THE SWOT ANALYSIS OF BTCL

BTCL

দেশ ও মানুষের সেবায়

Project Report on

THE SWOT ANALYSIS OF BTCL

Course

Project Work (BUS 498)

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EAST WEST UNIVERSITY

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April 18, 2010

Mr. M Sayeed Alam
Assistant Professor
Department of Business Administration
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Dear Sir

Here is a project report on **"THE SWOT ANALYSIS OF BTCL"** to fulfill the partial requirement of BBA program as the course Project Work (BUS 498).

It was a fantastic opportunity for me to prepare the paper under your guidance, which really was a great experience. I has worked hard and tried my best effort in order to prepare the project. I believe that it is an encouragement for the students to get involved with such process of reporting and a way to enrich knowledge. It will be a privilege for me to provide further clarification on this report whenever it is necessary.

Thank you.
Sincerely

Munshi Abdullah-Al-Mamun
2005-1-10-007

Acknowledgement

It was really a great challenge for me to prepare the project paper. First of all, I present my due regards to the Almighty, who has provided me the brilliant opportunity to build and complete this report successfully with good health & sound mind.

My honorable project supervisor **Mr. M Sayeed Alam** helped us all the way through. He also gave proper guideline about this project paper and also by not getting irritated with my unlimited questions. I really want to express my gratitude to him for giving valuable advice and time, which helped immensely in preparing this report.

This project paper reflects inspiration and efforts of some people. I hereby acknowledge my friends' contributions, which gave tremendous support and without which this term paper would be quite impossible to prepare.

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Executive Summary

Advances in telecommunication & information technology (ICT) have done more than anything else to drive the last decade's economic boom and the integration of markets around the planet. Since telecommunications play an important role in the development of ICT as well as socio-economic condition of a country, development of telecommunication is essential.

Bangladesh T & T Board (BTTB) which has become Bangladesh Telecommunications Company Limited (BTCL) in July 1, 2008, the only public sector telephone service provider, is doing the best with its limited resources to provide most advanced telecommunication services to its valuable subscribers.

BTCL has a firm policy to digitalize the complete network as soon as possible. Digitalization of BTCL network started back in the year 1983 and over the past few years, the installation of digital equipment has increased considerably. In the mean time, all the district headquarters & 377 upazilla's have been equipped with digital exchanges. Remaining upazillas will have digital exchange very soon.

In the age of information technology (IT), a robust and efficient national transmission system is required to support telecommunication and data communications, as well as the IT activities of a country. With this end in view BTCL is gradually installing and expanding Optical Fiber network and SDH microwave links throughout the country. Initiative has been taken to install optical fibre based access network.

BTCL has started providing Internet services. At present, the services cover 64 district headquarters and 377 upazillas and 16 growth centres. Plans are under way to extend the facilities to all upazilla headquarters very soon. BTCL is providing broadband data service and at present, there are 78 DDN nodes at 41 districts.

Consortium Submarine Cable has been formally inaugurated on 21st May, 2006 and connected to the global information super highway through consortium, enabling better overseas gate-way

facilities for data communications as well as voice communications for public and private operators. To connect the whole country with this Submarine Cable, different activities are taken. Besides BTCL, ISPs & different organizations are enjoying the service of submarine cable.

BTCL is implementing "10 (ten) lacs T & T Mobile phone (1st phase 2.5 Lacs)" project. A Public Ltd. Company namely "TELETALK Bangladesh Ltd" is providing Mobile Phone service to people. Programm has been taken to expand the service of the company.

BTCL is committed to expand the Telecommunication network of the country by introducing latest technology and also to contribute a sizable amount of revenue to Govt. exchequer. BTCL has taken a very big project to install 5 lac telephones in Dhaka & other major cities. Besides this, two major projects; one for development of interconnection scenario & another for development of internet & data communication scenario are also under process. BTCL expects to maintain its leadership role in telecom sector in the present multi-operator competitive environment.

Part 1: Introduction

1.1: Origin of the report

As student of the department of Business Administration, I am required to do a project paper in the course (BUS 498) & this paper is authorized by my honorable **Mr. M Sayeed Alam** . This project paper is assigned on January 29, 2010 and the submission date is April 26, 2010. As I am required to do my project paper, I preferred Bangladesh Telecommunications Company Limited (BTCL), formerly BTTB.

1.2 Objective of the Study

The main purpose of this report is to work on the SWOT Analysis of BTCL, formerly BTTB and give some strategic actions on the basis of the SWOT analysis.

1.3 Scope

In this "SWOT Analysis" report I am going to cover following areas of Bangladesh Telecommunications Company Limited (BTCL):

- General overview of the Telecommunication sector in Bangladesh
- Historical Background of Bangladesh Telegraph and Telephone Board (BTTB)
- SWOT Analysis of BTCL and possible strategic actions on the basis of SWOT information.

1.4 Methodology

To do the SWOT analysis of BTCL first I analyzed PESTL analysis and Michael Porter's five competitive forces model to find out the external and internal factors that affect the company directly and indirectly. Then analyzing these factors I did the SWOT analysis of BTCL and finally gave some recommendations that from my perspective will give BTCL competitive advantages over its competitors and BTCL will run more effectively than before.

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To do the SWOT analysis of BTCL I gathered information from

* Company's annual report
* Internet
* By conducting face to face interview with the employees of BTCL.

1.5 Limitation:

* I could not gather all the necessary information due to time constrains.
* Sometimes employees of BTCL. were not co-operative

Part 2: General overview of the Telecommunication sector of Bangladesh

2.1 Background

In the age of information technology (IT), a robust and efficient national transmission system is required to support telecommunication and data communications, as well as the IT activities of a country. Advances in telecommunication & information technology (ICT) have done more than anything else to drive the last decade's economic boom and the integration of markets around the planet. Since telecommunications play an important role in the development of ICT as well as socio-economic condition of a country, development of telecommunication is essential. It is important, therefore, to assess the performance of the service providers periodically to determine the quality of the outcomes they deliver and need for improvement. Such assessment is generally based on tracking public "expenditures" – an input measure – that fails to account for process measures such complaint resolution mechanisms or outcome measures. The fact is, with the same input, but better service quality, both process and output measures can be substantially improved.

2.2 Telecommunication sector of Bangladesh:

Bangladesh with an area of 1,44,000 sqr kilometers has currently more than 144 million populations. Dhaka its capital city with 12 million residents have high demand for telecom services; the other metropolitan cities such as Chittagong, Sylhet, Khulna, Rajshahi and Barisal have proportionately higher demand for telephone service as compared to the rest 56 district towns. The 460 thana headquarters and other commercially advanced places in the rural areas have also demand for telephone services which all need to be brought under a well developed broad based nationwide network of telephone service with easy access and connectivity with the global telecommunication system.

The telecommunications sector in Bangladesh is characterized by very low tele-density, inefficiency, and under-capitalization. BTTB did not have sufficient interconnection capacity to meet the demands of the mobile service providers. Historically, the state-owned BTTB has been the monopoly telephone service provider. The inability and inefficiency of state monopoly, as

well as revolution in the telecom sector, provided policy makers a recipe for devising competitive telecom service provisions for citizens. Fixed telephone with analogous, digital, NWD, ISD, Cellular mobile phone, internet service for data communication, VSAT services are already operating in Bangladesh. BTTB is main player providing fixed phone services. 5 mobile phone services Operators in partnership with foreign investors are providing GSM phone services some local and foreign companies are already in the race to operate PSTN service in the rural areas. Mobile phone services through satellite are also on way of introducing service in Bangladesh. BTTB as the state owned largest operator is providing the major services and is taking initiatives to expand the areas under its service network, fixed and mobile phone service. Approximately there are 9 lacs fixed telephone subscribers and 7 millions mobile phone subscribers. On the commencement of the Bangladesh Telecommunication Act, 2001 BTTB became and operator like other private operators and has to be corporatise within one year. Teledensity in Bangladesh is 0.5 lines per 100. High cost to access, $341 connection fees for each telephone, one of the highest in the world, and a lengthy waiting period -- average waiting period for a new telephone connection varies from three months to 4 years.

2.3 Historical Background of Bangladesh Telegraph and Telephone Board:

The Telegraph branch under the Posts and Telegraph Department was created in 1853 in the then British India and was regulated afterward under the Telegraph act of 1885. This was reconstructed in 1962 in the then Pakistan as Pakistan Telegraph and Telephone Department. After the independence of the People's Republic of Bangladesh in 1971, Bangladesh Telegraph and Telephone Department was set up under the Ministry of Posts and Telecommunications to run the Telecommunications Services in Bangladesh. This was converted into a corporate body named 'Telegraph and Telephone Board' by promulgation of Telegraph and Telephone Board Ordinance, 1975. In Pursuance of Ordinance No. XII of 1979 promulgated on 24th February, 1979; Telegraph and Telephone Board was converted to "Bangladesh Telegraph and Telephone Board" as a Government Board. Now it has become BTCL.

Bangladesh Telecommunications Company Limited	
BTCL	
Type	State Owned
Founded	July, 01 2008
Headquarters	37/E, Eskaton Garden, Telejogajog Bhaban, Dhaka, Bangladesh
Industry	Telecommunications
Products	Telephone, Fixed Lines, Internet
Website	http://www.btcl.gov.bd

BTCL or Bangladesh Telecommunications Company Limited, formerly BTTB, started its journey on July 1, 2008. The Bangladesh government initially owns all shares of BTCL but it would offload shares in the next one year for public. The value of BTCL is estimated to be at Tk 15,000 crores. BTCL has a total of 12,636 officials and staffs.

2.4 Services Provided by BTCL:

BTCL provides land-line telephone services in the urban areas, domestic long-distance and international services. Though the Bangladeshi government has given out nationwide PSTN licenses, the lucrative Dhaka market (which account for majority of the nationwide market) is still under the monopoly of BTCL.BTCL provides dial-up Internet access in all 64 districts of the country, making it the most-accessible Internet service provider in the country. As of January 2009 its total dial-up subscriber is 32,433. Since the beginning of 2007 BTCL have improved its Dial-up Internet service for better customer satisfaction. It also handles the .bd domain.

As of May 2008, the total number of subscribers of BTTB was 0.87 million .The BTCL also has plans to offer a wide range of broadband internet services soon. With this end in view BTT B is gradually installing and expanding Optical Fiber network and SDH microwave links throughout

the country. Initiative has been taken to install optical fiber based access network. BTTB now provides some value added services as Dial-Up and Leased Line Internet services, International Private Leased Circuit (IPLC) services, Digital Subscribers Line (DSL), Telex Services and Packet Switch Data Network (PSDN) services. The services offered by BTTB include public telephone services, telex, telegraphy, nation wide dialing, transmission links, trunk automatic exchange, overseas communication services, international trunk exchange, data communication service, internet services, digital subscribers line, and international private leased circuit.

2.5 Vision Mission Core Values

2.5.1 BTCL's Vision

Build a globally respected and enduring business consulting and information technology institution that partners with clients to enable them to transform their businesses so that they get closer to realizing their vision and become a leader in their industry.

2.5.2 BTCL's Mission

Help customers improve their company performance by providing world-class solutions via business and IT capabilities that leverage our globally integrated team of thought-provoking, passionate professionals.

2.5.3 BTCL's Core Values

Customer Partnership

We approach every client with a view to build a professionally enduring relationship.

Integrity & Accountability

We have the intellectual honesty to refuse opportunities that we cannot fulfill to the satisfaction of our clients, but once we commit we stand accountable.

Result Orientation

We leverage technology and embrace innovation with a single-minded focus on delivering leadership results for our clients.

Flexibility

We adapt our services and solutions to enable us to exceed our clients' expectations.

Care for the Individual

We value the cultural diversity of our employees, treat every individual with respect, and encourage all to realize their fullest potential.

Global Autonomy

We ensure global standards, while enabling local autonomy, to deliver high-quality, responsive, and personalized service.

2.6 Organizational structure of BTCL:

Bangladesh T&T Board is run as a government establishment under the Ministry of Posts and Telecommunications (MOPT). The Board Comprises of 1 (one) Chairman, 4 (four) full time members and 3 (three) part-time members, all are appointed by the government of the People's Republic of Bangladesh.
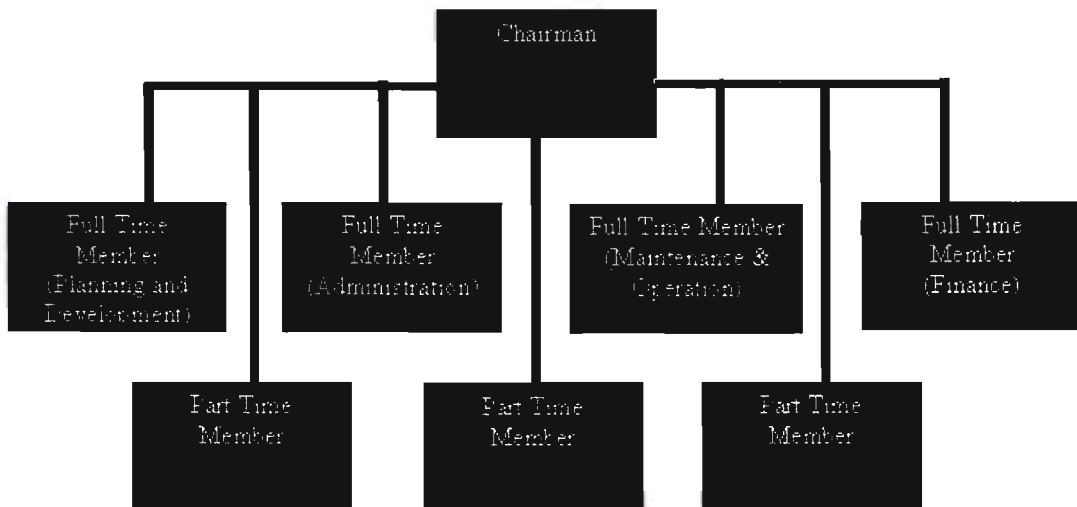
Fig-1: Organogram of BTCL

2.6.1 Privatization & Regulatory structure of Telecommunication Services:

The telecommunication sector of the country has been liberalized for private investment. Bangladesh T&T Board provides all types of telecommunication services in urban and rural areas while the mobile, paging and radio trunk services are offered by private operators. Recently a mobile phone service is being provided through Public Ltd. Co named `Teletalk' under the management of the government. Public/ Private operators were also given license to install and

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operate digital exchanges in rural areas and they would install telephone exchanges in phases.
Table-1 shows the list of the private & public operators in 2005-2006.

Table-1

Private Cellular Telecom. Operators in Bangladesh

SN	Name of the Operators	Function
1.	Pacific Bangladesh Telecom. Limited (PBTL).	Provide Cellular Radio Telephone services.
2.	Grameen Phone Ltd.	Provide Cellular Radio Telephone services.
3.	Seba Telecom. (Pvt.) Ltd.	Provide Rural Telecom .Services in 199 Upazilla's and Cellular Mobile Radio telephone systems
4.	Telecom. Malaysia International Ltd. (TMI)	Provide Cellular Mobile Radio telephone systems.
Public Limited Co		
1.	TeleTalk Bangladesh Ltd.	Provide Cellular Radio Telephone services.
Private fixed phone operators		
1.	Seba Telecom. Pvt. Ltd. (ISL)	Established, Operation & Maintenance of Digital Telephone in 246 Upazilla's (Rural area).
2.	Ranks Telecom. Ltd.	Installation & Operation of Telephone by fixed/ Wireless local loop in different geographical areas.
3.	Dhaka Telephone Co. Ltd.	DO
4.	M/s. Westek Ltd.	DO
5	Telebarta Ltd.	DO
6.	M/s. Jalalabad Telecom. Ltd.	DO
7.	National Telecom. Ltd.	DO
8.	Onetel Communications Ltd.	DO
9.	SA Telecom. Ltd.	DO
10.	Squar Informatix Ltd.	DO
11.	People's Telecom.	DO

2.6.2 Growth of Telephone in Bangladesh

The growth of telephone exchange capacity in Bangladesh in the last five years was on average more than one lakh line per year. The recorded pending demand of telephone has a trend of decreasing during this period. The following table shows the past trend of telephone growth in Bangladesh from 2000-2001 to 2005-2006 financial years.

Table: 2

Year	Type of Exchange	Number of Exchange	Exchange Capacity	Telephone Connection	Pending Demand
2001-2002	Manual	416	39,293	32,449	21,997
	Auto(Analog)	84	55,598	45,182	10,484
	Auto(Digital	168	6,51,187	5,28,300	1,78,630
	Total	**668**	**7,46,078**	**6,05,931**	**2,11,111**
2002-2003	Manual	359	33,260	26,045	24,017
	Auto(Analog)	53	18,820	13,640	6,592
	Auto(Digital	240	868,913	677,036	171,243
	Total	**652**	**920,993**	**716,721**	**201,852**
2003-2004	Manual	324	30,953	22,948	20,572
	Auto(Analog)	43	17,700	11,495	6,055
	Auto(Digital	271	917,696	775,715	150,115
	Total	**638**	**966,349**	**810,158**	**176,742**
2004-2005	Manual	298	27,100	18,659	16,657
	Auto(Analog)	45	17,400	10,999	5,914
	Auto(Digital	355	965,509	827,700	116,842
	Total	**698**	**1010,009**	**857,358**	**139,413**
2005-2006	Manual	217	18,388	11,815	
	Auto(Analog)	32	12,600	8,167	94,461
	Auto(Digital	484	1172,069	869,192	
	Grand Total	**731**	**1203,057**	**889,174**	**94,461**

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Fig - 2

Telephone Growth in Bangladesh.
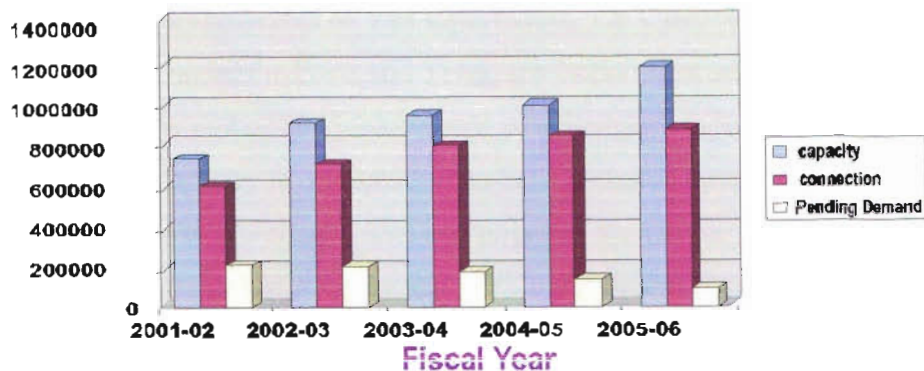
2.6.3 List of projects in the ADP (Annual Development Programme) of BTTB.

Following projects under BTTB are included in the Annual Development Program (ADP) during the fiscal year 2005-2006.

1. 2,66,000 lines Digital Telephone Installation (Including conversion of 76,000 lines to digital system)
2. Installation/ expansion of digital telephone exchanges in various districts of Bangladesh (Under PR China Credit)
3. Establishment of International Telecommunications System through Submarine Cable.
4. Installation and replacement of Radio links in different Upazillas of Bangladesh.
5. Installation of Digital Telephone Exchanges at Chittagong, Khulna and Sylhet (Under EDCF, Korea Loan)
6. Installation of Digital Telephone Exchanges at Upazilla and Growth Centres.
7. Installation of Digital Telephone Exchanges in Metropolitan Cities & Important district towns (1st Phase 1,10,000 lines)
8. Installation of Digital Radio Links & Telephone Exchanges in Chittagong Hill Tracts (Under PR China Credit).
9. 10 (Ten) Lac T&T Mobile Telephone (1st Phase-2.5 Lac).
10. Installation of Digital Telephone Exchanges at Keraniganj Upazilla in Dhaka District.
11. Introduction of Pre-Paid Services by BTTB.

2.7 Physical & technological resources:

2.7.1 Telephone Exchange Status of The Bangladesh T&T Board

The Telegraph branch under the Posts and Telegraph Department was created in 1853 in the then British India and at the end of 2005-2006 fiscal year Bangladesh T&T Board had 731 telephone exchanges with total capacity of 1203,057 lines. BTTB started operating digital local exchanges after installation of six NEC- NEAX 61E exchanges in the Dhaka Telecom. Region Network in 1990-91 fiscal year with initial total capacity of 26,000 lines. Upto 2005-2006 financial year one hundred forty one, seventy three, one hundred twelve, fifty three, sixty seven and thirty eight local digital exchanges were installed in Dhaka (S/N/E/W/Cen), Chittagong, Khulna, Rajshahi, Rangpur & Sylhet Telecom. Regions respectively. These were supplied and installed by NEC (Japan), Alcatel (France), Italtel (Itally), Ericsson (Sweden & Mexico), Netus (Turkey), CMEC, GDT and ZTE (China). Exchange status of BTTB as on June, 2005 and June, 2006 are given in the following Table-3 and Table -4 respectively.

Table-3

BTTB Telephone Exchange Status as on 30 June, 2005.

Region	Type	Number	Capacity	Connection	Pending demand
Dhaka (S)	Magneto	04	318	229	1,833
	C.B	02	200	166	356
	Auto(Analog)	04	1,800	1,419	568
	Auto(Digital)	21	169,301	163,859	15,238
	SUB-TOTAL	**31**	**171,619**	**165,673**	**17,995**
Dhaka (N)	Magneto	33	2,243	1,851	749
	C.B	04	643	586	654
	Auto(Analog)	02	400	270	87
	Auto(Digital)	60	265,570	239,840	28,940
	SUB-TOTAL	**99**	**268,856**	**242,547**	**30,430**
	Magneto	04	396	346	796
	C.B	00	00	00	00

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Dhaka (E)	Auto(Analog)	00	00	00	00
	Auto(Digital)	32	129,279	113,854	25,336
	SUB-TOTAL	**36**	**129,675**	**114,200**	**26,132**
Chittagong	Magneto	54	2,987	2,291	2,458
	C.B	19	2,885	1,840	1,439
	Auto(Analog)	12	3,800	2,628	1,751
	Auto(Digital)	54	137,574	126,427	30,236
	SUB-TOTAL	**139**	**147,246**	**133,186**	**35,884**
Khulna	Magneto	41	2,664	1,573	835
	C.B	32	5,200	3,453	1,331
	Auto(Analog)	15	5,800	3,239	1,070
	Auto(Digital)	84	115,704	82,857	5,073
	SUB-TOTAL	**172**	**129,368**	**91,122**	**8,309**
Rajshahi	Magneto	11	657	400	684
	C.B	14	1,825	1,111	1,160
	Auto(Analog)	01	500	367	400
	Auto(Digital)	52	51,431	34,003	3,266
	SUB-TOTAL	**78**	**54,413**	**35,881**	**5,510**
Rangpur	Magneto	32	1,764	1,161	251
	C.B	17	2,248	1,615	474
	Auto(Analog)	09	4,100	2,198	752
	Auto(Digital)	31	50,068	34,351	200
	SUB-TOTAL	**89**	**58,180**	**39,325**	**1,677**
Sylhet	Magneto	23	1,870	1,331	2,150
	C.B	08	1,200	706	1,487
	Auto(Analog)	02	100	878	1,286
	Auto(Digital)	21	46,582	32,509	8,663
	SUB-TOTAL	**54**	**50,652**	**35,424**	**13,586**
Country	Magneto	202	12,899	9,182	9,756
	C.B	96	14,201	9,477	6,901

Total	Auto(Analog)	45	17,400	10,999	5,914
	Auto(Digital)	355	965,509	827,700	116,842
GRAND TOTAL		**698**	**1010,009**	**857,358**	**139,413**

Table-4

BTTB Telephone Exchange Status as on 30 June, 2006.

Region	Type	Number	Capacity	Connection	Pending demand
Dhaka (S/N/E/W/Cen)	Magneto	26	1962	1,550	54,211
	C.B	04	480	394	
	Auto(Analog)	05	2,000	1,656	
	Auto(Digital)	141	604,908	538,665	
	SUB-TOTAL	**176**	**609,350**	**542,265**	
Chittagong	Magneto	51	2,732	1,998	26,028
	C.B	18	2,610	1,560	
	Auto(Analog)	13	3,800	2,473	
	Auto(Digital)	73	228,153	132,114	
	SUB-TOTAL	**155**	**237,295**	**138,145**	
Khulna	Magneto	34	1,889	1,102	2,560
	C.B	23	2,930	1,828	
	Auto(Analog)	10	3,600	1,937	
	Auto(Digital)	112	120,586	70,301	
	SUB-TOTAL	**180**	**129,005**	**75,168**	
Rajshahi	Magneto	09	484	334	1,311
	C.B	13	1615	829	
	Auto(Analog)	01	500	321	
	Auto(Digital)	53	58,697	33,201	
	SUB-TOTAL	**76**	**61,296**	**34,693**	

	Magneto	11	510	327	
	C.B	09	1,046	709	
Rangpur	Auto(Analog)	02	800	338	686
	Auto(Digital)	67	73,763	36,836	
	SUB-TOTAL	**90**	**76,119**	**38,210**	
	Magneto	13	720	592	
	C.B	04	150	127	
Sylhet	Auto(Analog)	01	-	-	8,692
	Auto(Digital)	38	74,148	39,002	
	SUB-TOTAL	**56**	**75,01**	**39,721**	
	Magneto	146	8,820	6,015	
Country	C.B	71	9,568	5,800	
Total	Auto(Analog)	32	12,600	8,167	
	Auto(Digital)	484	11,72,0698	8,69,192	94,461
GRAND TOTAL		**731**	**12,03,057**	**8,89,174**	

2.7.2 Public Telephones:

Several years back, public telephone services used to be provided through Coin Boxes in the urban areas and land line/ wireless Public Call Offices (P.C.O`s) in the rural areas. Service quality of these public telephones had been far from satisfactory. To improve the public telephone service, Cardphone systems were introduced in 1992 with programs of replacing the old coin boxes and P.C.O's . By June 2006, about 1,056 Card Phone booths were installed in different parts of the country . All Cardphones have access to nation wide dialing while 271 of them have international direct dialing facility. Due to better and easy public accessibility to telephone, this Cardphone service has become popular in the country. A program of installing card phones has been taken to cover all upazilla's and rural growth centres of the country.

2.7.3 Nation Wide Dialing (NWD) Services.

In Bangladesh Nation-wide long distance telephone dialing system was first introduced in 1983 employing NEAX-61E version of NEC exchange to link all the major cities of the country. Before that there were Subscribers Trunk Dialing (STD) services based on Analog EMD toll

switching system to link only a few cities of the country. By June, 2006; 441 stations including all 64 district headquarters and 377 Upazillas/ Growth centres were brought under direct dialing system. Total 47,123 NWD circuits were working by June, 2006. Details about the circuits are given in Table -5.

Table-5
Capacity & Working Circuits in the Trunk Automatic Exchanges (TAX's) as on 30 June, 2006.

Name of TAX	Capacity					Working Circuits					Total	
	KT	E-10	ZTE	AXE-10	S-12	KT	E-10	ZTE	AXE-10	S-12	Capacity	Working
Dhaka	-	7,320	-	11,529	-	-	7,320	-	8,571	-	18,849	15,891
Chittagong	8,296	4,148	-	-	-	4,423	4,148	-	-	-	12,444	9,211
Khulna	-	3,172	-	-	-	-	3,142	-	-	-	3,172	3,142
Rajshahi	-	3,72	-	-	-	-	2,501	1,830	-	-	3,172	2,501
Bogra	-	3,904	-	-	-	-	3,294	580	-	-	3,904	3,294
Barisal	-	-	2,135	-	-	-	-	1,098	-	-	2,135	1,830
Kushtia	-	-	854	-	-	-	-	-	-	-	854	580
Comilla	-	-	1,098	-	-	-	-	-	-	-	1,098	1,098
Noakhali	-	-	-	-	732	-	-	-	-	519	732	519
Mymensing	-	-	-	-	4,087	-	-	-	-	1,403	4,087	1,403
Sylhet	-	4,148	-	-	-	-	2,898	-	-	-	4,148	2,898
Faridpur	-	-	-	-	3,050	-	-	-	-	976	3,050	976
Jessore	-	-	-	-	4,362	-	-	-	-	1,007	4,057	1,007
Pabna	-	-	-	-	1,922	-	-	-	-	519	1,922	519
Rangpur	-	-	-	-	3,172	-	-	-	-	1,281	3,172	1,281
Dinajpur	-	-	-	-	1,830	-	-	-	-	976	1,830	976
GRAND TOTAL	8,296	25,864	4,087	11,529	19,455	4,423	23,303	3,508	8,571	6,681	68,930	47,123

2.7.4 Transmission System in Bangladesh:

Bangladesh is a riverine country, as the country's long distance transmission systems are mainly composed of microwave, UHF and VHF radio links. The Optical Fiber is also used in city & some district headquarter areas for interconnecting local exchange and Remote Switching Units (RSU) in multi exchange networks and also for interconnections between switching exchanges and microwave stations. BTTB's major microwave radio links, as listed in Table-6.

Table -6

Major Backbone Microwave Links as on 30 June, 2006.

Link	Type	Radio Channel Capacity	Make
Dhaka-Narayangonj-Hajigonj-Begum-Jorargonj-Chittagong	Analog	1800 Channel	NEC
Dhaka-Mankigonj-Faridpur-Magura-Jessore-Khulna	Digital PDH	140 Mb/s	Fujitsu
Dhaka-Mankigonj-Faridpur-Magura-Jessore-Khulna	Digital SDH	155 Mb/s	Nortel
Dhaka-Narsingdi-B.Braia-Shahzibazar-Moulavibazar-Sylhet	Digital STM-1	155 Mb/s	Nera
Madaripur-Gouranadhi-Barisal	Digital	34 Mb/s	Nera
Comilla-Hajigonj-Chandpur	Digital	34 Mb/s	Alcatel
Tangail-Madhupur-Mymensingh	Digital PDH	140 Mb/s	Alcatel
Dhaka-Talibabad-Tangail-Sirajgonj-Bogra	Digital PDH	140 Mb/s	Alcatel
Magura-Jhinaidah-Kushtia	Digital PDH	155 Mb/s	Nortel
Magura-Jhinaidah-Kushtia	Digital PDH	140 Mb/s	Fujitsu
Rajbari-Faridpur-Sadarpur-Madaripur-Gopalgonj-Khulan-Bagerhat-Pirojpur-Jalakathi-Barisal-Bhola-Laksmipur	Digital SDH	155 Mb/s	Harris
Madaripur-Shariatpur	Digital SDH	155 Mb/s	Harris
Barisal-Patuakhali	STM- SDH	155 Mb/s	Harris
Barisal-Patuakhali	Digital PDH	34 Mb/s	JRC
Patuakhali-Khepupara	Digital PDH	155 Mb/s	JRC
Pirojpur-Bagerhat-Khulna	STM-1 SDH	2 Mb/s	Harris
Patuakhali-Barguna	Digital PDH	34 Mb/s	JRC
Barguna-Khepupara	Digital PDH	960 Channel	Siemens

Bogra-Joypurhat-Phulbari	Analog	960 Channel	Fujitsu
Phulbari-Dinajpur-Thakoregaon	Analog	960 Channel	Fujitsu
Phulbari-Rangpur	Analog	960 Channel	Fujitsu
Thakoregaon-Atuari	Analog	155 Mb/s	Fujitsu
Bogra-Naogaon-Natore-Pabna-Kushtia-Jhinaidah-Magura-Jessore-Khulna	Digital SDH		Nortel
Bogra-Joypurhat-Phulbari-Dinajpur-Thakoregaon-Atuari	Analog	960 Channel	Fujitsu
Natore-Rajshahi	Digital SDH	155 Mb/s	Nortel
Chittagong-Satkania-Chiringha-Cox'sbazar	Digital	155 MBT	Harris
Chittagong-Betbunia	Digital	140 Mb/s	Alcatel
Satkania-Bandarban	Digital	150 MBT	Harris

Upazilla Headquarters (the smallest administrative units) are connected with their respective district headquarters through UHF links, most of which are now digital radio systems. Also some of the district headquarters are interconnected through digital UHF links.

2.7.5 Optical Fiber Link:

High capacity Optical Fiber System is in operation in the country from the year 1998. Optical Fiber Networks between Dhaka-Comilla-Feni-Chittagong-Cox's Bazar, Comilla-Brahmanbaria, Lakshmipur-Maizdi-Chaumohani-Feni, Kushtia-Meherpur-Chuadanga, Mymensingh-Sherpur, Mymensingh-Netrokona & Bogra-Punchagarh have been completed in June, 2006. The installation work of Optical Fiber networks between Dhaka-Bogra & Brahmanbaria-Sylhet are in progress. After completion of these networks; BTTB will have a complete backbone opticalFiber network from Chittagong to Panchagarh. BTTB's Optical Fiber links is shown in

Table -7

Optical Fiber Links as on 30th June, 2006.

Links	Type of Links	Made by
Dhaka-Comilla-Feni-Chittagong-Cox's Bazar	STM-1	Alcatel
Dhaka- Comilla	SDH STM-16	Alcatel
Comilla- B. Baria	STM-1	Alcatel
Feni- Begumgonj	STM-1	Alcatel
Begumgonj- Laxshmipur	STM-1	Alcatel
Maizdhi- Begumgonj	STM-1	Alcatel
Betbunia E. Station- Rangamati	STM-1	Shanghai Bell
Tecknuf- Chittagong	STM-1	Alcatel
Chittagong- Betbunia	STM-1	Alcatel
Rangpur-Palashbari-Bogra	SDH STM-1	Alcatel
Rangpur- Saidpur- Dinajpur- Thakoregaon- Panchagarh	SDH STM-1	Alcatel
Rangpur- Saidpur- Nilphamari	SDH STM-1	Alcatel
Rangpur- Lalmonirhat	SDH STM-1	Alcatel
Rangpur- Kurigram	SDH STM-1	Alcatel
Pabna- Shahjadpur	SDH STM-1	Alcatel
Sirajgonj- Shahjadpur	STM-1	Alcatel
Kushtia- Meherpur- Chuadanga	PDH STM-1	Shanghai Bell/ Alcatel
Satkhira- Khulna	SDH STM-1	Alcatel
Mymensingh- Sherpur	STM-1	Alcatel
Mymensingh- Netrokona	STM-1	Alcatel
Naogaon- Shantahar	SDH STM-1	ZTE

2.7.6 International Circuits

Following table shows that the minutes of international calls have significantly increased since 2002. The duration became more than doubled in 2005-2006 years compared to 2001-2002 financial year.

Table-8

Paid minutes of International circuits

Year	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006
Outgoing	39,269,674	76,553,864	102,573,809	218,681,769	234,323,381
Incoming	355,504,881	564,005,295	551,037,557	566,577,975	770,879,014
Total	394,774,555	640,559,159	653,611,366	785,259,744	1005,202,395

2.7.7 International telephone call facilities of BTTB

- **International Direct dialing (IDD)**

Subscribers may call overseas directly without operator assistance. Rates are calculated in 30 seconds units. BTTB also offers economy (reduce) rate from 16-00 GMT to 02-00 GMT & weekly & other Govt. holidays besides its normal rate.

Table-9

Call Charge

Normal call charge	Discount call charge
From. 02-00 GMT to 16-00 GMT	From. 16-00 GMT to 02-00 GMT & Weekly and Government holidays.

- **International Operator Assisted Call.**

i) **Person to Person Call :**

This is an operator assisted service for placing calls to a specific person. Charges do not begin acquiring until the desired party is reached and the caller is not billed if the party does not answer. BTTB's standard rate applies for the first three minutes and additional two minutes charges for P.P. facilities.

ii) **Telephone to Telephone call**

An operator assisted service for placing call to a specific telephone number is also available. The minimum charge for this call is three minutes .

iii) **Economy International Direct Dialing (E-IDD) :**

Subscribers may call, without operators assistance to 25 (Twenty five) overseas countries, namely- Australia, Canada, France, Germany, Hong Kong, Italy, Malaysia,

Singapore, USA, UK, China, South Korea, Taiwan, Thailand, Brunei, Switzerland, Norway, Sweden, Belgium, Netherlands, Luxemburg, Ireland, Spain, Greece & Austria by dialing "012" code from their telephones.

2.7.8 Telecommunication Satellite & Earth Stations:

A single telecommunication satellite in geo-stationary orbit 36,000 Kilometers above the earth can provide telecom services to one-third of the entire world. Advanced digital transmission technologies and more sophisticated use of radio wave in recent years have facilitated large volume of satellite transmission around the globe. To facilitate transmission of incoming & outgoing overseas calls through satellite. BTTB has established 4 Earth stations of which three earth stations are still in operation .The first earth station was installed at Betbunia near Chittagong in 1975. At present 856 (voice 847+VFT 3+ Data 6) International circuits with 12 countries are working through this earth station. The second earth station was installed in 1982 at Talibabad. This earth station has been taken out of operation. The third earth station which consists of largest International circuit facilities was installed in 1994 at Mohakhali. 4,211 (voice 3,950+ VFT 2+ Data 259) international circuits with 17 countries are working through this earth station. The fourth earth station was established at Sylhet in 1995 by British Telecom assistance to facilitate only BT-Sylhet traffic. 120 International circuits are working through this earth station. Moreover 131 Terrestrial International circuits of 2 countries are working via Microwave. These earth stations operating with INTELSAT satellites which are located in the Indian Ocean Region . The location detailes of these earth stations are given bellow:

Table-10

Name of E/S	Name of E/S	Carrier	Working with INTELSAT
Betbunia	A	IDR	60° E IOR
Mohakhali	A	IDR	64° E IOR
Sylhet	F3	IDR	62° E IOR

2.7.9 International Switching Centers

International switching centers are mainly responsible for immediate selecting and connecting the appropriate circuit for outgoing calls and sending the necessary information to the receiving country's switch to complete the calls. At present BTTB has three international switching centers (ISC) of which two are located at Mohakhali & one at Moghbazar. ISCs of Moghbazar is of type NEAX-61K and NEAX-61E & ISC at Mohakhali is of NEAX-61E & AXE-10 type.

2.7.10 International maritime Satellite Communication:

INTELSAT satellite links with fixed Earth Stations for overseas communication while INMARSAT (International maritime Satellite Communication) provides mobile communication services for ships and aircrafts. INMARSAT service is the mobile satellite communication system that links the mobile earth station on vessel or aircrafts with land earth stations around the world via INMARSAT satellite in geo-stationery orbit. This service makes it possible to get in touch with virtually any location around the world 24 hours a day with high quality communications ranging from telephone & data communications. Recent development of portable terminal has made it possible for customers to take advantage of INMARSAT service from remote locations also. Till to date BTTB has five INMARSAT-A Terminals which is operating through one LES (Land Earth Station) located in Jeddah. Besides this, according to IMN number allocated by BTTB, there are two numbers B-type (Land Mobile), 35 numbers C-type (Maritime Mobile) and 5 numbers Mini-M type Terminal working in commercial basis.

2.7.11 Internet & Data network :

BTTB is now providing Internet access services to its valued subscribers. The services include dial up access service, leased access services for enterprises, access for local ISPs, mail, Web hosting and .bd name registration and DNS services. Subscribers in all 64 district H/Q and 371 upazillas/ growth centres having Digital Telephone facility is now under internet coverage. It has Internet backbone connectivity of 2 STM-1 (155 Mbps each) through Singapore & France. Capacities of existing Nodes of digital Data Network (DDN) are expanded to 70 in 41 districts.

2.7.12 Submarine Cable:

Bangladesh has officially connected to the Information Super Highway through Submarine Cable since May, 2006. Presently 5,055 voice circuits are in operation with different countries through Submarine Cable and 2 STM-I is designated for Internet backbone through Singapore and France. 3 IPLC circuit have been opened with three companies. In the mean time, 66 ISP (International Service Providers) have been connected through Submarine Cable System. Bangladesh is earning Revenue from Submarine Cable. Besides, these, installation of ITX, TAX, Access Network, and VOIP Platform under this project are under process.

2.7.13 International Correspondence:

International Telecommunication also depends on countries sharing their information with the rest of the world. Close working relationships among different international organization and a spirit of international co-operation are essential in this regard. By strengthening relationship with various international organizations BTTB aims to contribute to the advancement of International telecommunication in Bangladesh. In this context BTTB maintains relation with International and Regional groups like International Telecommunication Union (ITU), Intelsat, INMARSAT, APT, SEA-ME-WE-4 etc. for sharing the service facilities and responding to the requests of mutual interest.

2.7.14 Private Telephone Service in Bangladesh

Bangladesh Telecom Regulatory Commission (BTRC), which was set up in January 2002, has divided the country into five zones namely:

- Central
- North-East
- North-West
- South-East and
- South-West

2.7.15 Licensing Situation

BTRC awarded licenses for four zones, except the central zone comprising Dhaka city, Jinjira, Savar, Narayanganj district headquarters, Gazipur district headquarters and Tongi. BTRC

finalized the frequency distribution to 19 private licensees. Following 17 names have been found among the 19 companies:

1. Tele Barta Limited
2. National Telecommunications Ltd.
3. Peoples Telecommunication and Information Services LTd.
4. Bashundhara Communications Network Limited
5. Keari Telecom (received license in August 2004 for Chittagong and Sylhet regions)
6. GEP Telecom Limited
7. QC Telecom Limited
8. One Tel Telecommunications Limited, a joint venture of Nitol Group and Absco Limited
9. Jalalabad Telecom Limited (JTL)
10. Bangla Phone, a joint venture of Nitol Group, Technoheaven Co Ltd and Bengal Communications International Inc.
11. Westeck Limited, a joint venture project of Westeck.com Inc. USA and Westeck Limited, Bangladesh, will also launch service in
12. RanksTel
13. Dominox Limited
14. Dhaka Telephone Co Ltd.
15. Square Informatix Ltd.
16. SA Telecom Systems Ltd.
17. Nextel Telcom Ltd.

2.7.16 Zone-Wise License of Different New Competitors

Following companies received license for all four zones (South-East, North-East, South-West and North-West)

- Tele Barta Limited
- Dhaka Telecom Limited
- National Telecommunications Network
- Peoples Telecom
- Bashundhara Communications Network Limited

Following companies received licenses for two zones:

- Keari Telecom (received license in August 2004 for Chittagong Sylhet regions)
- GEP Telecom Limited
- QC Telecom Limited
  - initially will launch service in South-East Zone consisting of Brahmanbaria, Comilla, Chandpur, Lakshmipur, Noakhali, Feni, Chittagong, Cox's Bazar, Khagrachhari, Rangamati and Bandarban

- Ranks Telecom Limited, a venture of Rangs Group

Following companies received license for one zone:

- Dominox Telecom Limited,
- OneTel Telecommunications Limited, a joint venture of Nitol Group and Absco Limited
- Jalalabad Telecom Limited (JTL)
  - East zone including Sunamganj, Sylhet, Habiganj, Moulvibazar, Sherpur, Jamalpur, Netrakona, Mymensingh, Kishoreganj, Tangail, Munshiganj, Manikganj, Narayanganj excluding the district headquarters, Gazipur excluding the district headquarters, Tongi, Dhaka excluding Dhaka city, Jinjira and Savar
- Bangla Phone, a joint venture of Nitol Group, Technoheaven Co Ltd and Bengal Communications International Inc.
- Westeck Limited, a joint venture project of Westeck.com Inc. USA and Westeck Limited, Bangladesh, will also launch service in South-East Zone consisting of Brahmanbaria, Comilla, Chandpur, Lakshmipur, Noakhali, Feni, Chittagong, Cox's Bazar, Khagrachhari, Rangamati and Bandarban. It will operate in the first stage in Chittagong, Chittagong Hill Tracts, Noakhali and Comilla areas at an initial target of one lakh subscribers

2.7.17 Frequency Allocation

According to a recent decision by the BTRC, the 19 private companies will get frequencies in 1800 and 1900 Mega Hertz.

The spectrum department of the BTRC has recently allocated the frequency to 10 companies among the 19 companies. These are:

1. Tele Barta Ltd

2. Bashundhara Communications Network Limited (BCNL),

3. RanksTel,

4. OneTel Communications Ltd. (OneTel),

5. Jalalabad Telecom Limited (JTL),

6. Banglaphone,

7. Westeck Telecom Limited,

8. Dominox Limited,

9. GEP Telecom and

10. Dhaka Telephone Co Ltd.

2.7.18 Major telecommunication projects conceived by BTTB for future implementation:

BTTB has prepared a number of project documents for future implementation, which are sent to the government at different times for consideration, approval and fund mobilization (from external & internal sources). Name of the projects conceived by BTTB are given below

A   Development of telecommunication networks.

B   Expansion of Internet and Data Network throughout Bangladesh (Project INFO-BAHAN).

C   Development of Infrastructure in Chittagong Hill tract region.

D   Modernization & Establishment of GMDSS watal stations at at Chhilimpur & Mongla.

2.8 Financial Structure of BTCL:

2.8.1 Revenue Income for 2005-2006.

Revenue collection in the financial year 2005-2006 was TK 13,162.75 million against the target revenue of TK 17,720.00 million. There was a shortage of TK. 4,557.25 million from the target amount. This collected revenue was 8.62% less than the collected revenue of 2004-2005 financial year

2.8.2 Reasons for fall of Revenue are as follow:

A   From the fiscal year 2003-04, NWD & international call charges have been reduced substantially.

B   Telegraph service is diminishing day by day.

C   Telex service has already been closed from 1st April, 2006.

D   Telephone revenue is falling down since 2001-2002 due to following reasons :

(1) Growth of mobile phones and introduction of private land phones.

(2) Royalty and fees of frequency charges used to be collected by BTTB, are now collected by BTRC.

(3) International incoming calls are reducing due to illegal call termination and VOIP.

However, Inspite of these limitations, BTTB achieved a satisfactory level of revenue during the fiscal year 2005-2006.

A comparison of revenue collection, expenditure and surplus for the last five years from 2001-2002 to 2005-2006 are shown in Table-11 and Fig.- 3.

Table-11

A Comparison of Revenue Collection, Revenue Expenditure and Surplus

(Tk. in milion)

Year	Revenue collection	Expenditure	Surplus
2001	15830.52	4635.41	11195.11
2002	15448.00	5884.31	9563.69
2003	15311.47	6090.25	9221.24
2004	14247.83	8189.24	6058.59
2005	13162.75	8245.59	4917.16

1 US Dollar = Tk 69.28 (On June, 06)

Fig - 3

Fiscal Year

28
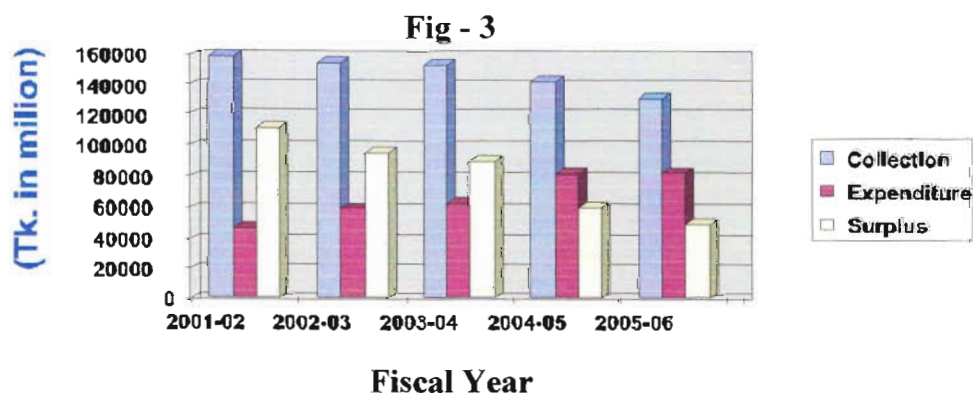
2.8.3 Revenue Collection.

A statement showing billed amount, revenue collection and receivables for the year 2004-2005 and 2005-2006 are shown in Table-12. Table -13 shows the service wise revenue collection for the year 2004-2005 and 2005-2006. Service wise revenue collection along with the percentage of yearly increase/ decrease of such collections for the periods from 2001-2002 to 2005-2006 are shown in the Table-14

Table -12.

Revenue Collection and Revenue Receivable.

Description	Taka in Million	
	2004 - 2005	**2005-2006**
Receivable amount as on beginning of financial year	6166.36	4755.20
Bills issued during the financial year	12835.66	11140.10
Total Receivable amount during the financial year	19003.02	15895.30
Actual Receipt during the year	14247.83	13162.75
Receivable amount carried over to the next financial year.	4755.20	2732.55

Table-13

Service wise Distribution of Revenue Collection in 2004-2005 and 2005-2006

Name of Service	2004 - 2005		2005-2006	
	Taka in Million	**Percentage of Total**	**Taka in Million**	**Percentage of Total**
Telegraph	3.87	0.03%	15.88	0.12%
Telephone	14064.98	98.72%	12995.61	98.73%
Telex	49.45	0.35%	64.61	0.49%
Others	129.54	0.90%	86.65	0.66%
TOTAL	14247.83	100%	13162.75	100%

Table -14

Rate of Change of Year wise Revenue Collection against Different Services

(Tk. in million)

Service	Item	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006
Telegraph	Revenue	8.09	6.84	4.88	3.87	15.88
	Growth	(-) 24%	(-) 15.4 4%	(-) 28.72%	(-) 20.70%	310.73%
Telephone	Revenue	15385.30	15139.87	15100.77	14064.98	12995.61
	Growth	21%	(-) 1.6%	(-) 0.26%	(-) 6.86%	(-) 7.60%
Telex	Revenue	228.19	212.55	151.17	49.45	64.61
	Growth	162%	(-) 6.86%	(-) 28.88%	(-) 67%	30.67%
Others	Revenue	208.93	88.74	54.66	129.54	86.65
	Growth	(-) 6 %	(-) 57.52%	(-) 38.40%	137%	(-) 33.10%
Total	Revenue	15830.52	15448.00	15311.47	14247.83	13162.75
	Growth	22%	(-) 2.4%	(-) 0.88%	(-) 6.95%	**(-) 8.62%**

2.8.4 Annual Development Program (ADP) for Capital Investment.

Every year capital investment is made in BTTB through the Annual Development Program (ADP) of the government under different projects which creates fixed assets for BTTB. The Annual Development Program for the year 2005-2006 and the actual amount spent under this program for 11 (Eleven) projects are furnished in Table-15.

Table - 15.

BTTB Investment in 2005-2006 through ADP on 11 (Eleven) projects.

(Tk. in million)

Item	Local Currency	Foreign Currency	Total
Allotment	4450.10	2553.50	7003.60
Expenditure	3165.82	1940.04	5105.86
Savings	1284.28	613.46	1897.74

2.8.5 Allotment & Expenditure under Asset Mobilization Head :

Allotment & the actual amount spent under BTTB's 'Asset Mobilization' head for the financial year 2004-2005 & 2005-2006 are furnished in Table-16

Table - 16

(Tk. in million)

Fiscal Year	2004-2005	2005-2006
Allotment	609.92	565.00
Expenditure	607.52	564.96
Savings	**2.40**	**0.04**

2.9 Human Resources Development (HRD) & Social Welfare Activities

2.9.1 Number of Revenue Posts in BTTB.

There are 19,409 different revenue posts (working position) in BTTB which are classified into following four service classes.

Class I Service	:	740	Posts
Class II Service	:	611	Posts
Class III Service	:	14,318	Posts
Class IV Service		3,740	Posts
Total	:	**19,409**	**Posts**

2.9.2 HRD activities in BTTB.

As the basic operator for telephony, overseas carrier and transmission network BTTB has enormous responsibility to keep pace with the tremendous development and globalization of telecommunication and information technology. Human Resource Development (HRD) is very essential for this purpose

To enhance the efficiency and quality of services of Bangladesh Telegraph and Telephone Board, to update the technical knowledge and skill of personnel and to install new technology in the Telecom. sector special emphasis is given to the in-service training activities. In service

training for newly recruited engineers and refresher training of other officers are carried out in Telecom. Staff College (TSC), Gazipur and that for the employees are usually carried out in Telecom. Training Centres (TTCs) located at Dhaka, Bogra and Khulna and in other sub-centres.

The Telecom. Staff College (TSC) at Gazipur (near Dhaka) established in 1987 with ITU & UNDP assistance has already put its marks as one of the leading institutes for telecom. training in this region. It has all the infrastructure facilities and equipment including resource personnel to establish itself as one of the best training centres of country. Recently, BTTB has taken steps for Up-gradation of TSC and TTC's for training in Computer, Access Network, NGN, Marketing etc.

Table-17
Courses conducted in TSC, Gazipur in the fiscal year 2005-2006 are as follows:

Sl. No	Name of Course	Participants	Duration of the Course
	Regular Course		
1	ADE / Batch	39	02 Years
2	ADE / Batch	18	02 Years
3	AO / Batch	09	02 Years
	Refreshment Course		
1	Ericssion Switching (AXE).	27	06 Days
2	General Management (GM).	15	02 Days
3	Optical Access Network (OAN).	04	03 Days
4	ZTE Switching (ZXJ).	15	03 Days
5	Computer Operation & Hardware	19	09 Days
6	Internet Protocol (IP).	19	03 Days
7	Next Generation Network (NGN).	11	02 Days
8	Global System for Mobile Com. (GSM).	13	04 Days
9	Financial Management.	09	03 Days
10	Cable fault localization/ Out Side	07	01 Days

	Plant.		
11	SDH/ PDH system.	11	02 Days
12	Telecom. Marketing (TM).	08	02 Days
13	Internet System & Broadband Service.	11	02 Days
14	Shanghai Bell switching (S-12).	15	02 Days

2.9.3 Training in TTCs :

Training activities of Telecom. Training Centres at Dhaka, Khulna, Bogra and other Sub-centres for the year 2005-2006 are as follows:-

Category of Course	No. of Courses	No. of Participants	Man-month
Regular Course	17	392	1,413.00
Refresher Course	68	263	82.50
Total	**85**	**655**	**1,495.50**

Table-18

2.9.4 Foreign Training:

During the fiscal year 2005-2006, 95 Officers of Bangladesh T&T Board received foreign training in about 30 different Courses on Telecom. and Relevant subjects held in China, Japan, India, Turkey, South Korea & Thailand. The foreign training activities for the year 2005-2006 are described below.

Table-19

Sl. No.	Name of Course	No. of Participants	Enterprising Agencies	Duration
1	Wireless Communication Technology.	01	APT, Bangkok.	10 days
2	C-Type Cable Jointing.	01	Fujitsu, Japan.	12 days
3	International ICT Expo-2005 & Study visit.	03	Huawei Tech., China.	07 days
4	SEA-ME-WE-44 Testing & Performance	01	Submarine Cable Project.	04 days
5	Evaluation Working Group.	01	JICA, Japan.	46 days
6	Network of Rural Community Information & Infrastructure.	03	CTO, London.	12 days

7	Training on Digital Switching.	03	Huawei Tech., China.	41 days
8	Broadband World Forum Europe-2005 & Study Visit.	01	Huawei Tech., China.	08 days
9	IT/ Wireless Network Communication, China-2005	05	Huawei Tech., China.	11 days
10	CDMA Technology.	01	South Korea Govt.	28 days
11	Digital Switching Equipment.	10	ZTE Corp., China	10 days
12	Broadband Technology & Services.International Telecom. Network (Fiver Optic Cable Engineering).	01	APT, Bangkok	13 days
13	IT/ Wireless Network Communication, China-2005	02	Japan Govt.	40 days
14	Telecom. Standarization-II	01	Japan Govt	33 days
15	Fiver Optic Outside Plant Engineering.	01	Japan Govt	43 days
16	SEA-ME-WE-4 AR & RS-7.	01	Submarine Cable Project.	03 days
17	Optical Fiver SDH & NMS.	08	Hesfibel, Turkey.	38 days
18	21st Century Communication World Forum & Study visit.	02	Huawei Tech., China.	12 days
19	E-government & ICT.	01	APT, Bangkok	07 days
20	Optical Fiver Cable Technology.	01	APT, Bangkok	07 days
21	GMT-2006□Planning, Designing, Expending & Proper	02	BTTB.	04 days
22	Operation and Mtce. of all system.	10	Huawei Tech., China.	45 days
23	MSC system.	06	Huawei Tech., China.	45 days
24	BSS system Communic Asia-2006 & Study Visit.	07	Huawei Tech., China.	45 days
25	Communic Asia-2006 & Global NGN	04	Huawei Tech., China.	12 days
26	Trends.	10	ZTE Corp, China.	09 days
27	APT Operators Forum.	01	ZTE Corp, China.	03 days
28	Network Planning	03	APT, Bangkok	45 days
29	GPRS.	01	Huawei Tech., China.	45 days
30	S-12 Digital Switching.	03	Huawei Tech., China	20 days
		01	CMEC, China.	10 days

2.9.5 Participation in foreign factory testing/ seminar/workshop/meeting :

a 720 officers/ officials of Bangladesh T&T Board participated in 29 (Twenty Nine) different types of factory tests /seminars / workshops / meetings inside the country during the fiscal year 2005-2006.

b 88 Officers of Bangladesh T&T Board participated in 46 different types of factory testing /seminar / workshop / meeting abroad during the fiscal year 2005-2006.

2.9.6 Social welfare activities in Bangladesh T&T Board.

Bangladesh Telegraph and Telephone Board with its limited resources provides different welfare facilities to the members of its staff .Following sanctions were made to meet-up several expenditures on welfare activities in the Bangladesh Telegraph and Telephone Board in the 2005-2006 fiscal year.

Table-20
Expenditures on welfare activities in BTTB in the 2005-2006

Sl. No	Head of Expenditures	Allocation & Actual Expenditure
01	Sanction of benevolent fund to the employees of Bangladesh T&T Board.	Tk. 17,36,700.00
02	Sanction of education fund for the dependents of Bangladesh T&T Board employees	Tk. 7,00,000.00
03	Sanction of grant to about 40 educational institutes including schools, colleges, mosques, and madrasahs under Bangladesh T&T Board to meet-up partial need of their yearly budget.	Tk. 24,53,500.00
04	Sanction of grants for central sports including games as Volley ball, Cricket, Badminton and other indoor games.	Tk. 2,30,000.00

Part 3: SWOT analysis of BTCL and possible strategic solutions

3.1 The SWOT Analysis Of BTCL:

		Internal	
	Strength	**Weakness**	
Positive	1. BTTB is the state owned largest operator providing fixed phone services in Bangladesh. 2. BTCL is the only landline service that offers fax and internet facilities and it has network and offer telecom installations throughout the country. 3. BTCL has the ability to provide customers with truly integrated service package that includes fixed line, internet facility and non-payment channels. 4. Experience in telecom sector since 1979.	1. Brand image of BTCL is worse than the other similar types of companies. 2. BTCL does not have the necessary equipments to utilize the large quantity of available Bandwidth of submarine cable. 3. Organization's CSR activities are poorer compare to other telecommunication companies. 4. The waiting time for getting connection of BTCL is more than the private mobile companies. 5. BTCL has inadequate skilled employees than the private mobile companies. 6. Absence of a strong independent regulatory body for BTCL. 7. Service quality is poorer compare to other telecommunication companies. 8. Corruption of the employees in BTCL made the organization unproductive. 9. BTCL did not have sufficient interconnection capacity to meet the demands of the mobile service providers.	**Negative or potential to be negative**

| Opportunities	Threats	
1. Government has recently corporatised BTCL and appointed new board of directors to improve the service quality. 2. Government has fixed the call rate for all NWD calls that is 0.30 Tk/min land phone and 0.65 TK/min for mobile phone at any time. 3. Government has increased the tax and tariff on mobile set and sim in the new budget. 4. There is a plenty of untapped potentials in the telecom sector that can be exploited through quality network and low tariffs by BTCL.	1. Growth of mobile phones and introduction of private land phones. 2. People can get mobile connection with set with a cheaper rate than before. So they prefer mobile phone then land phone. 3. The services and other facilities of the mobile companies are better than BTCL. 4. Huge investment in promotional activities like advertisement and CSR activities of the mobile companies creates good impression in consumers' mind than BTCL.	
	External	

Findings:

Of the 32 respondents 100% agreed that they are the subscriber of BTCL.

86.9% respondents agreed that BTCL is the largest operator providing fixed phone services in Bangladesh with superior service quality while 3.1% remain neutral. 6.3% respondents disagreed that BTCL offers fax and Internet facilities and it has proper network and offer telecom installations throughout the country while 40.6% agreed but majority of the respondents remain neutral about the fact. In response to the question that the manpower and technology of BTCL is sufficient 71.9% agreed with the fact while 18.8% expressed their negative answer. 43.7%

Bar diagram represents the strength of BTCL
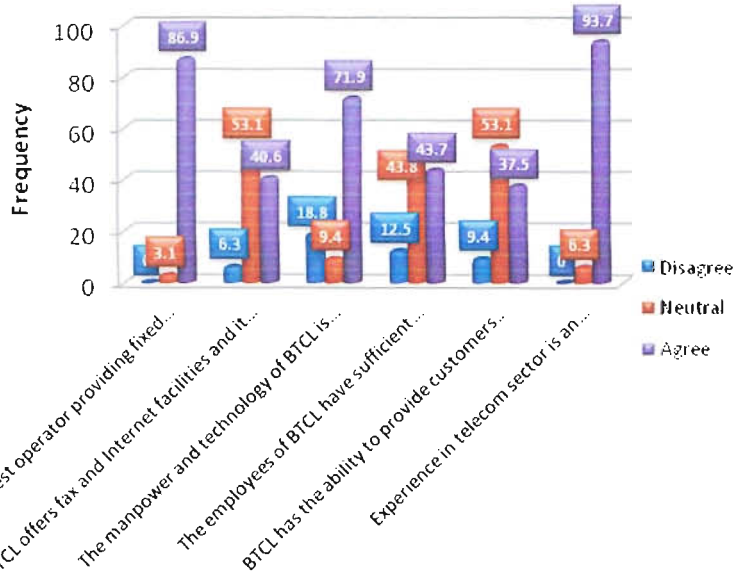
of the respondents agreed that the employees of BTCL have sufficient knowledge and training to meet the customer demand while 43.8% disagreed about the fact. In response to the question that BTCL has the ability to provide customers with truly integrated service package that includes fixed line, Internet facility and non-payment channels 53.1% respondents remain neutral while 37.5% expressed their positive view. 93.7% respondents agreed that experience in telecom sector is an advantage for BTCL.
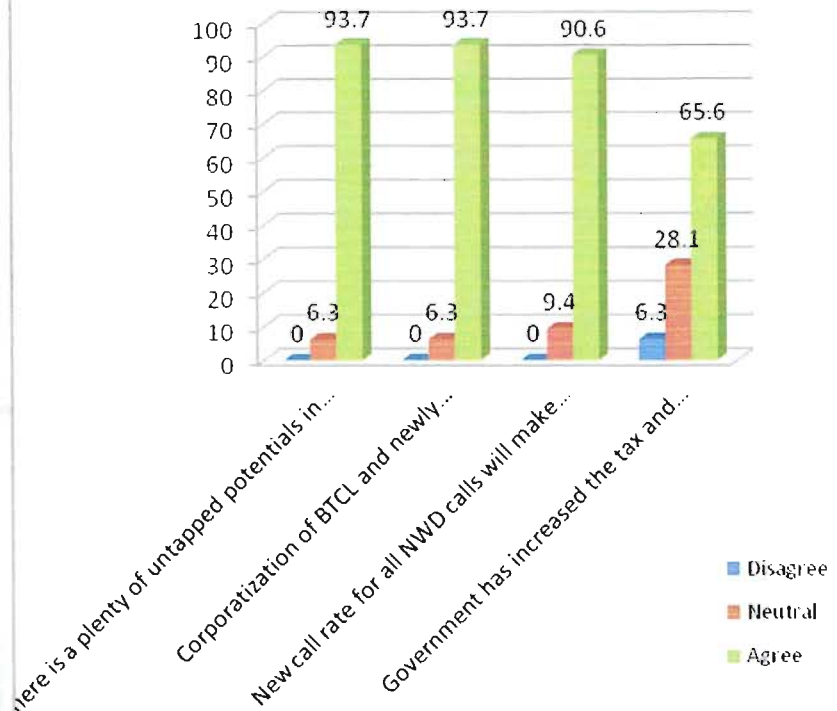

Bar diagram represents the weakness of BTCL
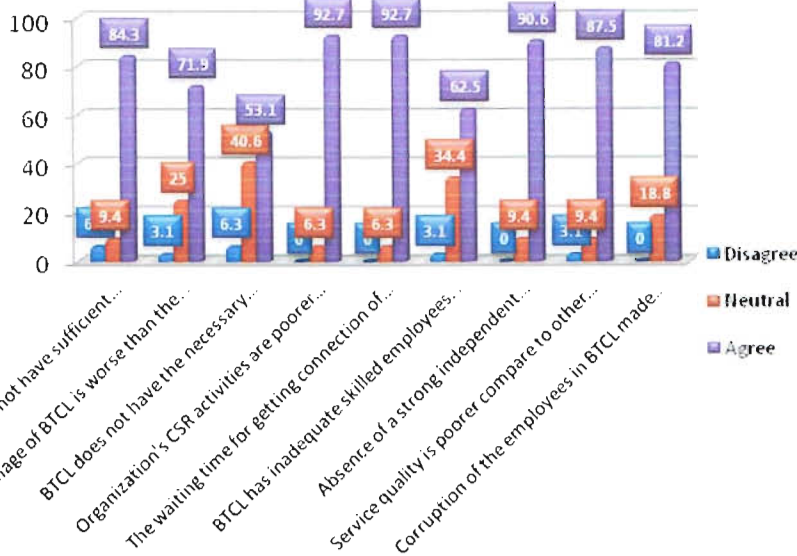
84.3% respondents agreed that BTCL did not have sufficient interconnection capacity to meet the demands of the mobile service providers while 6.3% remains neutral to the question. 25% respondents expressed their neutral view that Brand image of BTCL is worse than the other similar types of companies but 71.3% respondents agreed with the fact. 53.1% respondents expressed their positive view that BTCL does not have the necessary equipments to utilize the large quantity of available Bandwidth of submarine cable while 40.6% remains neutral about the fact. 92.7% respondents agreed that organization's CSR activities are poorer compare to other telecommunication companies. Almost 93% respondents agreed that the waiting time for getting connection of BTCL is more than the private mobile or PSTN companies. 34.4% respondents expressed their neutral view that BTCL has inadequate skilled employees than the private mobile or PSTN companies and majority (62.5%) expressed their positive view in this respect. 90.6% respondents agreed that absence of a strong independent regulatory body for BTCL decreases the service quality. 9.4% respondents remain neutral while 87.5% expressed their positive view that service quality of BTCL is poorer compare to other telecommunication companies. In response to the question that corruption of the employees in BTCL made the organization unproductive 81.2% expressed their positive view.

93.7% respondents agreed that there is a plenty of untapped potentials in the telecom sector that can be exploited through quality network and low tariffs by BTCL while 6.3$ remains neutral of the fact. Almost 94% respondents expressed their positive view that corporatization of BTCL and newly appointed board of directors will improve the service quality. 9.4% respondents remains neutral that while 90.6% agreed with the fact that new call rate for all NWD calls will make BTCL productive. Government has increased the tax and tariff on mobile set and SIM in the new budget which will help for the expansion of BTCL and majority (65.6%) respondents agreed with the fact.

Bar diagram represents the opportunities of BTCL

Bar diagram represents the threat of BTCL

	Disagree	Neutral	Agree
Huge investment in promotional activities and CSR activities of the mobile companies	3.1	34.4	62.5
The services and other facilities of the mobile companies are better than BTCL	0	9.4	90.6
People can get mobile connection with set with a cheaper rate than before	0	3.1	96.9
Growth of mobile phones and introduction of private land phones is a threat for BTCL	0	21.9	82.1

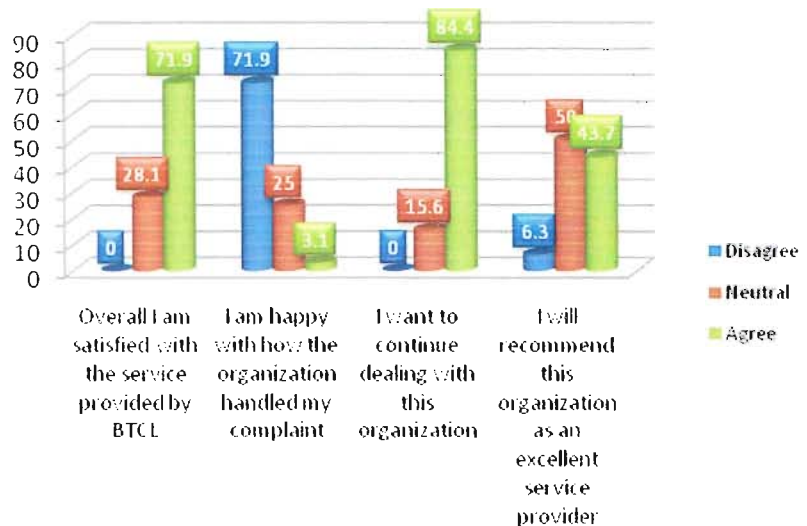62.5% respondents agreed that huge investment in promotional activities like advertisement and CSR activities of the mobile companies create good impression in consumers' mind than BTCL while 34.4% remains neutral with the fact. 90.6% agreed that the services and other facilities of the mobile companies are better than BTCL. Almost 97% respondent expressed their positive view that people can get mobile connection with set with a cheaper rate than before. In response to the question that growth of mobile phones and introduction of private land phones is a threat for BTCL 82.1% agreed while 21.9% remains neutral.

71.9% respondents are overall satisfied with the service provided by BTCL. 71.9% respondents expressed their dissatisfaction with how the organization handled their complaint.84.4% respondents expressed their positive view to continue dealing with this organization. In response to the question that whether

Bar diagram represnets the satisfaction level of the subscriber about BTCL

	Disagree	Neutral	Agree
Overall I am satisfied with the service provided by BTCL	0	28.1	71.9
I am happy with how the organization handled my complaint	71.9	25	3.1
I want to continue dealing with this organization	0	15.6	84.4
I will recommend this organization as an excellent service provider	6.3	50	43.7

Pie chart represents the age of the respondents

- 21-30 yrs
- 31-40 yrs
- 41-50 yrs
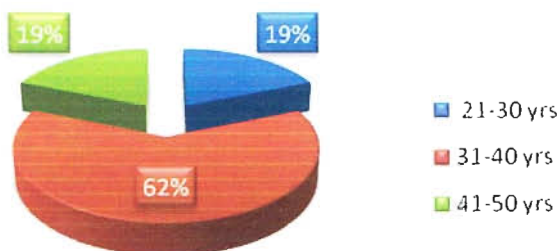
they will recommend this organization as an excellent service provider or not 43.7% respondents expressed their positive view while 50% remains neutral.

Of the 32 respondents 62% belongs to 31-40 years group, 19% from 41-50 years and 19% from 21-30 years group.

The respondents have various educational backgrounds. Of them 25% are masters degree holder, 43.8% respondents are graduate, 2% below graduate and 6.3% have others educational backgrounds.

Bar diagram represents the educational backgruond of the respondents
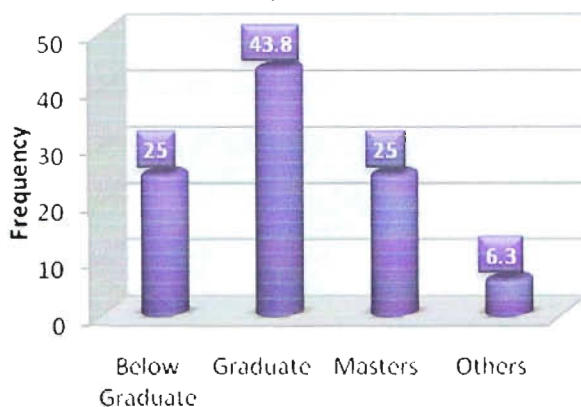
Pie chart represents the income of the respondents

- Below TK 10,000
- TK 10,000-20,000
- TK 20,000-30,000
- TK 30,000+
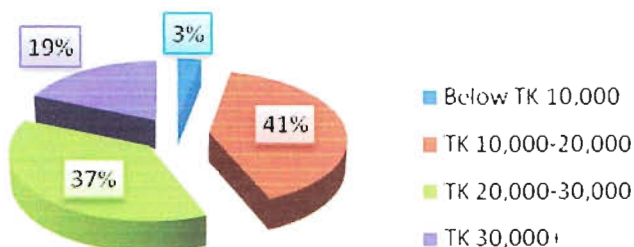
3% respondents have monthly income below tk 10,000, 41% have income tk 10,000-20,000, 37% respondents monthly income is tk 20,000-30,000 and 19% have more than tk 30,000.

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6.3% respondents are service holder and 93.7% are businessman.

Bar diagram represents the profession of the respondents
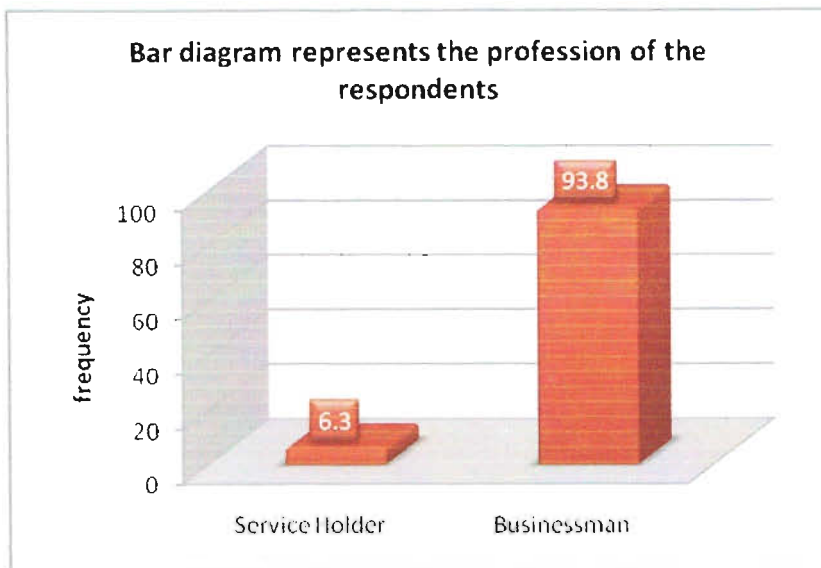
25% respondents live in Gulshan/ Baridhara/ Banani /Uttara, 6% live in Dhanmodi/ Mohammadpur, 25% inMalibag/ Mogbazar/ Khilgaw , 41% in Old Dhaka 3% live in other areas of Dhaka city.

Pie chart represents area of the respondents

The mean duration of service consumption of the respondents is 10.47 years.

Of the respondents 100% are male.

Regression Model Summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.682(a)	.465	.363	.37676

a Predictors: (Constant), F5, F1, F3, F2, F4

BTCL
দেশ ও মানুষের সেবায়

Here,

R= .682

69% means it is a strong relationship between dependent (satisfactory level) and independent variable F1, F2, F3, F4 and F5. Due to absence of some dependent and independent variable another 31% could not be achieved.

R = 0.465

So 46.5% of the total variation of satisfactory level can be explained by the regression model or independent variable.

Standard error: the multiple standard error of estimate .37676 the typical error we have made to feet the model.

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.483	1.122		3.996	.000
	F1	.115	.124	.140	.931	.361
	F2	-.267	.167	-.321	-1.593	.123
	F3	-.366	.108	-.511	-3.402	.002
	F4	.319	.192	.351	1.661	.109
	F5	.284	.125	.333	2.274	.031

Independent Variable: F1, F2, F3, F4 and F5
Dependent Variable: Satisfactory level

Interpretation:

If F1 is changed by 1% then the satisfactory level will be changed by 14% keeping other independent variables constant.
If the F2 is changed by 1% then the satisfactory level will be changed negatively 51.1% keeping other independent variables constant.
 If F4 is changed by 1% then the satisfactory level will be changed by 35.1% keeping other independent variables constant.
If F5 is changed by 1% then the satisfactory level will be changed by 33.3% keeping other independent variables constant.

Alpha > p Significant Relationship

F1 = .361   = Insignificant
F2 = .123   = Insignificant
F3 = .002   = Significant
F4 = .109   = Insignificant
F5 = .031   = Significant

3.2 Recommendations:

Given the institutional hold of corruption within BTCL, radical changes and drastic measures will be needed to redress the situation. To date no government has demonstrated the political will to take on the powerful nexus composed of dishonest workers, corrupt officials in the agencies and the ministry, opportunist traders, lobby groups and most certainly political leaders. A government having the required political conviction might have considered the following options:

1. BTCL should make the connection process easier and cheaper for the subscribers so that the waiting time for getting connection becomes shorter.
2. Establish a regulatory body to monitor, co-ordinate, regulate and facilitate the functions of BTCL and ensure that consumer rights are protected.
3. Proper investments in promotional activities in advertisement and CSR activities to create good impression in consumers' mind and hence increase the organization image.
4. Arrange sufficient funds for "golden handshakes" to all corrupt employees whose assets do not match their legal income in order to clean the slate in one go.
5. Conduct intensive **training** programmes for skill improvement in all important functions of BTCL to give superior services to subscribers.
6. Allow **BTCL** total freedom to handle own procurement without having to go to the **ministry** or the Cabinet Purchase Committee, with provision for regular external audits built into the system.
7. Rationalize the staffing of utility organizations, revise salaries and allowances making them commensurable with the cost of living, and provide employment on contract basis with the flexibility of hiring and firing.
8. Bring an end to BTCL monopoly in the nationwide long distance services and rationalize tariff of BTCL's Digital Data Network (DDN) for the mass market.
9. Convert BTCL into limited companies with private sector participation and allow them to function as normal private companies without interference from the government.
10. Establish the Bangladesh Telecommunications Regulatory Commission (BTRC), independent of governmental control and political influence.

11. Allow Voice over Internet Protocol (VoIP). Abolish the provision of obtaining permission from the Ministry of Posts and Telecommunications (MOPT), prior to leasing the capacity from Grameen Phone's optical fiber network. VSAT operating licenses should not limit the bandwidth.

12. Through Teletalk BTCL can offer superior value added services and other facilities like the other mobile companies.

13. To penetrate the untapped rural market BTCL can offer low cost mobile set with RUIM like Citycell does.

14. Creates customer care centers for the subscribers to give instant help to the subscribers like other private and mobile companies.

15. Introduce official pricing policy for the ISPs to give internet facilities available for all at a reasonably lower price.

3.3 Concluding Remarks:

Public services such as availability of telecommunication are vital to the effective functioning of a society. At the household level, its availability can help raise productivity, both immediate and latent. Without consistent supplies and with continuing service failures, uncounted hours are wasted in waiting for household/industrial equipment to work, complaining, settling the bills, or even finding the complaint center to help make things right. Clearly, if customer complaints are not taken seriously, they will be disheartened, dissatisfied and angry. It is imperative, that BTCL spares no effort to avoid failing the general public over and over again to gain their confidence and trust. That effort would be greatly appreciated and would go a long way to save the citizenry from having to bear the dissatisfaction derived from harassment, ineptitude, billing miseries and concomitant failures.

The findings suggest how the services of BTTB/BTCL can be significantly improved. After 37 years of independence, they must realize that they represent public services; i.e., they have been established to serve the needs of the public and not the reverse. It is important for them to restore faith in the public service delivery system. It is high time for the public to see better customer service from the public providers who are built and financed by the taxpayer's resources. BTCL

is responsible to this constituency and must serve them consciously and conscientiously. To do so, service must be maintained and enhanced every step of the way by improving processes, training, and human resource dimensions. The numbers presented in this report also ought to serve as a benchmark against which the quality of services of BTTB/BTCL must be calibrated regularly and shared with the public to determine whether there have been any improvements in the future. Otherwise the change in organizational form will be seen as merely gratuitous.

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Appendix

1.0   SWOT analysis of BTCL and possible strategic solutions

This survey has been designed to evaluate the SWOT analysis of BTCL. The findings will be shared widely to help bring about improvements in the services provided by BTCL. The result of the study will be used for the academic purpose only and the information elicited from the questionnaire will be exclusively confidential. You are requested to give your valuable opinion to the questions presented in the following.

1. Are you a subscriber of BTCL? ☐ Yes   ☐ No

2. BTCL is the largest operator providing fixed phone services in Bangladesh with superior service quality.
   Strongly agree 7   6   5   4   3   2   1   strongly disagree

3. BTCL offers fax and Internet facilities and it has proper network and offer telecom installations throughout the country.
   Strongly agree 7   6   5   4   3   2   1   strongly disagree

4. The manpower and technology of BTCL is sufficient.
   Strongly agree 7   6   5   4   3   2   1   **strongly disagree**

5. The employees of BTCL have sufficient knowledge and training to meet the customer demand.
   Strongly agree 7   6   5   4   3   2   1   strongly disagree

6. BTCL has the ability to provide customers with truly integrated service package that includes fixed line, Internet facility and non-payment channels.
   Strongly agree 7   6   5   4   3   2   1   strongly disagree

7. Experience in telecom sector is an advantage for BTCL.
   Strongly agree 7   6   5   4   3   2   1   strongly disagree

8. BTCL did not have sufficient interconnection capacity to meet the demands of the mobile service providers.
   Strongly agree 7   6   5   4   3   2   1   strongly disagree

9. Brand image of BTCL is worse than the other similar types of companies.
   Strongly agree 7   6   5   4   3   2   1   strongly disagree

10. BTCL does not have the necessary equipments to utilize the large quantity of available Bandwidth of submarine cable.
    Strongly agree 7   6   5   4   3   2   1   strongly disagree

11. Organization's CSR activities are poorer compare to other telecommunication companies.
Strongly agree 7   6   5   4   3   2   1   strongly disagree

12. The waiting time for getting connection of BTCL is more than the private mobile or PSTN companies.
Strongly agree 7   6   5   4   3   2   1   strongly disagree

13. BTCL has inadequate skilled employees than the private mobile or PSTN companies.
Strongly agree 7   6   5   4   3   2   1   strongly disagree

14. Absence of a strong independent regulatory body for BTCL decreases the service quality.
Strongly agree 7   6   5   4   3   2   1   strongly disagree

15. Service quality is poorer compare to other telecommunication companies.
Strongly agree 7   6   5   4   3   2   1   strongly disagree
16. Corruption of the employees in BTCL made the organization unproductive.
Strongly agree 7   6   5   4   3   2   1   strongly disagree

17. There is a plenty of untapped potentials in the telecom sector that can be exploited through quality network and low tariffs by BTCL.
Strongly agree 7   6   5   4   3   2   1   strongly disagree

18. Corporatisation of BTCL and newly appointed board of directors will improve the service quality.
Strongly agree 7   6   5   4   3   2   1   strongly disagree

19. New call rate for all NWD calls will make BTCL productive.
   Strongly agree   7   6   5   4   3   2   1   strongly disagree

20. Government has increased the tax and tariff on mobile set and SIM in the new budget which will help for the expansion of BTCL.
Strongly agree 7   6   5   4   3   2   1   strongly disagree

21. Huge investment in promotional activities like advertisement and CSR activities of the mobile companies
create good impression in consumers' mind than BTCL.
Strongly agree 7   6   5   4   3   2   1   strongly disagree

22. The services and other facilities of the mobile companies are better than BTCL.
Strongly agree 7   6   5   4   3   2   1   strongly disagree

23. People can get mobile connection with set with a cheaper rate than before.
Strongly agree 7   6   5   4   3   2   1   strongly disagree

24. Growth of mobile phones and introduction of private land phones is a threat for BTCL.
Strongly agree 7 6 5 4 3 2 1 strongly disagree

25. Overall I am satisfied with the service provided by BTCL..
Strongly agree 7 6 5 4 3 2 1 strongly disagree

26. I am happy with how the organization handled my complaint.
Strongly agree 7 6 5 4 3 2 1 strongly disagree

27. I want to continue dealing with this organization.
Strongly agree 7 6 5 4 3 2 1 strongly disagree

28. I will recommend this organization as an excellent service provider.
Strongly agree 7 6 5 4 3 2 1 strongly disagree

Respondent's Profile:

Age: 1. 21-30 yrs 2. 31-40 yrs 3. 41-50 yrs 4. 50 + yrs

Educational: 1. Below Graduate 2. Graduate 3. Masters 4. Others (Please specify)_____

Income: 1. Below TK 10,000 2. TK 10,000-20,000 3. TK 20,000-30,000 4. TK 30,000++

Profession: 1. Service Holder 2. Businessman 3. Housewife 4. Others (Please specify)_____

Area of residence: 1. Gulshan/ Baridhara/ Banani /Uttara 2. Dhanmodi/ Mohammadpur
3. Malibag/ Mogbazar/ Khilgaw 4. Old Dhaka 5. Others................

Duration of service consumption: _____(year)

Gender: 1. Male 2. Female

Thank you for your cooperation

2. SPSS Output

	Disagree	Neutral	Agree
BTCL is the largest operator providing fixed phone services in Bangladesh with superior service quality	0	3.1	86.9
BTCL offers fax and Internet facilities and it has proper network and offer telecom installations throughout the country	6.3	53.1	40.6
The manpower and technology of BTCL is sufficient	18.8	9.4	71.9
The employees of BTCL have sufficient knowledge and training to meet the customer demand	12.5	43.8	43.7
BTCL has the ability to provide customers with truly integrated service package	9.4	53.1	37.5
Experience in telecom sector is an advantage of BTCL	0	6.3	93.7
BTCL did not have sufficient interconnection capacity	6.3	9.4	84.3
Brand image of BTCL is worse than the other similar types of companies	3.1	25	71.9
BTCL does not have the necessary equipments to utilize the large quantity of available Bandwidth	6.3	40.6	53.1
Organization's CSR activities are poorer compare to other telecommunication companies	0	6.3	92.7
The waiting time for getting connection of BTCL is more than the private mobile or PSTN companies	0	6.3	92.7
BTCL has inadequate skilled employees than the private mobile or PSTN companies	3.1	34.4	62.5
Absence of a strong independent regulatory body for BTCL decreases the service quality	0	9.4	90.6

Service quality is poorer compare to other telecommunication companies	3.1	9.4	87.5
Corruption of the employees in BTCL made the organization unproductive	0	18.8	81.2
There is a plenty of untapped potentials in the telecom sector that can be exploited through quality network and low tariffs by BTCL	0	6.3	93.7
Corporatization of BTCL and newly appointed board of directors will improve the service quality	0	6.3	93.7
New call rate for all NWD calls will make BTCL productive	0	9.4	90.6
Government has increased the tax and tariff on mobile set and SIM in the new budget	6.3	28.1	65.6
Huge investment in promotional activities and CSR activities of the mobile companies	3.1	34.4	62.5
The services and other facilities of the mobile companies are better than BTCL	0	9.4	90.6
People can get mobile connection with set with a cheaper rate than before	0	3.1	96.9
Growth of mobile phones and introduction of private land phones is a threat for BTCL	0	21.9	82.1

	Disagree	Neutral	Agree
Overall I am satisfied with the service provided by BTCL	0	28.1	71.9
I am happy with how the organization handled my complaint	71.9	25	3.1
I want to continue dealing with this organization	0	15.6	84.4
I will recommend this organization as an excellent service provider	6.3	50	43.7

Age of the respondents

		Valid Percent
Valid	21-30 yrs	18.8
	31-40 yrs	62.5
	41-50 yrs	18.8
	Total	100.0

Educational background

		Valid Percent
Valid	Below Graduate	25.0
	Graduate	43.8
	Masters	25.0
	Others	6.3
	Total	100.0

Income of the respondents

		Valid Percent
Valid	Below TK 10,000	3.1
	TK 10,000-20,000	40.6
	TK 20,000-30,000	37.5
	TK 30,000+	18.8
	Total	100.0

Profession

		Valid Percent
Valid	Service Holder	6.3
	Businessman	93.8
	Total	100.0

Area of residence

		Valid Percent
Valid	Gulshan/ Baridhara/ Banani /Uttara	25.0
	Dhanmodi/ Mohammadpur	6.3
	Malibag/ Mogbazar/ Khilgaw	25.0
	Old Dhaka	40.6
	Others	3.1
	Total	100.0

Gender of the respondents

		Valid Percent
Valid	male	100.0

Duration of service consumption

N	Valid	32
	Missing	0
Mean		10.47