

Mobile Governance

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M-Governance, in simplest terms, is E-Governance delivered through the mobile devices, especially the smartphone. An Internet-connected mobile device is the answer to some of the most intriguing challenges and problems we face in delivering government services to the people. India is the best candidate for a successful implementation of M-Governance because of the phenomenal growth of a nation-wide mobile-eco system on one hand, and the challenges faced by the E-governance mechanism on the other.

Over the years, we, the citizens of India, have been utilising E-Governance services almost on a day-to-day basis. The communication technologies, especially the Internet, and digital-electronic devices such as computers and mobile phones have paved way for building an effective and convenient interface to connect the government with its citizens for various reasons. This is E-Governance. However, with the growth of smartphone adoption and easy access to mobile data connectivity across the country, M-Governance has started playing an increasingly effective and prudent role in bridging the distance between the two stakeholders of governance;

the government and the people. M-Governance, which is a subset of E-Governance, has emerged as an effective vehicle to realise the government's vision to reach out to every doorstep in the country. The impressive success of fintech in the country is an example of how the mobile phone device, in collaboration with the amazing power of Internet, can play a powerful and impactful role in making our E-Governance ambitions a reality.

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AMINISTRY OF ELECTRONICS & INFORMATION TECHNOLOGY
GOVERNMENT OF INDIA

Digital India
Power To Empower

Access important documents with

DigiLocker

AADHAAR

Birth Certificate

X and XII Mark sheets

The advertisement features three children against a green background. A boy on the left holds a smartphone displaying the DigiLocker app. A girl on the right holds a tablet also showing the app. A smaller child in the center is looking at a document. Three thought bubbles are connected to the children, containing the logos and names of 'AADHAAR', 'Birth Certificate', and 'X and XII Mark sheets'. The DigiLocker logo, a cloud with a document icon, is prominently displayed above the children.

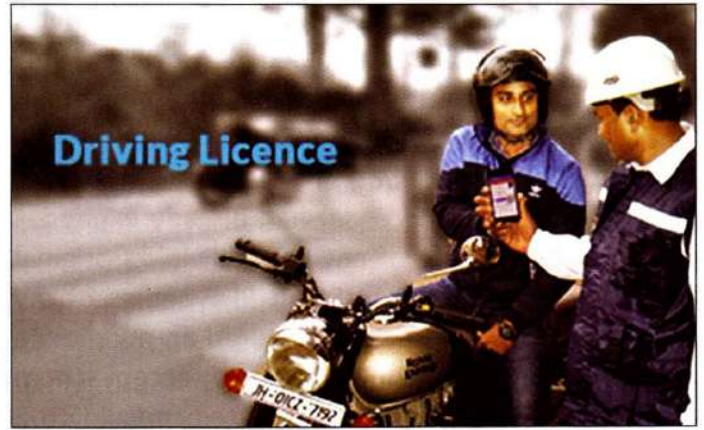
delivering government services to the people. India is the best candidate for a successful implementation of M-Governance because of the phenomenal growth of a nation-wide mobile-eco system on one hand, and the challenges faced by the E-governance mechanism on the other. Low PC penetration across the country, challenges related with broadband Internet connectivity, limitations of physical infrastructure (including constant power supply) and a large rural population are some of them. However, things may change if we get a little innovative, and leverage the internet-connected mobile devices as an alternative to Internet-connected PCs and kiosks. This is exactly what makes M-Governance so important for India.

Infrastructure at Service

While we will continue to work to strengthen our conventional infrastructure, nothing on earth stops us from utilising the excellent mesh of mobile networks and devices that the country already has in place, for the purpose. As of August 2022, India had 1.17 billion telecom connections, of which 98 per cent were mobile phone connections, and an estimated 65 percent of these devices were smartphones, according to government and industry figures. The country has a tele-density of more than 85 per cent and has more than 82.5 crore Internet subscribers. These figures are music to the ears of our policy makers and planners since they reflect the existence of a robust and dependable mobile and Internet infrastructure in the country. A vast digital infrastructure is ready to be explored and utilised.

To deliver government services over digital devices, we need good mobile download speed as well and presently the median speed on our mobile devices is around 13.5 megabits per second (Mbps). With the launch of 5G, we are looking at significant improvements on this front as well. The cost of internet connectivity has come down to levels affordable for the commonest man. On top of it all, we already have a strong country-wide telecom infrastructure, including in the rural India. The leadership of the country recognises its significance.

In year 2015, within months of assuming office during his first term as the Prime Minister, Shri Narendra Modi had underlined the importance of M-Governance, jokingly clarifying that it is not about 'Modi Governance' but 'Mobile Governance'. During



his address at the 18th National Conference on e-Governance, he said that in order 'to successfully implement e-governance, the country must think about 'mobiles first' and give importance to mobile governance. Addressing the government and industry, he said: "I urge you to explore ways to provide as many services as possible through mobiles. Let us bring the world into our mobile phones!" After seven years since he delivered his speech, the country has made significant progress in putting an effective M-Governance structure in place.

Shining Examples of Success

There are clear advantages of M-Governance including cost savings, proficiency, transformation/modernisation of public sector organisations, added convenience and flexibility, better services to the citizens and easy interaction. There are four major M-Governance models, namely:

1. G2C (Government to Citizens): The government interacts with citizens and vice versa
2. G2E (Government to Employees): The government provides information and services to the employees
3. G2G (Government to Government): Electronic sharing of data among various constituents of the government
4. G2B (Government to Business): Making government systems more transparent and accessible to businesses

In many sectors and domains including education and agriculture, performance and effectiveness of existing services may be improved by the use of M-Governance. We are already witnessing a quite revolution taking place in India in terms of making government services easily accessible.

I would like to share a personal example here. Recently, while I was scheduled to travel to New Delhi from Kolkata, I was stopped by a policeman at the entrance of the Netaji Subhas Chandra Bose International Airport, who said the personal ID I was carrying (my driving license) had already expired. I was not in possession of any other ID in its original form at the time though I had PDF copies of my Aadhaar card and voter's card stored on my mobile phone. The policeman refused to accept them and rightly so because they expected to validate a passenger's identity by examining a valid, original proof of identity. At this, I downloaded the DigiLocker app and was happy to find therein a copy of my Aadhaar card which was happily accepted by the policeman. So, a perceivable change can be witnessed and experienced in accessing government services today, thanks to M-Governance.

Some Incredible Services and Apps Provided by the Government Over Mobile Phones

- AarogyaSetu App
- DigiLocker App
- ePathshala App
- GST Rate Finder App
- Indian Police at Your Call App
- mAadhaar App
- MADAD App
- mParivahan App
- mPassport Seva App
- MyGov App
- PMO India App

I will discuss a couple more in the next few paragraphs.

'Mobile First' and Digital India

Mobile-Governance and E-Governance are not different things from different worlds but they originate from the same source, which is the government's vision to make services accessible to its citizens. M-Governance is not independent from E-Governance, but it's only a component, subset or sub-domain of E-Governance. Primary objective of M-Governance is to help deliver personalised

and localised information and services anywhere, anytime, using different kinds of wireless and mobile technologies. The government stresses on the "One Web" approach, which means making, as far as possible, the same information and services available to users, irrespective of the device or the browser they are using. This implies that all Government websites should be compliant with mobile devices to enable users of such devices to access the same information and services (to the extent possible) as available, say, over the internet through computers.

At a time when responsive design has almost become a standard, technology has been able to address issues related with differences in form-factors, screen sizes, content delivery modes (even sound is used to deliver content through some digital devices today), internet speeds and even skill-levels of users. Mobile devices have become so powerful that they can be used to carry out a majority of activities we have traditionally been using PCs for. Until a decade ago, it was felt that these small devices cannot handle the task of transferring large amounts of information, especially complex forms of information. However, the new devices are packed with enough computing power and software prowess to serve as a competent conduit for a majority of information and services. In addition to this, they are convenient to use and are almost always available. Things will continue to get even better on this front.

Mobile devices have an important role in the government's vision for Digital India as

well. Among the nine pillars of the Digital India programme, aimed at transforming India into a digitally empowered society and a knowledge economy, is e-Kranti which focuses on transforming E-Governance services. This has a clear connection with M-Governance as the government is targeting technologies such as the Cloud and mobile platform for effective implementation of e-Kranti. The key principles of e-Kranti include Mobile First, meaning all applications are designed/ redesigned to enable delivery of services through mobile. Fintech is a fantastic example of how this can be done.

Fintech Revolution and M-Governance

The country has made impressive progress in use of mobile technologies, especially in the government departments such as agriculture, health care, financial services, retail trading, utilities, communications, manufacturing, transportation and services. As mentioned earlier, fintech has seen exponential growth in the country thanks to the delivery of financial services over mobile devices. The government rolled out Unified Payments Interface (UPI) in April 2016 and within six years of its launch it has become a phenomenal success. Mobile devices have played a decisive role here. For reference, the Unified Payments Interface is an instant real-time payment system developed by the National Payments Corporation of India. The interface facilitates inter-bank peer-to-peer and person-to-merchant transactions. It is used on mobile devices to instantly transfer funds between two bank accounts.

Not just the government sector and banks but many players in the IT industry including a few startups have taken advantage of the same to offer their own, customized services which are mostly delivered through the mobile devices. Notable among these are PhonePe, Paytm, RazorPay, MobiKwik, Google pay, Amazon Pay, Bajaj FinServe, CRED, Uber and even WhatsApp. This has virtually

revolutionised the entire banking and financial services industry in India.

RBI has recently come up with 'UPI for feature phones' which is an important addition to the existing services and is bound to help users who have less advanced mobile phones or slow internet connections. One no longer needs to essentially have a smartphone and an internet connection to carry out financial transactions over mobile devices. Using the new service, the feature phone users will now be able to undertake a host of transactions, such as payments to friends and family, payment of utility bills, recharging of vehicle FAST Tags, payment of mobile bills, and checking their account balances.

The Framework and the Master Application

About a decade back, the Ministry of Electronics and Information Technology had developed and notified the framework of Mobile Governance. This was followed by the launch of 'Mobile Seva' which provides an integrated platform for delivery of government services to citizen over mobile devices using SMS, USSD, IVRS, CBS, LBS or mobile applications installed on the mobile phones.

For its organised, well-structured and effective implementation, the Mobile Services Delivery Gateway (MSDG) was launched to enable delivery of public services over mobile devices. The Gateway provided a system to deliver services through various mobile based channels, such as Short Message Service (SMS), Unstructured Supplementary Service Data (USSD), Interactive Voice Response System (IVRS), Cell Broadcasting Services (CBS), Location Based Services (LBS), Mobile Payment Services and mobile applications. The Gateway is constantly evolving and will continue to add new channels and functionalities in future.

While we have explored a few successful examples above, any discussion on M-Governance



in India cannot be complete without the Umang initiative which represents a far expansive and far-sighted vision of the government of India. According to the Ministry of Electronics and IT, the UMANG (Unified Mobile Application for New-Age Governance) is one of the key initiatives under the Digital India program to develop a common, unified platform and mobile app to facilitate a single point of access to all government services. It is envisaged to act as a master application, which will integrate major government services from various sectors such as Agriculture, Education, Health and Housing among others. The application will enable users to access e-Government services from the central Government, the State Governments, local bodies and their agencies.

UMANG is conceptualised to bring governance on the fingertips of individuals through 'mobile first' strategy. This multi-lingual app is developed and operated by National e-Governance Division (NeGD) of the Ministry of Electronics and Information Technology (MeitY) to fast-track Mobile Governance in India. Its primary aim is to abridge inconvenience faced by users in managing multiple mobile apps and facilitate a one-stop-solution to avail varied government services. Thus, downloading one mobile app will aid convergence of various efforts, carried out separately, to reach out to the individuals via mobile phones. This will greatly simplify the access to government services and take us towards a new era of M-Governance in India.

Challenges to Address

While we have made steady progress in our journey towards a successful and effective implementation and availability of M-Governance eco-system in India, we still have challenges which need to be addressed in order to make India realise its full potential. A large number of independently working applications and services is one such challenge. A common Indian citizen, who has limited understanding of digital technologies, finds it difficult to install, manage and access a significant number of applications to carry out a variety of tasks and access services from different stakeholders. The UMANG approach is praiseworthy and welcome from this standpoint. We can take better advantage of technology if it is available in a simpler form, especially if it is meant to reach out to every household including in rural India.

Another important challenge is the limited awareness and readiness and lack of necessary skills among the common users to access these services through a mobile device. Many of them rather prefer to visit government service delivery kiosks where they are helped by others. Low levels of digital literacy too is to blame for this. The government often runs awareness campaigns to encourage citizens to develop digital skills and enhance their understanding of the internet and communication technologies (ICTs) and things will continue to get better with the passage of time. Access to good smartphones is still a luxury to many and it will take time before every household has access to one. The government's efforts have already resulted in a host of smartphone manufacturing companies making base in India. Hopefully, India-made, cost-effective smartphones will help address this gap in some time.

India is a country with incredible diversity and we cannot imagine India without its vibrant local languages. These languages are an important factor from M-Governance perspective. While many of our services are available in multiple Indian languages (and English) we will need to make the entire M-Governance eco-system linguistically inclusive and accessible, to ensure maximum impact.

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DigiLocker can now be used as a Health Locker

A result of its integration with Ayushman Bharat Digital Mission (ABDM)

Users can digitally store health records like:

- Vaccination records
- Doctor prescriptions
- Lab reports
- Hospital discharge summaries etc.

Scan this QR code to download the DigiLocker App now