The Contribution of Telecom Industries on Bangladesh Economy

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ABSTRACT: Telecommunication, as gift of present day technology is essentially unique from another conventional infrastructure. From global marketplace to home marketplace, company conversation to employee’s conversation, telecommunication is the top technique to maintain the steady and instantaneously development of sharing facts. From enterprise factor of view of economic sporting activities of cutting-edge international, thru the conversation channel telecommunication now no longer handiest has large affects over the financial system in time period of GDP per capita but also serve many people creating job opportunities. Henceforth increasing employment fee may additionally every other significant factor to enhance monetary improvement. But lately this zone faces a few disaster associated with governmental SIM tax, company tax etc. For those motives, previous few years each governmental sales in addition to the boom fee of subscribers is decreasing. If the Government take vital steps beside the Privatization, the world may want to circulate ahead quickly, if you want to additionally assist Government to generate the sales and create process opportunity. Now this paper discusses the prevailing situation of the telecommunication sector of Bangladesh and telecommunication enterprise has significant and positive effect over the monetary improvement of Bangladesh[1].

KEYWORD: Telecommunication, GDP, Teledensity, Revenue percentage of GDP, Employment rate.

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I. INTRODUCTION

The telecommunication industry around the world accomplished a dramatic successful of development since 1980s. Since then, first the developed countries around the world started to make development in telecommunication generation to preserve a non-stop glide of conversation which sooner or later intensifies their monetary sports with the aid of using presenting an extra evolved platform of conversation[3]. On the opposite hand, developing countries additionally took initiative whilst it turns into prudentially glaring that the position of telecommunication over the economic development is significant. As part of the initiatives, privatization of telecommunication sector become one of the great attempt that become taken with the aid of using nearly each developed and in a while with the aid of using developing counties. As the adoption of telecommunication technology around the world is extra than ever Harald and Pantelis (2010) postulated that during the last three a long time cellular telecommunication enterprise has rapidly grown round the world. They additionally argued that the positive have an effect on of telecommunication technology is extra related to developing countries with a subscription of 3.2 billion as in developed countries the subscription is only 1.4 billion. Gruber and Verboven (2001) argued that effect of the telecommunication funding has significant stage of positive effect at the macro economical dimension of a country. Mobile phone penetration is one of the primary motives in the back of this funding which sooner or later make contributions closer to the economic development. Jotischky (2010) argued that telecommunication operators make investments with inside the improvement of community in Africa which certainly guarantees the benefit would be enjoy throughout the continent[4]. As a mandatory and revolutionary a part of modern telecommunication, internet is turning into a prerequisite with inside the improvement for any financial system. This argument is also supported with the aid of using Jensen (2007) with the aid of using claiming that the fishermen of India are making use of net to get the records and vicinity approximately that marketplace which gives the very best fee for their products. As a result, the opportunity of positive effect of internet over the economic development is endless. Moreover, internet as an essential method of telecommunication generation has significant effect on economic development as financial institution, share market, insurance company, mutual fund, corporate offices all in their transaction flow, debts and files in large part depend upon internet without delay. As the role of telecommunication over economic development is

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international regularly occurring without hesitation, Tella and Ahamfule (2002) claimed that communication tools such as telephones, mobiles, and internet are becoming the prerequisite for economic success and personnel achievement. This study's paper will review whether or not there's any significant relationship among telecommunication and economic development of Bangladesh.

1.1 Objective of the study: The broad objective of the paper is to make an extensive study on the telecommunication sectors of Bangladesh and also bring this sector near and familiar to the common people. The specific objectives are:
- To appraise the performance of our telecom sector and its contribution to the development of the whole economy.
- To give some suggestions this may help to increase the government revenues and growth of sectors as well.

1.2 Rational of the study: Telecommunication is an important sector of any use that may play crucial position with inside the nation’s economy. But we the people of our country don’t recognize sufficient approximately the issues, roles, prospects, and demanding situations of this sector. It isn't always possible to recognize with the aid of using person study due to the fact there isn't always sufficient complete and well prepared study exist on it; this document is tried to make the sector acquainted to the common people and additionally the associated person of this sectors.

1.3 Limitations of the study:
Huge resources available online but it was not possible to get access to all of these research papers. In regional context, I faced lots of difficulties to conduct the survey. Because respondents did not participate in the sector.

II. LITERATURE REVIEW

The effect of telecommunication in the economic development attracted attention of many researchers for many years. There are many researchers tried to have a look the telecommunication effect over the economic development of a country. By have a look at the length of eight years of 24 international locations Azim and Mahmood (2008) discovered that telecommunication improvement has a strong positive have an effect on closer to the GDP. Kateja and Jha (2008) investigated that there's an informal dating among the non-stop development of telecommunication and economic growth of India. As an end result, it has positive and obligatory sizable have an effect on over the economic development. As a imperative element of telecommunication, teledensity and its effect over the economic system become investigated with the aid of using undertaking a complete examine in Iran primarily based totally at the facts from 1960s to 2012, Sadr et al., (2012) discovered that there's a positive relationship among GDP and phone density. On the opposite hand, Jain and Sridhar (2003) argued that the better price of presenting telecommunication provider to the overall humans may be notably decreased in long time with the aid of using the usage of Wi-Fi technologies. In another, Waverman and Fuss (2005) discovered that telecommunication have definitely significant impact at the growth of an economy.

Ross (1999) proved that privatization of telecommunication industry is notably and definitely associated with the growth of teledensity which in go back has significant effect at the Economic development through network growth and the development of the quality of network. Geiger and Mia (2009), World Bank (2007) discovered that it's the mobile phone certainly creates excessive paying jobs in addition to socio economic development in the devolved and developing countries. Deloitte (2008) reported revenue of the telecommunication operators has the significant have an effect on over the GDP. Based at the taxation cause Ovum (2006) additionally pronounced that mobile phone industry has contribution of 145 billion RS equal to 3.6 billion dollar with the aid of using presenting the taxation sales closer to the government. Again, Deloitte additionally analyzed (primarily based totally at the six international locations: Bangladesh, Pakistan, Malaysia, Thailand, Ukraine and Serbia) and reported that government can captured the revenue without delay from the mobile operations and services. As an end result, mobile industry has the contribution of 26% revenue of the gathering of overall taxes and it rises to 29% if the regulatory fess that is obligatory to perform the business is included.

Ovum (2006) opined that during India telecommunication industry has created 3.6 million jobs and a roundabout way and it's far predicted that the growth rate of employment possibilities may be expanded with the aid of using 30 percentage in line with 12 months. The mobile economy GSMA (2015) pronounced that during 2014 worldwide mobile operators created 12.8 million direct and indirect jobs. Moreover 11.8 million jobs may be described as indirect jobs. The accumulation of the direct and indirect jobs is 25 million in 2014. Boateng and Yellen (2010) opined that the diffusion of mobile phone has more have an effect on over the process marketplace with high paying and high quality jobs each in towns and rural regions. By thinking about the certainly discussions, arguments and counterarguments, this paper is mainly targeted on the connection among telecommunication and monetary improvement. It need to be mentioned that during diverse preceding research there discovered positive relationship among...
telecommunication and economic development consisting of Sridhar and Sridhar (2007) argued “Development of ICT together with telecommunication zone and their derived offerings offer Significant blessings to the financial system.” As an end result, this studies basically specializes in Bangladesh telecommunication zone as top situation to research and discover the connection among telecommunication and economic development in the mild of studies paper findings approximately the telecommunication effect over the economic development.

Creating glad and dependable clients is a key problem of entrepreneurs and making managers in now a days and it's going to continue to be in the future. It is nicely regularly occurring that client pride is each an aim and an advertising and marketing device for client-focused companies (Kotler, Keller 2012). Customers’ satisfaction with their buy is a significant issue that leads enterprise to fulfill. In current instances, client satisfaction has won new interest within the context of the paradigm shift from transactional advertising and marketing to dating advertising and marketing (Sheth, Parvatiyar 1994).

The majority of research found out that telecommunications infrastructure has a positive impact on economic growth (Adams and Ford, 2009; Saunders et al., 1994; Madden and Savage, 1998; Loayza et al., 2004), though bidirectional causality got here up strongly. Some of those research used models that managed for different determinants or drivers of growth consisting of gross fixed investment, energy, education and transportation networks. Adams and Ford (2009), however, managed for population growth rate, alternate proportion in GDP, preliminary stage of GDP per capita, share of government consumption in GDP and gross fixed investment[4].

In today’s dynamic business environment from the firm’s factor of view, it's far approximately constructing and maintaining a strong relationship with their clients with the aid of using information the substances of customer satisfaction. The key to customer loyalty is customer satisfaction which in largely depends on the service quality offered by service providing firms.

III. DATA AND METHODOLOGY

The baseline study followed a quantitative and qualitative approach for collecting information about the status of the mobile phone users. Qualitative research is a method of inquiry that develops understanding on human and social science, to find the way people think and feel. Quantitative research is research method that used to generate numerical data, by employing statistical, logical and mathematical technique. It is better to consider of them as representing relative points on a scale. The data that I collect from a field directly is known as primary data. A questionnaire survey was undertaken to collect key information such as the Age, Gender, Monthly income, Monthly expenditure, about tax, flat call rate etc. Secondary data was collected from articles, newspaper, conference papers and company annual report. Altogether, data were collected from 267 persons. This survey conducted in the area of the university and around the area of the university. Participants of the survey are students, teachers, shopkeepers, auto drivers etc. Thentire analysis of the study was done statistical package named SPSS (statistical package for social science) for windows (version 20). Survey data was input in the SPSS for windows format. Different variables were computed as well as recorded with it. Some firsthand analysis such as frequencies, tests were performed through this software. MicrosoftWord (2013) was used to prepare all the outputs that were presented in this study.

3.1 Data analysis and empirical findings

Survey results in table 1 from the questionnaires were distributed to the users of mobile phonesamongthem 82% GP, 22% Robi and Banglalink and 14% Telelalk users and 49.8% users use multiple operator’s service. In my survey 57.7% users are students,16.9% are service holders and 25.5% are other professions.33.0% respondents monthly expense bellows TK 300,18.7% incur 300 to 500,16.1% respondents’ expense 700 to 1000Tk and 15.0% respondents have above 1000TK. There are 48.7% male and 51.3% female respondents.89.1% respondents use post-paid and 10.9% use pri-paid connection.

I have collected another important issue that about the flat call rate and imposing increasing tax over the call rate.70.0% respondents about the tax and they face problems for increasing call rate and 30.0% respondents don’t know about this type of tax when they know about this, they think it’s a problem.
Table 1: Frequency Table

<table>
<thead>
<tr>
<th>Demographic variable</th>
<th>Categories</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operator name</td>
<td>GP</td>
<td>82</td>
<td>30.7</td>
<td>30.7</td>
</tr>
<tr>
<td></td>
<td>Robi</td>
<td>22</td>
<td>8.2</td>
<td>39.0</td>
</tr>
<tr>
<td></td>
<td>Banglalink</td>
<td>22</td>
<td>8.2</td>
<td>47.2</td>
</tr>
<tr>
<td></td>
<td>Teletalk</td>
<td>14</td>
<td>5.2</td>
<td>52.2</td>
</tr>
<tr>
<td>Use of multiple operator</td>
<td>All operators</td>
<td>40</td>
<td>15.0</td>
<td>67.4</td>
</tr>
<tr>
<td></td>
<td>GP and Robi</td>
<td>49</td>
<td>18.4</td>
<td>85.4</td>
</tr>
<tr>
<td></td>
<td>GP and Banglalink</td>
<td>27</td>
<td>10.1</td>
<td>95.9</td>
</tr>
<tr>
<td></td>
<td>(GP, Robi, and Banglalink)</td>
<td>11</td>
<td>4.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>267</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Monthly Expenditure</td>
<td>less than 300 taka</td>
<td>88</td>
<td>33.0</td>
<td>33.0</td>
</tr>
<tr>
<td></td>
<td>300 to 500 taka</td>
<td>50</td>
<td>18.7</td>
<td>51.7</td>
</tr>
<tr>
<td></td>
<td>500 to 700 taka</td>
<td>43</td>
<td>16.1</td>
<td>67.8</td>
</tr>
<tr>
<td></td>
<td>700 to 1000 taka</td>
<td>46</td>
<td>17.2</td>
<td>85.0</td>
</tr>
<tr>
<td></td>
<td>1000 to above</td>
<td>40</td>
<td>15.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Profession</td>
<td>Students</td>
<td>154</td>
<td>57.7</td>
<td>57.7</td>
</tr>
<tr>
<td></td>
<td>Service holder</td>
<td>45</td>
<td>16.9</td>
<td>74.5</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>68</td>
<td>25.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>267</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
<td>130</td>
<td>48.7</td>
<td>48.7</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>137</td>
<td>51.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>267</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Type of connection</td>
<td>Pre-paid</td>
<td>238</td>
<td>89.1</td>
<td>89.1</td>
</tr>
<tr>
<td></td>
<td>Post-paid</td>
<td>29</td>
<td>10.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>267</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Monthly income</td>
<td>Less 5000 to 5000</td>
<td>91</td>
<td>34.1</td>
<td>34.1</td>
</tr>
<tr>
<td></td>
<td>5000 to 10,000</td>
<td>85</td>
<td>31.8</td>
<td>65.9</td>
</tr>
<tr>
<td></td>
<td>10,000 to 20,000</td>
<td>32</td>
<td>12.0</td>
<td>77.9</td>
</tr>
<tr>
<td></td>
<td>20,000 to 30,000</td>
<td>11</td>
<td>4.1</td>
<td>82.0</td>
</tr>
<tr>
<td></td>
<td>30,000 to above</td>
<td>48</td>
<td>18.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>267</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Effect of flat call rate</td>
<td>Yes</td>
<td>187</td>
<td>70.0</td>
<td>70.0</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>80</td>
<td>30.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>267</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

From the above table the study says that there is a strong positive correlation between monthly expenses of mobile phone and respondent’s income at 1% level of significance.
IV. MARKET OVERVIEW AND SOCIAL CONTRIBUTION

4.1 Overview of Mobile Sector

The country’s march closer to materializing its vision ‘Digital Bangladesh’ has added surprising growth with inside the telecommunication and information technology sector. The country’s active mobile subscriber penetration reached to 93.4% from meagre 30.6% in 2008. Bangladesh is now the eighth-biggest mobile marketplace with inside the world in phrases of unique subscribers and the sector now contributes nearly 1.8% of overall GDP. Two primary telecom provider services are “Voice Calls” and “Internet Data” offerings. Revenue from voice calls nevertheless dominates the industry even as contribution from data revenue is developing exponentially for the reason that launching of 3G in Bangladesh. The mobile surroundings supplied employment to extra than 7.60 lakh people in Bangladesh, each in formal and casual sectors. A 1/3 of the job have been created without delay with inside the surroundings, even as the relaxation have been generated in a roundabout way in different sectors due to the intake of inputs generated with the aid of using the mobile sector. The telecom industry in Bangladesh has scaled up rapidly over beyond decade having a complete of 161.772 million active subscription on the end of June 2019 and extra than 85 million unique subscribers. Unique subscriber penetration in Bangladesh rose to nearly 55% with the aid of using 2018 from only 1% in 2003 because of fast adoption of telecommunication services. The number of mobileinternet subscribers in Bangladesh is forecast to attain 7.3 crore with the aid of using the end of 2025, representing 41 percentage of the population. However, about 10.6 crore people will continue to be without get right of entry to the mobileinternet, factoring in population growth[2].

Figure 4.1: the total number of mobile phone subscribers

Source: BTRC

The Bangladesh telecom market is specially ruled with the aid of using pre-paid customers and nearly 98% of overall subscriptions are prepaid, in keeping with Grameenphone. Though industry penetration Primarily based totally on number of subscription is huge, a large part of customers holds a couple of subscription on the same time.

Figure 4.1: Bangladesh Telecom Industry subscriptions (in million)

In 2016, SIM re-registration through the biometric system has been a prime improvement in telecom sector. Due to bio-metric reregistration of SIMs in 2016, overall number of active subscription dropped with the aid of using 5% at some point of the 12 months as some of subscribers did now no longer whole the bio-metric reregistration inside stipulated timeframe. In phrases of overall performance, Grameenphone become in advance
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of different operators and 97% of its subscribers have been re-registered through the bio-metric system. The growth in overall number of subscriptions can also additionally gradual down in following few years due to implementation of MNP provider in Bangladesh with inside the overdue 2018 however actual industry penetration is anticipated to preserve its consistent growth[5].

4.1.1 The socio-economic contribution of the mobile sector:

Total mobile sector revenue become $3 billion in 2017. According to previous GSMA research on the Bangladesh mobile market the sector generated $5.2 billion of direct and oblique economic value in 2015. Over 2.5% of Bangladesh GDP. Greater get right of entry to mobile services has transformed economics accelerating economic growth and development in countries worldwide. The outcomes of mobile connectivity on an economic system are in large part brought thru its effect on productiveness. That a 10% increase in mobile broadband penetration results in a 0.25% to 1.38% growth in GDP. There is a robust dating among mobile penetration and productiveness. These show that a 10% boom in mobile penetration will increase productiveness with the aid of using among 1.0% and 1.3%.

4.1.2 Gender equality:

The Seventh Five Year Plan, with the target to increase the female-to-male ratio in tertiary education from 70% to 100% and to raise the female-to-male literacy ratio for the 20–24 age group to 100% from the current level of 86%. A further challenge remains in employment, where women make up less than 30% of the total workforce, meaning there is significant scope to empower women to increase participation in the economy.

4.1.3 Education and digital literacy in Bangladesh:

Robi 10 Minute School: Robi 10 Minute School is the largest online schooling platform in Bangladesh, offering free schooling to extra than 400,000 college students through Facebook Live. To date, the faculty has taken 327 live lessons and produced extra than 1,740 video tutorials. The initiative is supported with the aid of the Bangladesh Government, who signed a settlement with Robi 10 Minute School to distribute schooling content material throughout its 2,000 virtual labs and 30,000 multimedia lecture rooms in primary schools.

V. MOBILE SUPPORTS THE GOVERNMENT'S GROWTH OBJECTIVES

1. Mobile services promote digital inclusion and the growth of a knowledge based economy:

Digital inclusion way that the benefits of Information and Communication Technology (ICT) need to be to be had to all, regardless of location or socioeconomic status. Mobile technology can assist help and strengthen the education system with the aid of using presenting get right of entry to and personalization of the getting to know experience. The World Bank has said that the motion closer to a knowledge-based economy should be the aim of all governments, as knowledge becomes increasingly and more essential to retaining country wide competitiveness. It identifies four pillars of knowledge based economies, certainly considered one among that is records infrastructure, with technology such as mobile phones consisting of required to facilitate powerful Communication and the dissemination and processing of information.

2. Mobile services enhance productivity, innovation and economic growth: mobile offerings increase productiveness throughout the Bangladeshi economy. Mobile service can reduce transaction fees, making it much less high priced for Bangladeshis to communicate and behavior ordinary business operations, helping the growth of business and enterprises. Mobile services additionally create possibilities for funding, innovation and employment with inside the mobile sector and in quite a few different jobs that shape a part of the mobile ecosystem, consisting of system companies, people with inside the community engineering and renovation industry, and companies of associated enterprise offerings. Other opportunities enabled with the aid of using mobile services consist of the development of mobile application in healthcare, education and agriculture. As an end result of those positive effects, the mobile industry makes a significant contribution to the country’s GDP. The GSMA estimate that throughout Asia-Pacific, mobile contributed4.7% of the region’s GDP in 2013, even as the full contribution of cellular in Bangladesh become predicted to be over 6% of GDP in 2011.

3. Mobile services could promote long-run economic growth and fiscal stability: The mobile sector also makes an important contribution to the revenues of the Bangladesh government this includes the direct contribution made by mobile operators.

Moreover, several studies have already recognized the economic growth potential of Mobile in particular:

- Studies by the GSMA and the World Bank have estimated that a 1% increase in mobile penetration could lead to an increase in the GDP growth rate of 0.28% while a 1% increase in internet user penetration in high income countries can lead to an increase of up to 0.077% in the GDP growth rate. The World Bank has

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found that in low to middle-income countries, such as Bangladesh, every 10% increase in broadband subscriber penetration accelerates economic growth by 1.38%.

➢ Other research suggests that for every new job created in the Bangladeshi mobile sector are generated in the wider economy.

Through these positive impacts, the mobile industry can support many of the government’s objectives outlined in Bangladesh Vision 2021, including accelerated economic growth.

<table>
<thead>
<tr>
<th>Direct</th>
<th>Supplied impact</th>
<th>Intangible impact</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mobile operators</td>
<td>Social Benefit</td>
</tr>
<tr>
<td>Indirect</td>
<td>Related industries</td>
<td></td>
</tr>
<tr>
<td>Multiplier</td>
<td>General Economy</td>
<td></td>
</tr>
</tbody>
</table>

Figure 6: Structure of the analysis of economic impact on GDP and employment

This analysis was undertaken using publicly available statistics, company accounts and interviews with Grameenphone. By combining supply side and demand side analysis, it is possible to estimate the GDP contribution, employment created, and taxation paid in Bangladesh over the period 2008 to 2011.

VI. CONTRIBUTION TO THE ECONOMY

In this section, we quantify the contribution of the mobile industry to the economy, covering the industry and its adjacent sectors. Of course, such analysis cannot provide a complete picture of economic impact of mobile services.

6.1 The Value Chain

Figure shows how end user spend on mobile services and terminals flows along the value chain to the various players which make up the industry.

6.1.2 Contribution to Government Revenue:

One of the primary beneficiaries of the mobile industry is the government. Tax revenue is generated in lots of methods. A huge percentage of the value add retained with the aid of using the mobile operators is used to taxes consisting of VAT, import, duty, handset royalty and supplementary duty. Wage profits accruing to employees is subject to income tax. Value upload flowing to different sectors additionally generates tax sales. One motive the industry is taxed so closely is to make amends for an inefficient income tax system.

6.1.3 Contribution to Employment:

The contribution of mobile services to employment accommodates 4 additives. First, there's the direct employment of the industry or people without delay hired with the value chain. Second, there's the “support” employment that is create by outsourced of work and taxes that the government ultimately spends on employment producing sports. Third, there's the “indirect” class, which covers different fees in addition to income generated that is ultimately spent on employment producing sports. Finally, there's the “induced employment” class which refers to jobs created as personnel and different beneficiaries spend their earnings, thereby growing more employment.

6.2 Impact on Bangladeshi productivity:

There are numerous ways in which mobile services have led to productivity increases. In addition to the well-established effects described in previous studies¹⁰, mobile services have been reported to increase productivity in Bangladesh in the following ways:
• **Reduced travel times and costs:** specifically in rural areas where previously traders could have travelled to urban areas to check for demand and agree prices, this business is now carried out mobile calls, text messages or interactive services

• **Increasing efficiency in agriculture:** similarly to saving travel time, mobile services are increasingly being used to disseminate agricultural information services to rural subscribers including crop advisory records, climate updates and marketplace fee records. This is specifically useful in Bangladesh wherein agriculture debts for over 50% of employment and farms are frequently extraordinarily small.

• **Potential for improvements in access to banking services:** the appearance of mobile technology can enable banks to have a presence in rural areas instead of a traditional branch-based environment. As the percentage of Bangladeshis that personal a mobile phone is some distance more than the percentage that has a bank account, mobile banking has the potential to significantly improve/hance get right of entry to banking services.

• **Encouraging entrepreneurialism:** mobile generally encourages the growth of small businesses and increases efficiency. It provides affordable access to relevant information and knowledge services and expands market for businesses through e-commerce developments such as Cell bazaar, Daraz etc.

6.3 **Benefits to consumers:**
Consumer benefits of mobile telephony are extensively recognized in social and economic papers and were highlighted in previous economic impact research on Bangladesh. Price competition between the six MNOs saw prices fall by 50% in the last 5 years. However, price decreases have slowed in current years as MNOs are dealing with high taxes, falling ARPU levels and difficult operating conditions.

6.4 **Intangible impacts:**
Finally, the intangible impact of the mobile industry become diagnosed. Information supplied at some point of, secondary data, findings from different economic impact reviews have been drawn upon and extended. As with productiveness, economic and social studies become undertaken in the last ten years at the several methods wherein cellular offerings can sell intangible blessings. Several essential outcomes were identical inthe studies in the last years[6].

VII. MOBILE SECTOR TAXATION IN BANGLADESH

7. 1 **Tax contribution of the mobile sector**
In 2014, the total tax contribution of the mobile sector become predicted at $1.36 billion equal to 46% of the mobile sector’s overall market sales. Operators paid 70% of the total taxes, even as purchasers paid the final 30%. Total tax burden is relatively high in Bangladesh (46%) in comparison with different international locations in Asia, together with Sri Lanka (29%), Indonesia (23%), Malaysia (20%), and Thailand (14%). The mobile sector makes a huge contribution in taxes and fees relative to its economic footprint. While revenues from the mobile sector handiest accounted for round 1.6% of Bangladesh’s GDP, the world’s tax and charge bills accounted for round 7.2% of the full tax sales. The mobile sector in Bangladesh is subject to numerous taxes levied each on mobile operators and purchaser’s. The figure below illustrates the main components of the total tax and fee payments from the mobile sector by type of payments

![Figure 7.1: Composition of total tax and fee payments from the mobile sector](source: Deloitte analysis based on operator data)

7.2 **Taxes on mobile consumers in Bangladesh**
Consumer taxes in Bangladesh apply to ownership of devices, to utilization of offerings consisting of SMS and calls, and to the activation of connections. In addition to a 15% VAT fee on all goods and services, purchasers in Bangladesh are situation to a BDT 800 tax on SIM cards and a BDT 300 tax on handset imports which together significantly the price of getting into the mobile market for the first time. This tax contributes to growing the common annual price of mobile ownership (“TCMO”) 16 to US$48.50 (BDT 3,558).17 In addition to high taxes, the government’s registration programmed which become brought in 2007 may additionally act as
a barrier to access for poorer consumers. This coverage calls for MNOs to officially check in info of all mobile phone subscribers, which may be hard for subscribers on low profits or in rural regions who’re much less likely to be literate and to possess the necessary forms of identification than their urban counterparts.

7.3 Removing the SIM card sale tax promotes digital inclusion and economic growth:
The special tax of BDT 300 on new and BDT 100 on substitute SIM playing cards outcomes in an increasing in cost the price of gaining access to mobile services and a constraint on the overall mobile penetration and the range of us[7].

Figure 7.3Potential impact of removing the sim card sales tax, 2020

![Diagram showing potential impacts of removing the SIM card sales tax]

Source: Deloitte analysis based on operator data, GSMA, IMF and World Bank data

It is estimated that eliminating the tax on the sale of new and replacement SIM cards could potentially drive the following impacts:

- By 2020, expanded demand for mobile broadband has the capability to add an extra 3.7 million connections yearly, together with 1.6 million 3G connections, and increase usage of mobile services by 2.30%. From the period 2015 to 2020 a cumulative 19 million connections could be added.

- Through the direct effect of the mobile operators, and the indirect effect that their activities enable, expanded mobile usage may want to result in extra GDP growth, delivering up to an additional US$2.3 billion in 2020 and potentially providing employment for an additional 50,000 Bangladeshis. Over the period 2015-2020, a total of US$9.2 billion could be added to the economy, and employment could be provided to an additional 145,000 Bangladeshis.

- Moreover, following a short term reduction in revenue, the government may want gain tax neutrality within three years and by 2020 the increase in GDP growth has the capability to permit as much as an additional US$61 million in tax revenues annually to be collected through more broad-based taxation such as VAT and corporation tax.

VIII. RECOMMENDATION AND CONCLUSION

From the above discussion it is able to be stated that the Bangladesh telecom market has lot of capability to provide thinking about strategically ignorable or by some means alterable threats. The marketplace appears to be very capability & prospective. Lots of possibilities are waiting. Bangladesh has reasonably-priced labor Communication infrastructure is in proper situation. Customer demand for telecom product is sotoo much. Govt. regulations also are turning into liberal. Though telecommunication sector performs a crucial position in our economy system by creating job, generating revenues and contributing different type of social programs but our tax system and market structure makes it a non-profitable sector. So, it's far important to set up an ICT enterprise right away to get non-stop help from this sector. To increase this sector, we want to make a friendly environment and tracking and manipulate machine which will take care and give suggestions to solve the problem of this sector [7]. More over the ambitions and targets of country wide telecom coverage (NTP)/1998 and Bangladesh telecommunication act (BTA)/2001 ought to practice well to make certain the pleasant surroundings and remedy the prevailing hassle of this sector[8]. Besides this the Government need to rethink their tax policy. One examine indicates, if the tax on SIM and imported system’s is absolutely decreased, the subscribers may be expanded 9.5core and enterprise will boom from 30% to 56%. As end result authorities can earn extrat 50 billion so our government need to assume and rethink the tax policy which additionally, can assist to make certain their election commitment/ time table of “Digital Bangladesh by 2021”
REFERENCES

[8]. "National Telecommunication Policy, 1998".

Appendix

Questionnaire

Name: 
Occupation: 
Age: Gender: Male / Female
1. Do you use mobile phone?
   a. Yes   b. No
   [If the respondent doesn’t own mobile phone then the survey is done]
2. How long are you using mobile phone? ……………………..
3. How many mobile phones you are using ……………………..
4. What type of mobile phone you are using?
   a. Smart Phone      b. Featured Phone
5. Which mobile network operator are you using?
   A. Grameenphone     b. Robi          c. Banglalink     d. Teletalk
   e. Gp, Robi and Banglalink f. GP and Robi   g. Robi and Banglalink h. All operator
6. How do you pay for your mobile phone bills?
   a. Pre-Paid    b. Post-Paid
7. About how much do you spend on using your mobile phone per month?
   a. less than 300 taka   b. 300 – 500 taka
c. 500 – 700 taka   d. 700 – 1000 taka   e. above 1000 taka
8. How many your monthly income?
   a. Less 5000-5000 b. 5000-10,000
   c. 10,000-20,000   d. 20,000-30,000 e. 30,000 to above
9. Are you satisfied with your operator service rate?
   a. Yes   b. No
10. Do you know the difference between current and previous service rate?
    a. Yes   b. No
11. Do you know about current flat call rate?
    a. Yes   b. No
12. Are you having problem because of flat call rate?
    a. Yes   b. No
13. Do you know about the service packages of your network operator?
    a. Yes   b. No
14. Are the packages of your current network operator helping you?
a. Yes  b. No
15. Is your mobile expense effecting your economic condition?
a. Expense increases  b. Expense decreases  c. As usual