Accessing the E-Government Services Through Smartphones: Challenges and Opportunities

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Abstract:

Information Technology is transforming our world, changing the way we do governance, business, and even the way we learn, communicate, entertain ourselves. Even after India's information technology revolution and smartphones, some citizens have failed to use e-services due to awareness, accessibility, economic, timeliness, security, and many other weaknesses. Therefore, while studying the importance of e-governance concepts, there is a need to analyze the factors affecting the development of e-government through smartphones and the consequences of its challenges in the current digital age. This paper specifically addresses the challenges and opportunities issues in applications related to e-government initiatives using smartphones that directly affect citizens. However, these factors are likely to differ across the nation. After analyzing the secondary data and literature, we found that despite the challenges, the effectiveness of smartphone use in e-governance is gradually increasing and we can expect that m-governance will soon become a part of governance.

Keywords: - Information technology, Smartphone, E-governance, internet, e-services.

INTRODUCTION

We are living in a technology era where the technologies are changing and upgrading in an extremely fast manner. The government needs to change its manual process into digital form. E-Government is a technological revolution in government services that use web tools that have accompanied the information society. (**2017, Dr. Jaya Iyer*1 & Dr. Sindhu Singh).**The E-government is useful in many manners such as transparency, accountability, assessment of government recital and replaced the political practices which transitioned to e-democracy. (2014, **Poonam Malik1, Priyanka Dhillon 2, Poonam Verma3).** E-government provides a path to the government to use the creative ICT tools to provide people and companies with more convenient access to government policies and services, to improve the quality of the government services.(2016**, Nagaraja** K.) E-government is an online tool that offers a good relationship between the people and administration.(**2018,Kujtim Mustafa, Isak Shabani)**

In India, the e-government project is very beneficial for the citizen in terms of cost effectiveness, service delivery, transparency, and a promise for better service quality using the Internet. (2009, **Hiba Mohammad, Tamara Almarabeh, Amer Abu Ali**)

In India, the Smart Phone has entirely transformed the empire of communication in this century. Smart phones are perceived as effective tools to bring revolution in government services. Earlier the mobile was mostly used for communication purposes. But in the current century, the smart phone is using not only broadcast important information but also to deliver government services to the citizens (**2015, Dr. Vinay Kumara, Parul Palb, Ankita Sharmac).** Mobiles are now being used to provide services like Transport, health, education, finance, judiciary, and so on (**2015, Mrs. Vaishali Kadu1, Ms.Vijaya Mahesh Bagret2, Mr.Abhishek Verma3**). If we talk about the rural area, then citizens here have more than a simple mobile phone. If someone has a smartphone then it does not have to use the internet. And if we talk about the Urban area in India then they have both mobile phone users, simple mobile phones as well as smart mobile.(**2019, self observation by field study**) M-governance is a new way to provide government services universally using the internet enabled smart mobile phones. (**2016,Yousef Hashem Salameh Ali**)

LITERATURE REVIEW:-

A lot of studies have been conducted in the area of e-governance. A brief review of some of these studies along with research gaps has been given below.

Dr. Vinay Kumar, Parul Pal, and Ankita Sharma (2015) studied the effect of Mobile technology and how it can make an important contribution to the accomplishment of a good governance in India. This paper aims to analyze the pattern of different e-governance mobile apps based on different projects in various domains in India. They also studied the maximum number of apps are in different language domains and a maximum number of downloads has been done so far in the electoral domain. There are several reasons to use smart mobile devices for governance services, but in India, the number of smart mobile users is very low as compared to our total mobile device users in general. We can increase

these numbers by taking several measures seriously so that our citizens can avail these services in the future using smart phones.

Kujtim Mustafa and Isak Shabani (2018) explored the link between mobile cloud services and governance to examine how the availability of mobile may affect governance. Specifically, it seems at (1) how the availability of cloud data storage affects governance and (2) how the society wants and what they need at any time and wherever they are. The government should percolate all the services to the people for their convenience. Internet and smart phone have a significant role to get these services as per the customer convenience. They also discussed the major disadvantages of the cloud is that the person who is managing the data can sell the data to other companies or persons, for abuse with that data.

Mrs. Vaishali Kadu, Ms.Vijaya Mahesh Bagret, and Mr.Abhishek Verma(2015) **have** explained, that it is difficult for the government to deliver the government services to the individual at their doorstep. We are living in a digital age where every person has a mobile with an internet connection. With the help of Internet mobile, the person can use the application from anywhere. Therefore there is a need to transform the government web services into smart M-Governance, which bring the anywhere-anytime government service. The author concludes that with the help of smart mobile, users can access all the government services, and can increase active citizen participation in government processes, and improve internal operations. The E-governance services with mobile are not helpful for the rural population. Because most of the rural population used mobile to make and receive calls only. To carry out the m-governance in rural areas is a challenge for the Indian government.

Ms. Poonam Malik, Priyanka Dhillon, and Poonam Verma (2014) explained the role of ICT tools to implement good governance services in developing countries like India. With the help of e-governance the government will make their process and services in a more effective way. E-governance will offer several benefits to the people of India. They focused on three main contributions of e-governance that are: improving government processes; connecting citizens and last building external interactions. They also discussed some success factors that will bring good governance. Poverty, Technical illiteracy, Language Dominance, lack of knowledge, Inequality, and Infrastructure etc., are the major challenges in India. At last, the authors conclude that ICT tools improve the relationship between G2B, G2C, G2G, and C2G. ICT tools such as Internet email and web URL offer value for money services to the people of India.

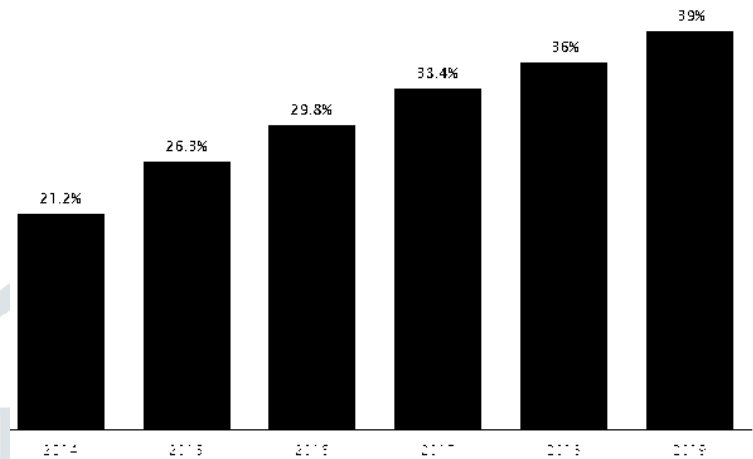**OBJECTIVE: -** The objectives of this research paper are:

1- To identify the factors that influence m-governance.

2- Challenges of Smartphone in accessing government services.

THE TREND OF SMARTPHONES IN INDIA:-

Trend of mobile phones in India is rapidly changing and advancing. In earlier days smart phones carry by only the rich and wealthy people due to their high prices and it was too far from the general public. But now the trend of usage

of smart phone has changed and now smart phones are accessed by the general public also. The growth of smart phones is increasing day by day.

According to indiatimes.com smart phone penetration in India is on the Rise, Set to Reach 37.3 Crore Users in Quarter 1, 2019. According to research by Counterpoint, last year, 2018 there is the total of 150 million smartphone shipments to India, and the number will be expected to hike to at least 160 million the year, 2019.

Graph of Mobile phone users that uses a Smartphone in India from 2014 to 2019. (Statistia.com)
Source:
https://www.statista.com/statistics/257048/smartphone-user-penetration-in-india/

Factors that influence the Smart Mobile in Government services: - The Major factors that influence the m-governance in India are as follows.

1- **Accessibility:** - Smart phone is an effective tool to deliver the government services to citizens. It ensures that citizens could use their smart phones to access the government services from anywhere. The demand for mobile phones is increasing regularly and with the accessibility of the millions of users, the government is inspiring the users to deliver e-government services through smart phones.

2- **Economical: -** There is no need for any physical network for communication purposes. Mobile services are also cheaper due to their low internet traffic plans and can be accessible in most of the rural and urban areas in India.

3- **Timely and accurate: -** Delivering timely and correct information is the key to the empowerment of citizens. All data is stored in the cloud server and it is convenient for users to access their documents on time using the internet.

4- **Payment Service: -** it is easy and convenient to make the payment through a mobile phone using a different application such as Unified Payment Interface and wallet. Mobile payment takes less time to make the payment as compared to the laptop or desktop.

CHALLENGES: -
Below are some challenges faced by the government.

Unawareness: - If we talk about urban areas, then most users know how to get the services from the smartphone. But in a rural area, most of the users have not a smartphone.

Even if somebody has a smartphone he doesn't know how to get the services from the phone. It is a major issue.

Poverty: - Major obstacles for the government are poverty in the rural area. The people who are living below the poverty line cannot afford the smartphone and the Internet and they deprived of government services.

Network Issues: - Mobile Network is the major issue in rural areas, and people of rural areas are facing lots of network issues. Most of the villages are not connected by the communication network .

Internet Issues: - Internet plays a mediatory role between the user and mobile application. If the speed of the internet is very slow then the mobile applications take lots of time to access. Access to the mobile application on slow internet connectivity is very difficult.

Lack of Trust: - It is difficult for the citizens especially rural people to trust M-government services. People still think that online payment is not safe. This thinking of people is due to a lack of knowledge and trust. People still consider mobile phones as a means of entertainment..

Electricity: - Online is directly related to electricity. And India still lags behind more countries in terms of electricity. This is a key factor in the success of Good Governance. Which the government can not ignore. Even today, there is a lack of electricity in many villages and cities in our country.

M-Government services Applications (Apps)

E-Sanad: - e-Sanad is a government mobile app aimed at online submission/verification of documents. It is created by NIC. Any type of document like personal, educational, or commercial can be authenticated using e-Sanad. The document should be available in the digital repository for getting attestation through e-Sanad.**(apps.nic)**

Digi Locker:- DigiLocker is a cloud-based application for the issuance and verification of documents & certificates digitally. The digi locker contains two parts one part is the issuance of certificates from valid sources like the government certificate and another is upload itself by users**.(apps.nic)**.

Saarthi APP: - Railway Minister Suresh Prabhu has launched a new railway app called Sarthi (SAARTHI). The features of this app are quite rich. Earlier users had to download separate applications to get railway facilities, like - booking, running status, arrival time, departure time, PNR inquiry, etc. But now the users can access every service from this app. The features of this app are as follows:

1- Coolie service can also be taken.
2- You can book Railway tickets.
3- All social media platforms of the Railway Department can be viewed.
4- You can also book an air ticket.
5- You can send feedback about railway services. etc. **.(apps.nic)**
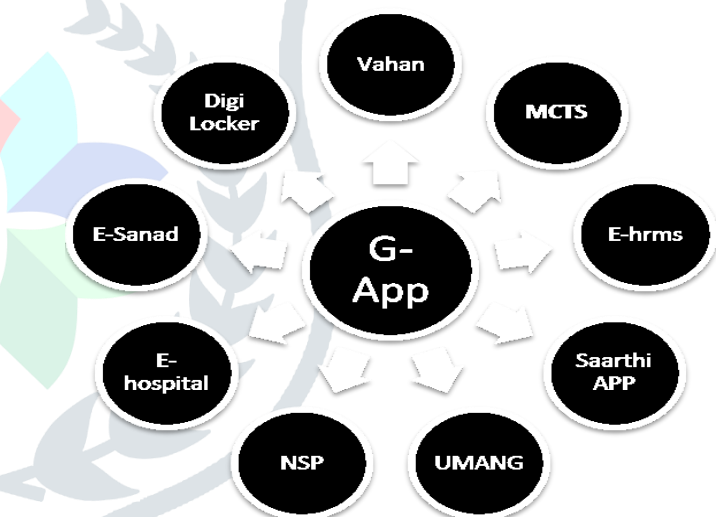
Fig:-1- Government Mobile App

Vahan: - Vahan is an online web application for RTO. The purpose of the application was to computerize the RTO operations related to national permits and data search of the digitally registered vehicle. The data of vehicle search by registration number, chassis number, and engine number anywhere in a country. This app was released on 1-June-2015. (Vahan.nic.in)

The UMANG (Unified Mobile Application for New-age Governance) App: - This app brings various government departments and their services on one platform. It permits users to pay electricity bill online for citizens of Ajmer, Assam, Mumbai, Bharatpur, Bikaner, Delhi, Kolkata, Chhattisgarh, Gujarat, Daman & Diu, Dadra, and Nagar Haveli, Andhra Pradesh, Gulbarga, Bihar, West Bengal, Jaipur, Jamshedpur, Jodhpur, Kota, Maharashtra, Meghalaya, Madhya Pradesh, Odisha, and Noida. This app was released on 23 November 2017.**(apps.nic)**

National Scholarships Portal: - National Scholarships Portal (NSP) is a Centralized web URL one-stop solution for several scholarship schemes offered by the government to the citizen of India. Students can directly apply online for the scholarship. This app was released on 16-Mar-2016. **(apps. nic)**

Mother and Child Tracking System (MCTS):- Mother and Child Tracking System (MCTS) is an online web portal to provides hospital services to pregnant women and children up to 0 to 5 years of age. It also helps in the regular valuation of service delivery to children and pregnant women. This app was released on 11-Feb-201. **(apps.nic)**

E-Way Bill System: - This app was developed for goods and service tax on 23-04-2019.The business men can fill the GST details online. The benefits of E-way bill system are as follows:

- Auto calculation of e-Way Bill using different pin codes.
- Easily find the distance between two PIN codes
- Find the Multiple e-Way Bills on one Invoice/Document.
- Find the consignment is in Transit/Movement. **(apps.nic)**

Suggestion: - The government should market and promote mobile services in rural and urban areas, so that everyone can know about these services, that now they can also avail government services from smart phones. And there should be more transparency and accountability. Which will build trust towards citizens? The government should focus on increasing network towers in rural areas. To avoid the internet issue the government should also focus on the ISDN and leased line network in rural instead of RF connectivity. Electricity is also an issue in rural areas, which also directly affects the online service of the government. To get service from mobile, it is also necessary to charge the mobile and without electricity, it is not possible. Therefore, the government should also pay attention to electricity issues along with the internet.

Conclusion:- Due to the huge demand for smartphones and the internet, mobiles are replacing the usage of desktop and laptop. Now the government is focusing on a mobile app rather than the web. Therefore the rate of usage of mobile governance will be more than e-governance. It is the responsibility of the government to reach the government services each and individual in a fast and effective manner. Smartphones will be a new tool for providing the government's services to the people. In rural areas, mobile usage is very high. Mobile Governance not only the alternative channel for government to percolate the government services to the public but also provide a better communication system to make a better citizen responsive government. The major challenge for M-governance is unawareness and it can be eradicated if the government starts to market and promoted these services in a good manner. But finally, internet-enabled smartphones can replace e-governance to M- governance with good governance.

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Biography:

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