

Leveraging mobile technology for better service delivery/

Financial inclusion through mobile technology

Mobile phone is undoubtedly a phenomenon in the rise of 21st century. Perhaps no other electronic commodity has gained such popularity in the last ten years. With increasing affordability of the handset and the tariffs, the mobile phone has become a part of our lives, blurring the digital divide created initially by computers and the internet. Six out of ten people in the entire world population now own a mobile, with developing countries accounting for about two-thirds of the use in 2009, compared with less than half such subscriptions in 2002.

Governments across the world are also increasingly becoming responsive to the phenomenon. m-Governance, a post-millennium term defines the response. Mobile phone based transactional and information services have now become pertinent to reach citizens and in the context of developing nations like India, this is more relevant, with blurring the digital divide. Yet the challenges of m-governance are typically remain the same as those of e-governance, low levels of computerization of government operations at the back-end, lack of digitized data or content and most important of all change management.

Along with m-governance, the breathtaking growth of mobile technology shows another possibility in the developing countries: financial inclusion. With the mobile device itself being the “point of service” for financial information and transaction, the cost of banking can be reduced to an extent, where such services can be provided to the underprivileged and inaccessible citizens. However, illiteracy, low income, lack of savings and less number of bank branches in rural areas continue to be a road block to financial inclusion.

This session focuses on the two above aspects: leveraging mobile technology for service delivery improvement by governments and making financial inclusion happen in developing nations world-wide, keeping the Indian context in mind.

Based on their practical experience some key issues that will be highlighted by the panelists through the discussion are:

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Topics	Discussion Note
<p>Level of mobile penetration in developing countries – Recent Trends</p>	<p>What is the reach of mobile phones for citizens of developing nations? Although the growth of mobile phone usage in developing countries is very fast, what is the nature of usage among poor people, living far from the facilities of cities? Where is India on this?</p> <p>Case (India): With about 506 million mobile phone connections, India has the second largest wireless connections in the world (Nov 2009). India's mobile phone market is the fastest growing in the world, with companies adding some 16.67 million new customers a month. It is projected that India will have 'billion plus' mobile users by 2015, and many global communication organizations predict that India's telecom network will overtake China's in the next 10 years. While India has taken serious steps to implement e-governance in the country – the growth of mobile telephony urges us to have a fresh look at m-governance. The first generation e-governance initiatives resulted in computerization of the legacy systems/practices in government with limited ability to internalize the advances in information and communication technologies (ICT). The paradigm shift from e-governance to m-governance (which leverages the convergence of mobile and communication technologies) results in radical differences in the key processes of creation, maintenance and usage of knowledge, creation of secure mobile transaction & delivery systems, establishment of the appropriate infrastructural support for multi-mode direct citizen interface and delivery mechanisms. One has to remember, the digital divide still prevails at large in India, with less than 2% households having internet connections. But the mobile penetration is far more, with around 38% “wireless density” (# mobile connections / projected population).</p>
<p>m- Governance: Are Governments Ready?</p>	<p>Are governments equipped with the requisite infrastructure to implement mobile based services to citizens? What are the challenges faced? How can these challenges be addressed?</p> <p>Even though in India the cost of mobile devices and calls is one of the lowest in the world, in order to effectively deliver services on mobile devices, a lot more is yet to be done. For example, if a person has to put details in a form, he/she</p>

	<p>cannot do so as such facilities are not available in the current devices. Therefore, the immediate option is to look at mobile devices that combine computing with mobility and are affordable. Other challenges include developing applications that can be offered in local languages and developing a clear cut agenda about owning the content available through the mobile. Can this also be done by ordinary citizens? Generally, people tend to be consumers of available services and applications, rather than provide and create content themselves.</p>
<p>Barriers in Mobile Governance</p>	<p>While mobiles have great potential to expand public services to the poorest segments of the population in areas where wired telecommunications and ICT services do not exist, there are still limits to its capabilities.</p> <p>Several constrains exist which may potentially inhibit the growth of m-government services in developing nations:</p> <ol style="list-style-type: none"> 1) The physical limitations of mobile technology (small screen size, limited text input, etc) may restrict the amount of information that is easily sent or received. 2) In some areas, the mobile user is charged a fee for not just sending a SMS but also for received it, placing financial limitations on the amount of information governments can cost-effectively provide to citizens. 3) Inadequate power supply, low levels of literacy, lack of knowledge of English language, computer illiteracy and computing are a major hindrance in adaption of this channel. 4) Existing financial structures which are compatible with mobile technology, such as credit cards and bank accounts need to be developed further. 5) Though minimal in comparison with wired networks, physical infrastructure is still necessary for mobile applications and services to be available in rural areas. The infrastructure still has to be developed further.
<p>Literacy vs. Mobile literacy</p>	<p>Is literacy a barrier to mobile usage? Is there any pattern that suggests that despite of being illiterate, a class has emerged who can use mobile phones? What is their usage pattern? Can mobile phones help in spreading literacy?</p>

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<p>PPP Trend to establish a comprehensive infrastructure and network across the country</p>	<p>How effective are PPPs to provide mobile solutions to citizens? What are the roles for the government and the private parties? How have such partnerships helped spreading of mobile based information and service delivery?</p> <p>Example: Bharti Airtel setup the telecom infrastructure linking 13,716 village panchayats and common service centers (CSCs) located in the remotest corners of Gujarat to ensure high quality and cost-effective video, voice, and data services in the areas of agriculture, e-governance, health, education, etc. The connectivity will also facilitate point to point and point to multi-point videoconferencing services, VoIP services and both intranet and Internet services from these village panchayats and CSCs.</p>
<p>Role of Mobiles during emergencies and crisis / Natural disasters</p>	<p>Mobile phone can be used for evacuation purposes for example during the fury of Gustav hurricane in America, the mobile companies offered special services, free SMS, free phone calls, text message charity for collection of funds and much more. Callers were also helped with mobile alerts, GPS positioning, emergency services notification, emergency calls and emergency directions. Mobile service providers strengthened their networks to ensure that their subscribers face no communication failure in the time of an emergency.</p> <p>Example: during the recent Kosi flood in Bihar, India where there are news reports on how cell phones turned savior in the flooded Bihar, yet cell phones were used only for making phone calls and sending SMSs to seek help. Though aid for flood victims was being raised using SMS, evacuation plans, precautionary guidelines, dos and don'ts for flood hit villages, weather forecasts, and other helpful information could have been circulated through SMS to Bihar flood victims. The rescue operations could have been synchronized more effectively. Mobile service providers could have played a more proactive role to help their customers in Bihar.</p>
<p>Types of diverse voice and text based services that government can provide: Green ideas</p>	<p>What are the services provided utilizing mobile based internet? Who are the recipients and users of such services? But with most citizens using basic mobile handsets and basic tariff plans, internet remains unavailable to them. Also, they do not consider internet through mobile to be essential. In such case, what all voice and text based services can be provided to the users? With limited</p>

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	interactivity options, how can the users get “engaged” for such services?
How secure will be m-Governance?	How secure is m-governance now and how secure can the channel be? Who are the regulatory authorities, and what kind of securities have been enforced and recommended so far for such services? What kinds of services need more security than others?
Specialized mobile / handheld devices for field work	Special handheld devices for field data capture may help government employees working in fields to capture and transmit data in real time. This can expedite service delivery to a great extent. How can this option be explored? Who are the major players and which services are available today?
On Financial Inclusion	
m-banking for the people living on the margin: a win-win for banks and citizens	<p>Example: "Easy Paisa"- a branchless banking product by Tameer Bank (a microfinance bank) in Pakistan in collaboration with Telenor Pakistan is facilitating payment of utility bills and money transfer at all the designated outlets of Telenor.</p> <p>A similar service called M-Pesa has already turned out to be success in Kenya. Vodafone's M-Pesa money transfer service was launched in Kenya in 2007 and now has 5 million users.</p>
Citizens response to mobile services	Wherever mobile based services are made available are citizens finding such services and applications easy to use and helpful?
How secure is m-banking for the underprivileged?	People who can't even read and write will remain gullible for the m-banking option. Also, in rural areas of developing nations, a single mobile phone gets used by multiple people. Also, as use of m-banking will be in large numbers, so will be the opportunists to hack / cheat. How can such threats be put away? What behavioral education should be provided to m-banking customers?
Transaction oriented services for rural India: recent initiatives for the poor people	What are the recent initiatives for rural India? What solutions are micro insurance, microfinance organizations launching leveraging this technology?