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GOOD GOVERNANCE BY MOBILE PHONE IN BANGLADESH: CHALLENGES AND WAY FORWARD

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ABSTRACT

Mobile communication technology in the mean-time take us in new height of excellence by strengthening good governance practices with the supports of public and private sectors, giving the country new identity of Digital Bangladesh. The rapid development of mobile technologies insists to deliver government services to citizens in more effective and cheaper ways. As a part of Good Governance, vision of M- governance is make all government services accessible to the mass people through convenient distribution channel and at affordable cost where services will be provided efficiently, transparently and in a reliable way. M-government as a part of Good governance introduced a new channel for public interactions with different stakeholders where by reducing barriers of citizen communication or service providers could carry out interactions easily. Governments has vision to develop a Digital Bangladesh where formation of national ICT road map, provide ICT facilities to doorsteps of common people, establish good governance and expanding network of telecommunication in all parts of country are very much prerequisites. Unfortunately, we didn't possess sufficient infrastructure, atmosphere and trust yet which is very condition to initiate and implement social and economic development services in the field of healthcare, distant education, agriculture information, mass banking and utility services to poor as a part of socio economic development index. Therefore mobile phone has enormous possibilities to expand access of public services to the poorest segments of the nation where wired telecommunication and ICT doesn't exist or still there is a limitation. But still we could not popularize and diffuse potential benefits of m governance among general people level to make them informative and empowered. Government move to administrative reform and commitment to give public services easier and faster is very much required in this regard.

Keywords: Bangladesh, Communication, empowerment, Good Governance, mobile phone, m governance, telecommunication.

INTRODUCTION:

Now citizens can learn and Improve English language skills without visiting any language school, without reading language learning books, for emergency medical services not need to visit doctor chamber or local hospital, without communicating through traditional methods i.e. farmers now can get fertilizer and market information just by calling from any mobile handsets. Mobile phone has been materialized as the new frontier of transforming services to citizen in even more accessible and citizen-centric way, by extending the benefits of remote delivery of government services and information to those who are unable or unwilling to access public services through the traditional way of communication. Simultaneously, rapid technological development encourages mobile ICT such as Computers, Notebooks, Tablets whereas the mobile phones offer many new possibilities of the mobilization of interaction through voice, data and internet services.

Mobile phone brings revolutionary change in village people lives especially rural women who can manage their livelihood by the help of mobile communication. LIRNEasia, a Srilankan research firm had conducted a survey among more than 10,000 mobile users in six countries (Bangladesh, India, Pakistan, Philippines, Srilanka and Thailand) and identified that low-income customer in Bangladesh lead the region in the mobile phone use for the business. Poor Bangladeshis make business call 72 percent of the time on any given day where as India is just 43 percent and in Pakistan 31 percent (Galpaya, 2009). Additionally entrepreneurship has been develop among the mass people where almost 5 lac people direct or indirectly depends on mobile communication for livelihood.

Bangladesh has demonstrated remarkable success in avenues like health and family planning, non-formal education, micro credit, women empowerment, lowering the infant and under-five mortality rate, agriculture production, macro-economic stability and management. But all these successes will be washed out because of poor governance practice by political parties, administrative institutions and large vested groups. Still corruption and poor governance practices of government machineries is a frequent state of affairs in third world countries as a result of that, people are depriving to receive the desired supports and necessary services (World Bank'2015).

GOOD GOVERNANCE CONCEPTS AND NECESSITIES:

Good governance is considered as one of the key ingredients of poverty reduction and sustainable development of a nation by fulfilling the basic needs of the citizen. Moreover, good governance can be seen as an umbrella for a functioning democratic arrangement where freedom of expression and an effective judicial system is in place. United Nations Development Program (UNDP), in 1997 stated that good governance is characterized by participation, the rule of law, effectiveness and efficiency, transparency (built on the free flow of information), responsiveness, consensus orientation, equity, accountability and strategic vision. Now the question is why good governance is imperative? Does poor governance lead to inefficient use of limited resources, practice corruption and failed to ensure basic needs of citizen? Therefore, in this regards William Easterly professor of Economics at New York University, states that "badly governed countries are poor countries" and that "good governance tend to come together in packages, so it is hard to tell which one is causing economic development" (Easterly, 2006).

Communication, information dissemination and dialogue are identified as key components of governance and a positive correlation between communication and good governance is assumed (Coffey, 2007). To do so, citizens and their representatives need information to make informed choices, and open channels of communication operating in both directions – from Government to the Citizenry (G2C), and from the Citizenry to Government (C2G), (DFID, 2005). Information and communication can improve citizen's ability to identify their needs and to evaluate government performance. Access to information can ensure stakeholders voice in economic policies to ensure economic growth and development in a more equitable, balanced and therefore stable manner. Subsequently communication can also build social capital by encouraging networks and social movements just about common or unique issue.

RATIONALE OF MOBILE COMMUNICATION:

Once "Mobile phone" was a luxury in Bangladesh until 2000, now considered as the most important element of daily lives as basic needs. Mobile services quickly emerged as the most effective tool for transforming government services which was earlier incapable to citizens and indisposed to access government services through the traditional way of getting services. Invention of mobile communication has created new avenue of information sharing competence to touch greater number of people at single fingertip which was not possible in traditional wired technology or when infrastructure constraints existed. Mobility does not only refers to the

movement of people but also other entities of ideas, images, technologies, money, flowing across various scopes (Urry, 2000).

How Mobile phones could act as a catalyst between government and citizen:

- User: More people than ever have access through mobile uses. Anywhere and anytime we can find huge customers in single platform.
- Penetration: Penetration rate is increasing and global penetration rate is 63%. (GSMA, 2016)
- Mobility: The mobile devices enables people to access content either wherever they are or whatever they want.
- Embracing: Mobile becomes an integral part of people's lives.
- Interaction: Through mobile phones people can perform two way communications.
- Range: Due to mobility and network infrastructure, subscribers can easily make contract when other ICT communication modes (Internet, fixed lines) were absent and not possible to establish.
- Cost: Mobile communication is cheaper than usual internet services and also high cost creates barrier at entry levels for poor peoples.
- Efficiency: The technology and services are more efficient to provide services swiftly and more efficiently.
- Lack of alternative option: In poorer counties where infrastructure structure is very poor and expensive there mobile is a best option. (Hellstrom, 2009)

In fact, market penetration rate of mobile phones are mounting high especially in developing countries where conventional communication system is sufficiently poor, and alternative ICT services are not available followed by people didn't have access of information. Therefore, mobile phone services have potentials to act as a catalyst and stimulate public services at the door steps of most citizen located at remote areas.

TELECOMMUNICATION INDUSTRY IN BANGLADESH: IMPACTS ON SOCIETY AND ECONOMY:

History of Bangladesh telecommunication was not mass people friendly, where only state owned organization had a monopoly control over telephone market till 1989 as BTTB services were inefficient, and unable to meet the growing demands. Due to very low tele-density, inefficiency, and lack of interconnection capacity, policy makers liberalized telecom service for citizens. In 1989, as a Least Developed Country (LDC); Bangladesh is the pioneer who opened mobile phone sector for private and foreign investment. Pacific Telecom was the first operator launched the country's first mobile phone service; subsequently three more mobile phone licenses were issued respectively (Yusuf & Alam, 2007).

At present five mobile companies operating business in Bangladesh and among them only one state owned company working in market with 132.64 million subscribers (BTRC, 2016). By the end of 2015, 95% of the country's landmass and 98% of the population were covered under telecommunication network with 64 million internet users. Here, 80% for mobile phones vs. 31.9% for internet access – reveals a strong opportunity for governments to provide services to citizens without Internet access. Mobile devices will be ideal tool as a delivery channels and alternative access for public services in any parts of a country round the clock. Operators could promote mobile Value Added Services and internet that could not only diversify the market but also get the optimum benefits of mobile communication where Value Added Services could be received from public and private initiatives. So there is an ample opportunity to utilize Mobile phone as a gateway of Knowledge, Information and Entertainment through wide services on a 24x7x365 basis at any place with extensive network. Nowadays, the contribution of service sectors towards the society and economy is gradually increasing than ever before. The telecom industry in Bangladesh is one the forefront areas of development process where 1% increase of internet penetration generates 4.3% increases in exports and also an increase of 10 mobile phones per 100 people boost GDP growth by 0.6% (Deloitte, 2015). Telecom industry in the meantime became big contributor in revenue basket. In 2013, 10% revenues of national revenue income came from Mobile operators, besides there is a co relation between Mobile operators revenue with country GDP, if 10% revenue of mobile operators increased eventually Annual GDP would raise to 1.2% which denotes that the people are using mobile phones to fuel economic engine of Bangladesh. In 2015, Mobile industry accounts 6.2% of Bangladesh GDP where mobile ecosystem contributes 10% of Government revenues (GSMA, 2016).

MOBILE APPLICATION FOR GOOD GOVERNANCE:

M-government or M-governance is relatively a new concept in the arena of good governance and Public

Administration. In general, internet is considered as a key means to provide governments services to citizen but due to limited internet penetration in developing countries, e-government may arise as an exacerbate digital divide and raise the issue of inequalities among the citizens. On the other hand, M-government is defined as a eco system and its implementation involving the utilization of all kinds of wireless and mobile technology, services, application and devices for the betterment of citizens, business and all governments units. (Kushchu & Kuscu, 2004). To build government ministries even more accessible and citizen centric by extending the benefits of remote delivery of government services and information to citizens, numerous mobile phone applications has been developed in across the worlds (World Bank, 2007). In East Africa there are few e-government services but many m-governments applications are working successively.

Due to advancement of mobile phone technology in recent times mobile phone becomes economical to all segments of customers in developing countries, majority of rural people has only mobile phone access as communication tool which allow citizen to get access of public services virtually in any places covered by mobile network. Now through mobile phones citizen can access government's services like health, education, employment, police, tax, agriculture, financial services, weather etc. as a part of everyday lives. World Bank identifies several factors which are stimulating the demand for mobile services: i) Low cost ii) convergence of wired network and iii) higher data transfer rate (World Bank, 2007). Public service through mobile application can brings boundary breaking potential where we can introduce an integrated communication system to provide civic service anytime, anywhere. In fact, public offices working in field has data around with them so that they can assemble data under the digitalized government platform which can help them to take decision later. Similarly, citizen can get access such data any time according to their requirements which will eventually help them to increase productivity of public service offices and improving delivery of government services.

According to vision statements of The National e-Governance Plan (NeGP) of *India* "Make all Government services accessible to the common man in his locality, through common service delivery outlets, and ensure efficiency, transparency, and reliability of such services at affordable costs to realize the basic needs of the common man" (Frame work of Mobile Governance, 2012). In the meantime, diverse m-governance services have already been implemented in different countries:

Table 1: M Governance services in different countries

Country	Mobile Application	
Singapore	E-citizen services: road tax, income tax, passport, TV license renewing.	
	Library notification, local weather	
	Police crime alerts, Singapore dept. of statistics.	
Philippines	More than half of the government departments use the mobile channel to deliver public	
	services.	
UK	Local voting, Security message alerts.	
Bahrain	Enquiries regarding electricity bills, Daily price Index	
	Traffic contraventions, Flight information, School exam result	
	Complaints to government services. (Future Gov, 2009)	
India	National ID, income-tax, passports/visa and immigration,	
	Pension, banking, and insurance, land records, property registration,	
	Transport, police and employment exchange. (egovstandards, 2012)	
	News updates- traffic, weather, emergency and disaster management.	
Kenya	Emergency notification, voter registration, Job information.	
Kenya	Blood bank SMS, vaccination program.	
	Crisis management, Teacher Training, Civil and political mobilization. (Aker & Mbiti, 2010)	
Haanda	Weather forecast, voting.	
Uganda	Job platform, market place information and services.	
Tanzania	Request of emergency services, wrongdoing of police officers.	
	Health services, Reports on crimes, criminal info. by SMS.	
	Combination of mobile phone and TV to deliver content in primary school	
	(The Economist, 2011).	

In Bangladesh, by mobile phones we can also touch every citizen at a time and ensure participation of all from any part of the country. Through mobile phones large numbers of rural people would be connected where they

can get information and analyze these to make a right decision according to social and economic aspects. Mobile communication became integral part of our daily lives and also it has changed the pattern of communication by cost-effective open public service platform for mobile citizens. Considering target group geo structure and capacity we can use various channels like Voice, Text, Cell broadcasting, USSD, and SIM Tool kit where all users will be able to access mobile based services. But there is a dilemma that is it sole responsibility of government to ensure m-governance, or under public private partnership model mobile operators can introduce M-Governance platform.

Areas of m-governance services already implemented in Bangladesh:

Table 2: List of M-Governance Services in Bangladesh

Area	Project Name	Concern Authority	Services
Education	SMS Based automated Registration of Admission Test"	Teletalk, Government owned mobile operators and all concern universities.	SMS from any Teletalk Prepaid mobile phone to 787 2777 from any mobile phone operators to get information of university.
	Exam result	Education board.	Through SMS students can get result.
	Learn English	British Council	Dial 3030 to learn basic and communicative English
Utility Services	Bill Pay	Titas Gas, DESCO, DPDC, PDB and POLLI BIDYUT electricity consumers.	Citizens are able to pay their Bills both from their mobile phone by authorized "BillPay" Centers
	Mobi Taka	Bangladesh Railway, Grameen phone and Content providers	Subscribers can purchase ticket by sending SMS and ticket prize will be adjusted from mobile balance.
	Passport and Driving License	Immigration Authority and BRTA	Citizen can get confirmation about passport and licensed delivery date through SMS.
Agriculture	Agriculture Information services (AIS),	SSL and AIS	Farmers get consultative services and information related to agro farming.
	Digital fertilizer recommendation system.	Ministry of Agriculture, Katalyst	Farmers of a remote area of the country will be able to get information regarding the cultivation of suitable crops and recommendation required fertilizer.
	Digital Purjee Information Service	A2I Program of the Prime Minister's Office and Bangladesh Sugar and Food Industries Corporation of the Ministry of Industries	Farmers will get instant SMS notification that informs the grower that his purjee has been issued, and that he may start preparing his harvest for supply to the mills.
Environment	"Early Warning Dissemination through Cell Broadcast"	Ministry of Food and Disaster Management	Customers get disaster warning to the people in disaster-prone areas through the mobile phone's cell broadcast function.
Financial Services	Mobile Banking	Out of 27 private Banks, 19 already banks launched	 In April'2016 there were 35 million mobile banking A/C holders, Daily transaction reached at 6069 million BDT. Transfer money, receive salaries, Utility bills, insurance premiums, loan installments, E-top-up for mobile phones, and e-ticketing could be possible. Government has plan to start payments like, agriculture subsidies, widow allowances, freedom fighters allowances, pension payment will be transferred through mobile
	Share Information	Dhaka Stocks Exchange	Share updates and Personal notifications.
Democracy	Vote Centre Identification	Election commission, Teletalk	Voter could locate his/ her voting place by sending National ID number

Area	Project Name	Concern Authority	Services
Health	Health line mHealth	TRCL, Grameenphone, Banlalink The Mobile Allicance for Maternal Action (MAMA), D.Net, USAID, Johnson and Johnson	24 hours Doctor advice any time by just dialing 789 from any handset. Provides Bangla voice messages to pregnant women and advice to mother and the newborn.
Employment	wap.prothom- alojobs.com	Prothom Alo	To reach the mass people prothom-alo jobs has made their services more easily accessible by enabling the users to reach the services through SMS
	SMS based registration and payment	Teletalk and concern ministry.	Applicant was used to go bank for financial instrument as a fee but now they can pay fee through mobile phone balance adjustment and get registration.

M-governance framework could be developed by keeping focus on one single thing i.e. to help people stay close to their dear ones and to enlighten their lives through free and flawless access to information. Here, Telecom operators with innovative strategies are offering attractive and affordable packages specially, SACHET packages where mobile subscribers can browse internet and enjoy browsing, check mails, download content and many more exciting stuff at affordable rates and convenient ways. Initially customers and operators had focused only on voice services, while operators shifted their focus to capture the VAS market where customers get other Value Added Services like SMS, MMS, voice chat, games, ring tone etc. However, majority of subscribers of Bangladesh still depends on voice rather than VAS or internet browsing due to illiteracy, ignorance and fears of complexity. Subsequently operators offer free SMS packages to make subscribers habituate about VAS. In case of health sectors, medical services are not available and convenient for rural areas, So Health Line and M-Health is a solution, where doctors can consult a patient through call centre operations and advice the caller from any location of a country. Bill pay through mobile is another popular service in urban areas which received positive response in which the city dwellers can pay their Utility bill through mobile phones. Besides that, recent introduction of BBC Janala program in 2009 got huge popularity as mobile phone is used to call or sms to receive lessons on English. To make this program successful all mobile operators had given up 75 percent discounts on calls to the dedicated Janala numbers (BBC, 2009).

Considering only 25% of population is under formal Banking services, Mobile Banking or financial services have been adopted in Bangladesh with the support of private banks and Mobile Network operator to reach out to the rural and un-banked population under banking coverage. At present, 35 million mobile users have mobile accounts to unleash the benefits of mobile technology and daily transaction amounts are BDT 6069 million with daily average transaction being BDT 3.9 million. (Bangladesh Bank, 2016). So such services became very popular and well accepted in Bangladesh where mass people now can send and receive funds, grow savings and liquidate savings any-time and anywhere. By 2020, access to mobile financial services could increase the Gross Domestic Product by 2 percent in Bangladesh (The Daily Star, 2013, B4). No matter the fact is M-governance is playing accelerate role in country economic growth significantly. Under M-Governance, mobile based innovative public services delivery platform could be deployed for extending the access of public services to those citizen where existing government services could not reach, which are unable to access to public services through internet or those who simply prefer to use mobile device.

CHALLENGES OF M-GOVERNANCE:

All applications related to M-governance has been designed and developed considering mass people necessity and capacity to access. To speak the truth, gradually VAS services have been becoming more popular in Bangladesh through active promotion of mobile operators. Despite its potentials, still there is a lack of awareness among citizens about the benefits of mobile communication for receiving public services in a convenient way. Present political leaders and policy makers are not concerned about this technological advancement while different stakeholders and civil societies believe that mobile device could be effective channel of communication (The Daily Star, 2009). In these circumstances strong efforts are pre requisite from all stakeholders to increase understanding of how mobile communication can stimulate bottom-up participation and empower disadvantaged sections of the society.

There are four fundamental issues which are very linked to mobile application to implement good governance program:

Issue	Target group
User	General public (all) vs. niche populations (student, professional, business owner).
Technology	Low feature handsets vs. smart phones
Platform	Self-contained (no other input needed) vs. web/audio/multimedia (linked to external sources)
Involvement	Manufacturer vs. operator. Independent vs. network operators.

(Donner, Verclas, & Toyama, 2008)

At this point, we can elaborate existing constrains which may potentially inhibit the growth of m-governance services in Bangladesh. Internet penetration rate of Bangladesh is relatively low by comparing other developing countries, especially among south Asian countries (ITU, 2015). Still, a large number of citizens are lagging behind mobile internet facilities in rural and riverine areas where wired communication is not available there and even citizen didn't have capacity to purchase mobile sets. So still there is a scope to increase accessibility in rural and deep rural areas to give access of information where Information creates opportunity and provide empowerment as well. Here, major constrains are government tax. Mobile operators need to pay BDT 300 . tax initially before customer purchase of a sim. That's why mobile operators are now reluctant to increase subscriber's number by providing subsidy. In addition of that Average revenue per unit (ARPU) from new customer is around \$2.30. Operators foresee new customer acquisition is not financially viable because operator need to wait 24 month to recover SIM tax and VAT from each subscriber. Most of the cases operators get nothing after bearing SIM tax, as customer in the mean time may chose to switch to other operators. (The Daily Samokal, 2009)

Due to stiff rules and regulatory framework this is not possible for mobile operators, content providers and ministries to provide services to citizen. Legal complexities are still a big concern to launch new services alongside traditional public services delivery system. Besides, in July 19th 2010, Bangladesh parliament passed new Telecommunication Act (Amendment) 2010, with provisions of fines up to BDT 3000 million, 10 years in jail for wrong doing, change the conditions in the license without any consultation with the operators, regulator and police can file a case even on suspicion, arrest any telecom operator official without a warrant (Amendment, 2010). Now mobile operators consider that proposed amendments are unfavorable to their business and may hinder future investment.

Handset is the most important challenge to implement M-governance, most mobile users have entry level handsets with basic features option only but do not have application and software to use internet. Adding together the small screen size, limited text input and complicated commands creates obstacles to access information that should be easily sent or received. And due to high price of mobile handsets poor people might not able to purchase ordinary or competent handset for basic communication which eventually will lead to lose benefits what is offered in m-government services for creating M Digital Divide ultimately.

In addition of that what kind of contents government should introduce? Does it focus on mass people or niche citizen, senior or young citizen, rich or poor issue? Another question is who should produce content and update time to time. M-governance also can create informal relationship with governments where a citizen can spend whole life without being involvement of any formal transactions with Government. In M-government portal, Government has limited control or access over mobile application as a result a gap between citizen and government may arise (Chowdhury, 2010).

Going Forward M-government tends to be another channel of government then who will pay additional costs for the Services; governments or public? It would calculate supplementary expenditure for government rather cost substitution initiatives. By adopting innovative costing strategies like fee sharing provision with private sector may facilitate to reduce upfront cost. Yet, there is trustworthiness gap in mobile device uses so government must introduce trusted and secured services where citizen can do transaction by confidence (Mamun, 2010).

Finally, public servants are always aware about their job and duties but digitalization of services may create fear about losing power and status quo. Mobile operators already have bitter experience to take public services with ministries and services organization which ultimately lead to slowing initiatives or shelves permanently. The Telecommunication Act 2010 envisages the transfer of supreme power to the telecom ministry to regulate the sector from BTRC. Now ministry will issue licensing and set tariff of customer packages which may gives scope to bureaucrats to take control over telecom operators and lead corruption indeed (Amendment, 2010).

WAY FORWARD:

Since liberalization of telecommunication sector, the country has offered the benefits of modern communication technology towards the entire citizen of a country where two third populations of Bangladesh are now carrying mobile phone. To facilitate services for citizen, Government formed an independent commission named BTRC to monitor and guide this sector to establish an effective service channel for mass people (BTRC, 2016). Here multi stakeholder's synergies among Government, regulator, Telecom operators, ICT firms, device manufacturers and civil societies are very much essential to formulate M governance policies and guidelines.

Stakeholders	Action
	Provide a facilitating policy environment.
	Political commitment to deliver Public services through mobile application.
	Explore the use of mobile communication for all public services delivery.
Government	Establish Public Private partnership
	Change the mindset of government employees.
	Legal and financial support for mobile contents.
	Flexible and friendly legal framework.
	Offer realistic regulatory environment.
Dogulatou	Policy reforms and flexibilities.
Regulator	Follow up 4G roll out.
	Protect customer rights.
	Expand infrastructural development.
	Develop capacity of mobile network.
	Assist government in PPPs.
	Approach government with pioneering ideas of public services delivery.
Mobile Operators:	Develop content by the help of local content makers.
	Provide platforms for public services delivery through local e-content.
	Identify and develop market for public services.
	Create or collect content and convert as a mean of public service delivery.
	Promotion of Mobile application for building awareness of citizen.
Handset	Produced higher specification handset at lower cost.
Manufacturer and	Introduce Bangla operating option in Handset.
ICT firms.	Develop content for public sectors services.
TC1 III III S.	Built in Apps in mobile phone.
	Identify stakeholder's movements and interest.
Civil Societies and	Advise government for policy reforms.
pressure group (CAB,	Raising awareness for public services through ICT.
AMTOB)	Ensure consumer right whether subscribers are deprived by cost.
1111110 <i>D</i>)	Create pressure to government and operators for offering new services.
	Provide pro active impact assessments on programs.

Source: (Hellstrom, 2009).

We have already identified a number of issues which inhibit growth of m-governance in Bangladesh. It is essential to encounter these barriers to ensure the progress of Bangladesh towards a good governing society. Here we would like to identify some actions that should be addressed by the stakeholders for effective execution and functioning of m-governance, including:

The Government of Bangladesh has made biometric re-registration mandatory for all mobile connections on December 16'2015, with the vision of better security for mobile financial services, help to curb illegal call termination, and ultimately benefits the telecommunication sector. By May 31'2016, operators had re-verified some 10.85 crore SIMs out of the 13.19 crore connections currently active in the sector and rest of number have already been blocked. In current bio metric SIM registration process youth who are not eligible for vote and without NID couldn't purchase a SIM and in some cases seniors' citizen also failed to purchase sim when they were experiencing mismatch of finger print (Carriers start Blocking, 2016). Government should encourage mobile

operators to increase subscribers by policy support and reforming administrative machinery. At present mobile penetration rate is 75% which need to increase significantly to bring majority of the people under mobile network. Generally it takes one and a half years to recover the subsidized money from rural and some urban regions (Roundtable Discussion, 2009). So, SIM and handset tax would be very feasible government move to provide government services to rural and disadvantaged people through mobile operator. Mobile handset manufactures can continue developing affordable handsets with relevant functionalizes, government should keep zero taxes on mobile devices and equipment's also under rural safety net.

Mobile phone operators have been very solemn in implementing measures and technologies in the spirits of Digital Bangladesh. Finally, Government has kept provision of appeal against fines imposed by BTRC only but not for any other actions by the governments or the telecom regulator. Telecom operators' has appeal removal of this provision for the sake of functioning of successful service industry. On the other hand, a strong business model and trustful eco system is very much required for effective participation of government, mobile operators and end users.

Business model on education, health and income generation will get enormous recognition from citizen especially rural peoples. Users are willing pay for that services which are important for them. An in-depth understanding of which services users want and how much they will pay for services must be developed which will ensure the sustainability of services.

A central body can be formed by government, mobile operators, IT companies, VAS providers and civil society's representatives which will facilitate and co-ordinate m-governance activities and make visible. Integrated platform is very much required to develop m governance project with the supports of concerned ministries and mobile network operator. For example we can get experience from India about Mobile Services Delivery Gateway which is shared infrastructure by the central and state government department, agencies and mobile operators for delivering public services through mobile devices.

At present citizen are not well informed enough about where they can get services or does he/ she can avail the public services through local e-content. In general, mass people didn't have interest or capacity to leverage full benefits of mobile devices, still there is a perception about mobile devices can only be used for voice communication. Government and AMTOB should take intensive campaign and promotional programs to make citizens aware of and provide detailed knowledge of m-government services.

However, role of Telco's and IT- enabled service providers are very crucial to expand the capacity of governments to transforming government ambition to citizen. In India, already Vodafone and Airtel have been working with different states Government (Jha, 2015). Recent time's Public Private Partnerships (PPPs) get momentum in developing large and successful projects in Bangladesh. We can figure out strong PPPs for development and delivery of public services through mobile application. Government should ensure effective participation of private sector in public services delivery by policy reforms whether local content providers can offer innovative ideas and contents to governments. Obviously, Private sectors especially local software firm and content providers should develop platforms and infrastructure for government projects implementation. Government ministries and agencies related to the m-government application should be highly involved in the planning and implementation phase with Private sector counterparts. Eventually it will lead a change of attitudes of administrative stuffs towards provision of services and transform their models of providing public services to citizen. Here Government need to formed a body to ensure the adoption and implementation of the framework related to complaint web sites of all government ministries, inter-operability of mobile application in all handsets, uniform numbers for convenient contact, all ministries and departments shall have mobile application to deploy public services in mobile.

Under PPPs business model we can establish a rational revenue sharing model where all user can get services in a cheaper price and every stakeholders get optimum benefits. Moreover, Mobile Governance Fund to support the development of suitable applications by Government agencies, ICT firms and independent consultants startups. Here, innovative billing system is needed for m-governance services since cost and affordability is a big challenge in Bangladesh. So we may need to develop system in a convenient way where the citizens are supposed pay minimal for getting standard services or government can subsidize as a part of good governance. Finally, we need to develop trust among user. Due to illiteracy, poverty and ignorance citizen are not aware about their right and means to receive public services from government. Government recent moves to introduce m-money, m-banking m-remittance create hype among the citizen to get benefits from these services but still there is a dilemma whether they could get trustworthy service whereas at present they are depriving to get services by fraud, delay and hassles (Karim, 2010). Beside that simple and easy to use services, reliability of information, quickness in response, relevancy of the information and as well as quality of network coverage have also discovered as some other dominant factors to begin successful and sustainable of m governance in

Bangladesh.

CONCLUSION:

Rapid technological development and customer eagerness to get faster services encourage government and telecom operator to generate user centric initiatives for m-governance. M Governance can change rural people lives drastically and empower them in terms of money, knowledge and power where they can get information about market, agriculture, health care, socio and political issue, and also environment features. Still there is confusion on regulation for m-government content standard for delivering government services and sometimes it is very difficult to integrate due to different technological platform though many customers have similar features and functionaries. In current context without strong M governance services in mass level, it is difficult to acquire sufficient information of people to make meaningful political choices and hold government representative accountable to their decisions.

Here, strong coordinated efforts is very much required by the private sector and the government for further increase of tele-density and get benefits of m governance. Policy reforms and action have been implemented from government's side but significant change was not seen yet. But the success of m governance will largely depends upon the ability of government administrative body, adopt appropriate technology, develop platforms, cost efficiency service and create awareness in mass people level. There were many successful projects in Africa where strong local technological partner was involved in Africa to manage, integrate and sustain the application (Hellstrom, 2009).

Democratic governments during last two decades had undertaken major initiatives to ushering good governance by giving the access of easy and convenient communication to people across the country. Recent Telecommunication Law, Introduce Social obligatory fund for expanding network in rural areas where as government can also move to grasp positive mechanism with telecom operators to offer central and local government services faster and efficient way. Very recently government gave long overdue approval to the draft of national telecom policy to address the fast evolving scenario of country's telecom landscape. Here, ambition is 100% tele density and 65% internet penetration by 2021 to cope with the technological change and benefits. However, there is a lot of excitement surrounding m-governance and potential to transform the society as a more participatory and democratic. To accelerate the pace of good governance for all citizens, Government of Bangladesh, development partner, civil societies and private entrepreneurs are fully striving to deliver public information and services to citizens through smarter and faster ICT platforms where citizen can get access of Information to change their social and economic lives. In sum, Information and connectivity is empowerment, empowerment is confidence, confidence is capacity and more capacity means more growth, better future of citizen.

ACRONYMS:

ADP: Annual Development Program.

AMTOB: Association of Mobile Telecom Operators of Bangladesh

APRU: Average Revenue Per Unit.

A2I: Access to Information

BBC: British Broadcasting Corporation

BTTB: Bangladesh Telephone and Telegraph Board BTRC: Bangladesh Telecom Regulatory Commission.

CAB: Consumer Association of Bangladesh

CBC: Cell broadcast

CSR: Corporate Social Responsibilities

DFID: Department of Foreign Investment and Development, UK.

GOB: Government of Bangladesh GDP: Gross Domestic Product

ICT: Information Communication Technology

IVR: Interactive voice responses LDC: Least Development Countries

NID: National Identification Number

PC: Personal Computer

PDA: Personalized Digital Assistants SMS: Short Messaging Service.

UNDP: United Nations Development Program. USSD: Unstructured Supplementary Services Data

WAP: Wireless Application protocol

VAS: Value Added Service

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