) Management contracts range from what is essentially a form of technical assistance, where the management contractor takes no financial risk, to more significant cases where compensation is based at least partly on results, including performance incentives. The contractor assumes responsibility for operations and maintenance of a particular activity, or even an entire railway. Competition arises from the possibility of several firms bidding for the contract.

(d) Provision of Leasing from the Private Sector can be allowed. In many countries, a private company, often specialized in leasing, buys a piece of equipment and leases it to the railway. Such opportunities are particularly favorable for specialized or limited use equipment. Indian Railways created a subsidiary, the Indian Railways Finance Corp., which issued bonds to private individuals and entities, to buy equipment, and lease it to the railway.

(e) Concessions are a form of lease in which the contractor agrees to make certain fixed investments and retains the use of the assets for a longer contract period. In some countries, concessions of up to 30 years have been granted to operators, who have responsibility for all maintenance and investment. Concessions often involve bidding for the lowest subsidy on operations and investment.

(f) Joint Ventures can be made. Typically joint ventures involve private partner companies contributing to the development capital, planning, and management expertise in the development of land or other real estate owned by a railway. British Rail created a Property Board to develop station space in concert with the private sector.

(g) Private Ownership can be allowed. A few examples can be found of private ownership in railways (which may include some public participation, as long as it is not a controlling interest). The most extreme examples are to be found in the Sweden and United Kingdom where the right to provide services have been franchised to privately owned and operated train operators. Indeed in the United Kingdom for a time the network infrastructure was fully privatized. Examples can also be found of privately owned services on publicly owned railways, for example, food catering on Indian Railways. In Poland, various subsidiaries of the railways, such as manufacturing and repairs, are being transformed into private, joint stock, or independent state owned enterprises.

5. Other Recommendations

5 (a) The ICD at Kamalapur is not being used optimally. Bangladesh Railway should create facilities to carry more containers between Chittagong and Dhaka and should extend this service up to northern districts utilizing the capacity of JMB.

BR staffs responsible for container services need to be more aggressive to match the road transport/trucking industry lobby and marketing efforts. Greater cooperation and understanding between Chittagong Port Authority and BR is needed to overcome some of the problems being faced. Length of the railway track being laid within the port area is not long enough to accommodate one full train track, as a result it will have adverse impact on the efficiency of container train operation.

(b) To increase efficiency in handling container traffic, Bangladesh Railway may like to establish a separate self-sustaining organization such as CONCOR (Container Corporation of Indian Railways) under the Indian Railways. The handling of containers by BR could have improved a great deal, if a separate self-sustaining organization (like "CONCOR") could be established, to handle these containers.

(c) Multimodal studies are to be undertaken involving the objectives and issues of sustainable development. Problems on different modes of transport including access to ports and airports are to be identified and an integrated transport policy for the country based on multimodalism approach has to be developed and implemented.

Conclusion

The Railway of this area is inherited form British India started declining day by day and Bangladesh Railway started loosing its glorious past as a result of the monopoly. Bangladesh Railway inherited a number of structural and physical weaknesses as a part of its legacy since it was not especially designed and constructed to serve Bangladesh. Due to truncation from the main system, BR is handicapped to serve the country effectively and efficaciously without proper re-orientation and development. Now, more than ever before in the long history, BR is facing major threats to its long term survival: The progressive withdrawal of the Government funding which was necessary in the past to sustain Railway infrastructure and services, and the relentless increasing competition from other transport modes, especially from road transport which has been assisted by different factors are the major threats. The first of these threats, the withdrawal of Government funding assistance, must and should be combated with more effective lobbying of Governments by Railway Managements. The second threat, however, can partly be countered by more effective lobbying. Competition from the road transport cannot be expected to reduce in intensity for the foreseeable future for its greater flexibility, and will only be effectively counteracted if rail can offer a standard service which at the same time satisfies the needs of customers and is superior to the offers from its competitors. Clearly this provides rail with a substantial challenge. It requires a major change in the outlook of railway managements and in the culture of railway organization. Henceforth, the activities of Railway managements will have to be directed at identifying, understanding and responding to the needs of their existing and potential customers; identifying and understanding the cost causation and profit potential associated with the individual traffics or market segments; and bringing about the organizational change which will ensure that railway satisfies new commercial goals. These guidelines are intended to assist the railway organization of the country to set up the systems and procedures necessary for Bangladesh Railway to be able to function as commercially, market-led organization. All units of the organization must become and remain customer oriented, an their activities must be harmonized and coordinated with the satisfaction of customers as the fundamental objective. Finally, to enhance the efficiency of BR, proper attention should be given to this trust sector. Private sector involvement in operations and maintenance of BR should be encouraged. Government has to patronize the sector properly for its expansion and development. In the same time, operational and maintenance as well as overhead costs should be minimized; management should be efficient and number of employees should be rationale. So, for the healthy growth and development of BR, the unique mass transportation system of the country, a proper market-based reorientation is very much necessary.

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APPENDIXES

APPENDIX-1

INSTITUTE OF BUSINESS ADMINISTRATION (IBA), UNIVERSITY OF RAJSHAHI, RAJSHAHI

PRETEST QUESTIONNAIRE

I am Mahmudul Kabir, M. Phil fellow, of Institute of Business Administration (IBA), University of Rajshahi. I need some information related to Service Marketing conditions of Bangladesh Railway. I need your assistance.

 Have you taken the transportation service of Bangladesh Railway? If yes then mention the name of the Service.

.....

2. Which are the points you feel well about the service of BR?

.....

- 3. Which are the problems you have faced or you see in it?
- 4. What is your expectation from the service of BR?

.....

- 5. Are you satisfied with the fare you are to pay against the service?
- 6. Do you get the services of BR at convenient places?

.....

7. What is your feeling about the dealing of staffs of BR towards their customers?

APPENDIX-2

QUESTIONNAIRE DESIGN TO KNOW THE OPINIONS OF THE CUSTOMERS (RESPONDENTS) ABOUT SERVICE MARKETING OF BANGLADESH RAILWAY:

NB: We draw your kind attention to inform you that the study aims at highlighting the conditions of service marketing of Bangladesh Railway. We expect your valuable opinions and suggestions. We assure you that the secrecy of your opinion will be kept. Your valuable information will be used as the primary data of an M. Phil program. There is given some statements having alternate five scale supports. You are highly requested to read out the questions carefully and put a tick (\checkmark) mark within the box as you think as your own opinion. The five scale supports as follows:

- I) Unwilling to answer \Box
- II) Low support \Box
- III) Support 🗌
- IV) High Support \Box
- V) Very High support \Box

RESEARCH TITLE

Service Marketing in Bangladesh: A Case Study of Bangladesh Railway.

PART ONE: PROFESSIONAL INFORMATION

FOR THE CUSTOMERS (RESPONDENTS)

- 1) Name of the Respondent:
- 2) Occupation:
- 3) Name of the traveled Train:
- 4) Destination:
- 5) Present Address:

PART TWO: QUESTIONNAIRE-1

(To be used by the respondents)

A. PRODUCT (RAILWAY SERVICE)

1. The existing Service structure of Bangladesh Railway is weak in proportion to the demand of age.

(i) Unwilling to answer \Box (ii)Low support \Box (iii)Support \Box (iv)High support \Box (v)Very high support \Box

2. In order to achieve the expected goal of Bangladesh Railway it is needed to change the overall service structure of the organization.

(i) Unwilling to answer \Box (ii)Low support \Box (iii)Support \Box (iv)High support \Box (v)Very high support \Box

3. The standard of customer care is being highly hampered due to lack of good service structure.

(i) Unwilling to answer□ (ii)Low support□ (iii)Support□ (iv)High support□ (v)Very high support□

4. The overall existing service structure of Bangladesh Railway is dissatisfactory for the passengers.

(i) Unwilling to answer \Box (ii)Low support \Box (iii)Support \Box (iv)High support \Box (v)Very high support \Box

5. It is quite possible to overcome the challenges of Bangladesh Railway through the execution of establishment of a good service structure.

(i) Unwilling to answer \Box (ii)Low support \Box (iii)Support \Box (iv)High support \Box (v)Very high support \Box

6. Bangladesh Railway is failed to achieve its expected goals as it is directed with an unsuitable service structure.

(i) Unwilling to answer \Box (ii)Low support \Box (iii)Support \Box (iv)High support \Box (v)Very high support \Box

7. Punctuality of trains is not impressive.

(i) Unwilling to answer□ (ii)Low support□ (iii)Support□ (iv)High support□ (v)Very high support□

B. PRICE

1. The existing pricing structure of Bangladesh Railway is inappropriate for the present situation.

(i) Unwilling to answer \Box (ii)Low support \Box (iii)Support \Box (iv)High support \Box (v)Very high support \Box

2. In order to achieve the goal of Bangladesh Railway there needs a change of pricing structure of Bangladesh Railway.

(i) Unwilling to answer \Box (ii)Low support \Box (iii)Support \Box (iv)High support \Box (v)Very high support \Box

3. In spite of being a modern transportation system, the overall pricing structure of Bangladesh Railway is too week.

(i) Unwilling to answer□ (ii)Low support□ (iii)Support□ (iv)High support□ (v)Very high support□

4. The passengers of Bangladesh Railway are being deprived of getting proper customer care and service according to the value (price) they are paying.

(i) Unwilling to answer \Box (ii)Low support \Box (iii)Support \Box (iv)High support \Box (v)Very high support \Box

5. Bangladesh Railway will be able to play a vital role in the way of communication sector much effectively than the present situation if it changes its current pricing structure.
(i) Unwilling to answer (ii)Low support (iii)Support (iv)High support (v)Very high support

6. The weaker pricing structure of Bangladesh Railway acts as an impediment to establish good service.

(i) Unwilling to answer \Box (ii)Low support \Box (iii)Support \Box (iv)High support \Box (v)Very high support \Box

7. Bangladesh Railway will be able to play a vital role in the sector of internal communication of the country if it changes its pricing structure.

(i) Unwilling to answer \Box (ii)Low support \Box (iii)Support \Box (iv)High support \Box (v)Very high support \Box

C. PLACE (CHANNELS OF DISTRIBUTION)

1. Bangladesh Railway fails to achieve its goals due to lack of time oriented places (distribution channels)

(i) Unwilling to answer \Box (ii)Low support \Box (iii)Support \Box (iv)High support \Box (v)Very high support \Box

2. Good channels of distribution (Place) will play better role to run the organization well.
(i) Unwilling to answer□ (ii)Low support□ (iii)Support□ (iv)High support□ (v)Very high support□

3. Channels of distribution (Place) is not customer oriented.

(i) Unwilling to answer \Box (ii)Low support \Box (iii)Support \Box (iv)High support \Box (v)Very high support \Box

4. The existing channels of distribution (Place) is not appropriate for the present situation.
(i) Unwilling to answer□ (ii)Low support□ (iii)Support□ (iv)High support□ (v)Very high support□

5. The present channels of distribution (Place) should be changed.
(i) Unwilling to answer (ii)Low support (iii)Support (iv)High support (v)Very high support

6. The organization will be more benefited if the present distribution channel is changed.
(i) Unwilling to answer□ (ii)Low support□ (iii)Support□ (iv)High support□ (v)Very high support□

7. The present distribution channel (place) fails to achieve optimum levels of customer attraction.

(i) Unwilling to answer□ (ii)Low support□ (iii)Support□ (iv)High support□ (v)Very high support□

D. PROMOTION

1. The existing promotional policy is inappropriate for the present situation.

(i) Unwilling to answer \Box (ii)Low support \Box (iii)Support \Box (iv)High support \Box (v)Very high support \Box

2. Advertising program is necessary.

(i) Unwilling to answer \Box (ii)Low support \Box (iii)Support \Box (iv)High support \Box (v)Very high support \Box

3. The Salesmanship is not available and inefficient.

(i) Unwilling to answer□ (ii)Low support□ (iii)Support□ (iv)High support□ (v)Very high support□

4. The present promotional policy is not customer oriented.

(i) Unwilling to answer \Box (ii)Low support \Box (iii)Support \Box (iv)High support \Box (v)Very high support \Box

5. The existing promotional policy should be changed.

(i) Unwilling to answer□ (ii)Low support□ (iii)Support□ (iv)High support□ (v)Very high support□

6. New promotional policy will make the organization more profitable.

(i) Unwilling to answer \Box (ii)Low support \Box (iii)Support \Box (iv)High support \Box (v)Very high support \Box

7. New promotional policy will be able to attract more customers.

(i) Unwilling to answer□ (ii)Low support□ (iii)Support□ (iv)High support□ (v)Very high support□

E. PEOPLE (STAFFS)

1. People (Staffs) of Bangladesh Railway are not efficient up to the mark.

(i) Unwilling to answer \Box (ii)Low support \Box (iii)Support \Box (iv)High support \Box (v)Very high support \Box

2. There is lack of co-ordination among the people (Staffs) of different departments.
(i) Unwilling to answer□ (ii)Low support□ (iii)Support□ (iv)High support□ (v)Very high support□

3. People (Staffs) are not putting their full potential to the service.
(i) Unwilling to answer□ (ii)Low support□ (iii)Support□ (iv)High support□ (v)Very high support□

4. People (Staffs) do not respond to the needs of customers accordingly.
(i) Unwilling to answer□ (ii)Low support□ (iii)Support□ (iv)High support□ (v)Very high support□

5. Bangladesh Railway has a less number of staffs to give the required service.

(i) Unwilling to answer \Box (ii)Low support \Box (iii)Support \Box (iv)High support \Box (v)Very high support \Box

6. The Staffs need training on regular basis to perform their duties well.

(i) Unwilling to answer \Box (ii)Low support \Box (iii)Support \Box (iv)High support \Box (v)Very high support \Box

7. Staffs have less customer awareness.

(i) Unwilling to answer□ (ii)Low support□ (iii)Support□ (iv)High support□ (v)Very high support□

QUESTIONNAIRE-2

PRODUCT (RAILWAY SERVICE) RELATED QUESTIONS:

1. Is the service of Bangladesh Railway able to satisfy you and capable of accomplishing your expectation?

(i) YES \Box (ii) NO \Box

2. Is Bangladesh Railway giving you better service than other transportation?
(i) YES □
(ii) NO □

3. Do you think that Bangladesh Railway has enough equipment and manpower to give your desired service?

(i) YES 🗆	(ii) NO 🗆
(-)	(/

4. Is it possible to formulate a fundamental development of Bangladesh Railway without constructing its infrastructural change, modification and enlargement?
(i) YES

PRICE RELATED QUESTIONS:

5. Are you happy paying the price for that standard of service you are getting from Bangladesh Railway?

(i) YES \Box (ii) NO \Box

6. Are you getting proper customer care for the price you are paying?
(i) YES □
(ii) NO □

7. Do you see any advancement of Bangladesh Railway service with the present pricing structure?

(i) YES \Box (ii) NO \Box

8. Is the current pricing structure of Bangladesh Railway low?

(i) YES \Box (ii) NO \Box

PLACE (CHANNELS OF DISTRIBUTION) RELATED QUESTIONS:

9. Are you satisfied with the number of ticket counters BR has?
(i) YES □
(ii) NO □

10. Do you think that the railway stations are modern enough to deliver satisfactory services?

(i) YES \Box (ii) NO \Box

11. Do you think Railway stations are safe enough for you and for your luggage?
(i) YES □ (ii) NO □

12. Does Bangladesh Railway ensure door to door services for the passengers and commodities like road sector?
(i) YES □ (ii) NO □

PROMOTION RELATED QUESTIONS:

13. Do you see any advertisement of BR which motivates you to take their service?
(i) YES □
(ii) NO □

14. Do you think that the existing promotional activities are enough to attract customers towards the organization?

```
(i) YES \Box (ii) NO \Box
```

15. Do you think that BR will be able achieve a commanding position in transport sector without taking any significant promotional program?
(i) YES □ (ii) NO □

16. Do you see any seasonal discount, or any sort of discount fare rate for regular passengers?

(i) YES \Box (ii) NO \Box

PEOPLE (STAFFS) RELATED QUESTIONS:

17. Is the manpower structure of BR is huge enough to ensure customer care?
(i) YES □ (ii) NO □

18. Do you think that the existing railway executives and employees are performing their duties and responsibilities with sound co-ordination?
(i) YES

19. Are the existing appointed officers and employees of BR performing their relevant professional duties proficiently as well as with accountability?

(i) YES \Box (ii) NO \Box

20. Are the Officers and sub-ordinates of BR capable enough of playing effective role in providing their service to satisfy you more?
(i) YES □ (ii) NO □

APPENDIX-3

BÝnUnUDR Ae veR‡bm G¨Wlvgvb‡÷kb (AvB.ve.G) ivRkvnx vekhe`¨vjq, ivRkvnx/

বাংলাদেশ রেলওয়ের সার্ভিস মার্কেটিং সংক্রান্ত বিষয়ের উপরে মতামত পাওয়া i Dti tk hvî muavitbi Rb clinz cliquj v

we:`? Avcbvi Ael/wZi Rb" Rvbw/Q th GB Mtelbv gj-Z evsjvt`k tijltqi mwuFm gvtKnUs Gi Ae⁻v Rvbvi jt¶" cÜZKZ | Avgiv Avcbvt`i gj-"evb gZvgZ l civgk @Avkv KivQ | Avgiv Avk/m w`w'Q th, Avcbvi t`lqv G mKj Z_" m¤úY@Mvcb _vKte | Avcvbv t`lqv Z_" i'angvî G Mtelbv KvtR cü_vgK WvUv vntmte e"eüZ nte | cüZvU veewZi Rb" GKvU Kti cuEwe>`yt-j t`lqv AvtQ | cüZvU veewZ Avcvb th ve>`tjZ mg_@ Ktib Zv ve>`iy cvtk@UK (<) wPý w`b | t-tji ve>`ywj gZvgtZi vbgujvLZ gvî cüXvk Kti |

- K) DËi`v‡b B″Oly⁄c bB 🗌
- L) Kg mg_🗗 Kwi 🗌
- M) mg_B Kwi 🗆
- N) ‡ekx mg_🕅 Kwi 🗌
- 0) Lsytekx mg_ 🕄 Kwi 🗌

c<u>ög</u> Ask: e[°]w³MZ Z_[°]vewj

- K) DËi `vZvi bvgr
- L) †ckv
- M) ågbKZ tU‡bi bvg
- N) Mšé^{∵−}j
- 0) eZĝvb ŵKvbv

wZxq Ask: ckgvjv-1

(mKj DËi`vZvt`i D‡Ï‡K″c\\xZvt`

<u>K) cY" († i j l ‡q mwfm)</u>

- evsjv4`k tij l‡qi eZ@vb mwufm KvVv4gv h\$Vli Pwn`v Abryv¢i `e\$P|
 K) DËi `v¢b B"Q\$Vc bB □ L) Kg mg_€ Kwi □ M) mg_€ Kwi □ N) ‡ekx mg_€ Kwi □ 0)L\$v †ekx
 mg_€ Kwi □
- 2) KwLZ j ¶[¬] AR\$bi Rb[¬] evsjvt`k tij I tqi eZ§vb mweR KWvtgv cwieZ₽ Avek[¬]K |
 K) DËi `vtb B[¬]QVc bB □ L) Kg mg_₽ Kwi □ M) mg_₽ Kwi □ N) tekx mg_₽ Kwi □ 0)Lşy tekx mg_₽ Kwi □
- 3) f\u00e4jv mwuf\u00e7 KW\u00e4gvi Af\u00e4e hvl\u00e7umevi g\u00fvb Pigf\u00e4e wewN\u00e7 nt\u00e7\u00e7 nt\u00e7\u00e7
 K) D\u00e7i `\u00e4b B\u00e7\u00e4v bB □ L) Kg mg_\u00e7 Kwi □ M) mg_\u00e7 Kwi □ N) tekx mg_\u00e7 Kwi □ 0)L\u00e7 tekx mg_\u00e7 Kwi □
- 4) eZĝ¢b evsj¢`k ţij l ţqi mweſ mwuſſ KWV¢gv hvÎxt`i Kv¢Q Amţšţl RbK |
 K) DËi `vţb B″Q½ bB □ L) Kg mg_ſ Kwi □ M) mg_ſ Kwi □ N) ţekx mg_ſ Kwi □ O)Lşy ţekx mg_ſ Kwi □
- 5) GKwU fv¢jv mwnfm KvVv¢gv ev⁻évqtbi gva~tg evsjv4`k tij Itqi msKUmgn-KwUtq IVv m¤ff
 K) DËi `v¢b B″QV¢ bB □ L) Kg mg_@ Kwi □ M) mg_@ Kwi □ N) tekx mg_@ Kwi □ 0)Løy tekx
 mg_@ Kwi □
- 6) Abbyve mwufm KvVvtgvi gva"tg cwiPwjZ nq etjB evsjvt`k tijltqi KwrLZ j¶"gvÎv AR® e"nZ nt"Q|
 K) DËi `vtb B"Qby bB □ L) Kg mg_® Kwi □ M) mg_® Kwi □ N) tekx mg_® Kwi □ 0)Lyy tekx mg_® Kwi □
- 7) ‡U‡bi mgqvbgwZZv Avkve¨ÄK bq| K) DËi `v‡b B″Q½ bB □ L) Kg mg_@ Kwi □ M) mg_@ Kwi □ N) ‡ekx mg_@ Kwi □ O)Lgy †ekx mg_@ Kwi □

<u>L) gj-" (fvov)</u>

1) eZgvb mg‡qi Rb¨†i‡ji gj-¨(fvov) Am½wZc¥\$

K) DËi `v‡b B"QKj bB 🗆 L) Kg mg_® Kwi 🗆 M) mg_® Kwi 🗆 N) ‡ekx mg_® Kwi 🗆 O)Lşy tekx mg_® Kwi 🗆

2) KwvLZ j ¶" AR\$bi Rb" evsjv4`k tij l‡qi gj-" KWv4gv cwieZ® c\$qvRb| K) DËi `v4b B"OK bB 🗆 L) Kg mg_® Kwi 🗆 M) mg_® Kwi 🗆 N) ‡ekx mg_® Kwi 🗆 O)L&y tekx mg_® Kwi 🗆

3) GKvU Dbæ thvM4hvM gva``g n I qv m‡Ë¦I evsjvt`k tij I ‡qi gj-``KvVv4gv AZ``š(`e\$P| K) DË i `v4b B″QVy bB □ L) Kg mg_® Kwi □ M) mg_® Kwi □ N) ‡ekx mg_® Kwi □ 0)Lsy tekx mg_® Kwi □

4) cð`q gj-" (fvov) Abgv4Z evsj4`k tij I tqi hvívmvaviY chfB hvívtmev I mwfR t_tK evAZ nt"Q| K) DËi `v4b B"QKy bB 🗆 L) Kq mq_B Kwi 🗆 M) mq_B Kwi 🗆 N) tekx mq_B Kwi 🗆 O)Lsy tekx

K) DET 44D B"UNK DB LL KG MG_FKWTL M) MG_FKWTL N) 40KK MG_FKWTL V)LGY 10K MG_19 KWTL

5) eZgvb gj-KvVvtgv cwieZl® Kitj evsjvt`k tij Itq thvMvthvM gva"tg GKvU jiaZc¥®FnygKv ivLtZ cvite| K) DËi `v4b B″QVy bB □ L) Kg mg_l® Kwi □ M) mg_l® Kwi □ N) tekx mg_l® Kwi □ 0)Lny tekx

mg_19 Kwi 🗌

6) `e₽ gj-" (fvov) Kvlvtgv fvtjv mwlf@ ev-levqtbi t¶tÎ GKvU Ašlivq| K) DËi `v4b B″Qlý bB □ L) Kg mg_₽ Kwi □ N) mg_₽ Kwi □ N) tekx mg_₽ Kwi □ O)Lgy tekx mg_₽ Kwi □

7) gj-"KW/4gv cuieZ@Ki‡j AfišfixY thv//4hv//t¶‡Î evsjv4`k tijl‡q GKvU jiaZc¥9FvgKv ivL‡Z cvi‡e|

K) DËi `v‡b B"QKy bB 🗆 L) Kg mg_® Kwi 🗆 M) mg_® Kwi 🗆 N) ‡ekx mg_® Kwi 🗆 O)Lsy tekx mg_® Kwi 🗆

M) ⁻\u00fb (tijltqi m\u00e4_ m¤\u00e4\u00e7KZ ⁻\u00e4bmgn-)

1) eZ@vb mgtqi m4_ m½vZcY^qtmev cÖvtbi ~4tbi Afvte vsjvt`k tijltq Zvi KvvLZ j¶~ AR\$b e~_9nt~Q| K) DËi `vtb B~QKy bB □ L) Kg mg_B Kwi □ M) mg_B Kwi □ N) tekx mg_B Kwi □ O)Ley tekx mg_B Kwi □

2) Dchỳ tmev cồư bi 「j/~úb c端Zôubulli Dạo sa কার্যক্রম পরিচালনার ক্ষেত্রে ভালো ভূমিকা রাখবে। K) DËi `utb B"QKy bB □ L) Kg mg_ট Kui □ M) mg_ট Kui □ N) ţekx mg_ট Kui □ 0)Ley tekx mg_ট Kui □

3) tmev cwi tektbi ⁻j / ⁻vb mgn-hvÎvmvavi tYi Rb¨ Dchỳ bq | K) DËi `vtb B″QK bB □ L) Kg mg_₱ Kwi □ M) mg_₱ Kwi □ N) tekx mg_₱ Kwi □ 0)Lışı tekx mg_₱ Kwi □

4) Pjgvb tmev cövb gva¨g mgtqi mut_ ht_vchŷ bq/
K) DËi `vtb B"QK bB □ L) Kg mg_₽ Kwi □ M) mg_₽ Kwi □ N) tekx mg_₽ Kwi □ O)Lgy tekx
mg_₽ Kwi □

5) Pjgvb tmev cövb ⁻j/ ⁻vb mg‡ni cwieZ® Avek″K | K) DËi `v‡b B″Q½ bB □ L) Kg mg_® Kwi □ M) mg_® Kwi □ N) ‡ekx mg_® Kwi □ O)Lyy tekx mg_® Kwi □

6) eZgvb tmev cöv‡bi ⁻ý/ ⁻vb mgr+ cwieZfbi gva¨‡g cŵZôvbuU Av‡iv DcKZ n‡Z cvi‡e| K) DËi `v‡b B″QVç bB □ L) Kg mg_B Kwi □ M) mg_B Kwi □ N) ‡ekx mg_B Kwi □ 0)Lsy tekx mg_B Kwi □

7) Pjgub tmev cöub ~ubmgn-KuwLZ ch@qi huÎx AuKIb Ki‡Z e`_9n‡"Q| K) DËi `u‡b B"QKy bB 🗆 L) Kg mg_@ Kui 🗆 M) mg_@ Kui 🗆 N) ‡ekx mg_@ Kui 🗆 O)Lsy tekx mg_@ Kui 🗆 N) c**ü**Yv` bv 1) Pj gvb cůYv` bv bwiZ eZgvb mg‡qi mvt_ m½viZc¥9bq/ K) DËi `v‡b B"QKy bB 🗆 L) Kg mg_@ Kwi 🗆 M) mg_@ Kwi 🗆 N) ‡ekx mg_@ Kwi 🗆 O)Lsy tekx mg_19 Kwi 🗌 2) cÿyv`bv Kg@Pxi c`t¶c Mäy AZ"vek"Kxq/ K) DËi `v‡b B″O¥x bB □ L) Kg mg_€ Kwi □ M) mg_€ Kwi □ N) ‡ekx mg_₽ Kwi □ O)Ley †ekx mg_ 🗗 Kwi 🗌 প্রতিষ্ঠানটির বিক্রয় মনোভাবের অভাব ও অদক্ষতা রয়েছে। K) DËi `v‡b B″O¥x bB □ L) Kg mg_€ Kwi □ M) mg_€ Kwi □ N) ‡ekx mg_€ Kwi □ O)Ley †ekx mg_18 Kwi 🗌 4) eZgvb c¢Yv`bv bwZ hvîxM‡Yi Rb" Dch� bq/ K) DËi `v‡b B"QKy bB 🗆 L) Kg mg_@ Kwi 🗆 M) mg_@ Kwi 🗆 N) ‡ekx mg_@ Kwi 🗆 O)Lsy tekx mg_18 Kwi 🗌 5) Pj gvb c@Yv`bv bwZi cwieZ@Kiv c@qvRb/ K) DËi `v‡b B"OK¢ bB 🗆 L) Kg mg_® Kwi 🗆 M) mg_® Kwi 🗆 N) ‡ekx mg_® Kwi 🗆 O)Læy tekx mg_18 Kwi 🗌 6) bZbz cüyv`bv bwiz cüzôvbvUtK Avtiv jvfRbK Kti Zjzte K) DËi `v‡b B"OKy bB 🗆 L) Kg mg_19 Kwi 🗆 M) mg_19 Kwi 🗆 N) ‡ekx mg_19 Kwi 🗆 O)Ley tekx mg_18 Kwi 🗌 7) bZkr cÿYv` bv bwiZ hvî xmvavi Y‡K Avi I AvKó. Ki‡Z mnvqK n‡e| K) DËi `v‡b B"QKy bB 🗆 L) Kg mg_@ Kwi 🗆 M) mg_@ Kwi 🗆 N) ‡ekx mg_@ Kwi 🗆 O)Ley †ekx mg_18 Kwi 🗌

N) Kg@wnbx

1) evsjv‡`k †ij l‡qi Kg@wnbx Dchŷ cwigvb `¶ bq|

K) DËi `v‡b B"QKje bB 🗆 L) Kg mg_1 Kwi 🗆 M) mg_1 Kwi 🗆 N) ‡ekx mg_1 Kwi 🗆 O)Lsy tekx mg_1 Kwi 🗆

2) KgM#Yi g‡a" Avšť vefvMvq mgš¢nvbZv i‡q‡Q| K) DËi `v‡b B″Q½ bB 🗆 L) Kg mg_® Kvi 🗆 M) mg_® Kvi 🗆 N) ‡ekx mg_® Kvi 🗆 O)L&y †ekx mg_® Kvi 🗆

3) KgxMt¥i Zut`i ub‡R‡`i cwic¥[©] ¶Zv e¨enu‡ii A fve cwiju¶Z n‡"Q| K) DËi `v‡b B"QKj bB □ L) Kg mg_B Kwi □ M) mg_B Kwi □ N) ‡ekx mg_B Kwi □ O)Lsy †ekx mg_B Kwi □

4) hvÎxMtYi Pwn`vi m4_ tij I tqi KgMtYi Avkvbi∫c mvov cövb Kti bv|
K) DËi `v4b B″QK bB □ L) Kg mg_€ Kwi □ M) mg_€ Kwi □ N) tekx mg_€ Kwi □ O)Lsy tekx
mg_€ Kwi □

5) KwLZ hvîxtmev cü4bi Rb[®] Dchỹ cuigvY Rbeţji Afve iţqţQ| K) DËi `v4b B″QK bB □ L) Kg mg_@ Kwi □ M) mg_@ Kwi □ N) ţekx mg_@ Kwi □ O)Lşy tekx mg_@ Kwi □

6) tmev cövtbi `wqZ_imwl/Kfvte cvjtbi jt¶" KgMMtYi wbw`@ mgqšti Pjgvbfvte cük¶tYi cöqvRb itqtQ|

K) DËi `v‡b B"QKy bB 🗆 L) Kg mg_ê Kwi 🗆 M) mg_ê Kwi 🗆 N) ‡ekx mg_ê Kwi 🗆 O)Lşy tekx mg_ê Kwi 🗆

7) KgMMtYi hvîxtmev cövtb m‡PZbZvi Afve i‡q‡Q| K) DËi `v‡b B″QKy bB 🗆 L) Kg mg_@ Kwi 🗆 M) mg_@ Kwi 🗆 N) ‡ekx mg_@ Kwi 🗆 O)Lsy tekx mg_@ Kwi 🗆

MiZxq Ask: clkgvjv-2

K) cY" (tij I tq mmfm)

 K) evsjv4`k tijl‡qi mwuFm vK Avcbv4`i Pwn`v Ges AvKv-Lv ci‡Y m¶g?

 1) nïur
 2) bv

L) evsjvt`k tij I tq Ab¨vb¨ thvMvthvM gvaïtgi tPtq Atc¶vKZ Dbæi tmev cövb KitQ vK?
1) nïu □ 2) bv □

M) Avcub uK gtb Ktib, KuwLZ tmev cövtbi Rb^c evsjut^k k tij Itqi cöqvRbuq tjuKej I miÄvguv itqtQ?

1) nüu 🗌 2) bv 🗆

N) evsjvt`k tijltqi AeKvVv4gvMZ cwieZ®, cwigvR® I cwiea® Qvov vK GKvU tgšvjK Dbopb NUv4bv m¤@?

1) nüu 🗌 🦳 2) bv 🗆

<u>L) gj~ (fvov)</u>

K) evsjv4`k tijtqi tmevi gub Ablyvqx Avcbv4K th A_°cÖvb KitZ nt″Q, Zv4Z Avcvb vK mš6?
1) niu □ 2) bv □

L) cl) q A_@Abhyvqx Avcvb vK Dchŷ hvî x‡mev cv‡"Qb?
1) nïur □ 2) bv □

M) eZ@vb gj-"KvVv4gv Ae"vnZ ti‡L evsjv4`k tijl‡qi tKvb DbwZ t`L‡Z cvb vK?
1) nïu □ 2) bv □

N) evsjvt`k †ijl‡qi eZgvb gj-"KvVv‡gv vK vbgǽtii?

1) nïur □ 2) bv □

<u>M) ⁻ (b (‡ij l ‡qi mv‡_ m¤ú(KZ ⁻ (bmgn))</u> K) evsjvt`k †ij I ‡qi vUvKU KvDÈvi msL"v vK chvB? 1) nïu 🗌 2) bv 🗆 L) ht_vchŷ tmev cövtbi Rb¨evsjvt`k tij Itqi t÷kb mgn-uK ht_ó cwigvY AvampK? 1) nïu 🗌 2) bv 🗌 M) t÷kbmgŋy nK hvĺx I gvj vgvj cuienY I avi‡Yi Rb¨ h‡_ó cuigvY nbivc`? 2) bv 🗆 1) nïu 🗌 N) evsjvt`k tijlta vK Nti Nti hvÎvtmev I cY" tcwûvtbvi t¶tÎ moK vefutMi tPta tekv vbôqZv cövb Ki‡Q? 1) nïu 🗌 2) bv 🗆 N) c**ü**Yv`bv K) evsjvt`k tij I tqi tKvb veÁvcb vK AvcbvtK Zvt`i tmev MåtY AbyvävZ Kti? 1) nïu 🗌 2) bv 🗆 L) Pj gub c lyv`bv কার্যক্রম কি c liZôubulli c liZ hvÎx AuKI #Y ht_ó? 1) nïu 🗌 2) bv 🗆 M) Dtj র্রযোগ্য কোন প্রণোদনা কার্যক্রম গ্রহণ ব্যতীরেকে বাংলাদেশ রেলওয়ে কি যোগাযোগ ক্ষেত্রে সুদৃঢ় অবস্থানে DËiY KitZ cvite? 1) niu 🗌 2) bv 🗆 N) ubqugZ hvî xmvavi tY Rb" tKvb tqšmgy msukó Qvo, qj-"Qvo i tqtQ uK? 1) nïu 🗌 2) bv 🗆

<u>N) Kg@wnbx</u>

K) evsjv4`k † i j l ‡qi † j vKej KvVv‡gv vK hvÎx‡mev cövb vbvðZKi‡Yi Rb¨ h‡_ó?
1) nüv □ 2) bv □

L) evsjv4`k tijltqi eZgvb vbe®nx Avdmvil Kgv?`i `vvqZ;cvj‡b †Kvb mgšq̀nxbZv Av4Q e‡j Avcvb g‡b K‡ib vK?

1) nüu⊡ 2) bv □

M) evsjv4`k tij I tqtZ vbh& eZ@vb Auchnvi I KgnMtYi `wqZ;cvjtbi t¶tÎ `¶Zv I Revew`vnZvi
A fve itqtQ vK?
1) nïu □ 2) bv □

N) tmev cöv‡bi gva"‡g Avcbv‡K Avil mšvó cöv‡b evsjv‡`k †ijl‡qi Avdmvi I Zv‡`i Aaxb[~]ĺ KgPvixMY Zv‡`i cüqvRbxq fvgKv ivLvi Rb" h‡_ó Dch&j vK bv?

1) nüu 🗌 2) bv 🗆