

PUBLIC SERVICES DELIVERY THROUGH M-GOVERNANCE: JAMMU & KASHMIR GOVERNMENT INITIATIVES

S.A. Dar and P.Sakthivel

Dept. Of Political Science and Public Administration, Annamalai University, Tamil Nadu, India
darshowkat41@gmail.com

ABSTRACT

The “Mobile Service” initiative of Government of India followed by union territory of J&K aims at streaming mobile governance in the country, received much attention as a new paradigm for delivery of public services through electronically, especially via electronic and mobile gadgets. The mobile service was geared up in J&K in the year of 2003. The successive governments in J&K took many initiatives of mobile governance for better delivery of services to their citizens. The paper aims to examine the initiatives of the government of J&K for public services delivery through Mobile Governance and challenges associated with it.

Keywords: M-Governance, Technocracy, Mobile Apps.

Introduction

The United Nations has taken the initiative that is mobile governance a sub domain of electronic governance to boost the reachability access to public services for users. The Mobile governance is being adopted by all developed and developing nations of the world and India is not an exception. The world’s largest democratic nation India notified mobile governance in the gazette of India in Feb, 2012. M-Governance a revolutionized the whole world. It means not a replacement for E governance but supplement to E governance (Julia Manner et.al 2012). It means the use of mobile phones, headsets with wireless internet connection to perfect and refine the government services and strengthen peoples reach. It created a new dawn for people (anytime, anywhere, Michael Schermann et.al). As compared to other technological blessings the mobile phone is much cheaper and accessible in most of the rural areas in India. The mobile has now millions of subscription base; Government of Jammu and Kashmir are promoting and using the mobile services for delivering the e governance services in different areas. The mobile technologies are persistently trending, more channels may be added in the future as the need arises. The main objective of the mobile governance consists easy interaction, better service to the citizens and cost saving etc. It made the channel of communication between government and citizen open and easy. Its aim is to simplify the work and to deliver one stop ecosystem for

providing the services by the government through the mobile handsets. The government of J&K with private public partnership give permission to multiple network service providers to carry out the aims of mobile governance. The objective of this initiative is to provide platform that allows all government departments and agencies to expeditiously start offering their service through mobile phones without having to create their separate mobile platform. The solutions provide by the mobile handsets are beneficial during unforeseen conditions.

The historic category of good governance is government to citizens. It consists all the communications and transactions between the Jammu & Kashmir government that takes place through electronically. We all have staunch belief that mobile governance is much beneficial sub domain of e governance helps the citizens to achieve their needs in a time bound manner electronically. Also the services are pass on through mobile governance must be consistent with the needs and wants of citizen . The subscription base in J&K is continuously increasing and as per the reports reviled by Telecom regulatory authority of India (TRAI). The subscription is reached up to 83, 99,153 and expected to increase more in future.(TRAI).

Research Questions

1. Unearth the reasons for the emergence of mobile governance in J&K.

2. Discuss the initiatives of successive governments in J&K to promote Mobile governance.
3. Mobile applications developed by J&K government and other stakeholders for public services delivery.
4. Understand the challenges and issues in Mobile Governance.
5. How far the mobile governance brought efficiency, transparency & accountability in routine administration.

Objectives of the Study

1. To unearth the initiatives of Jammu & Kashmir Government for prompting mobile Governance.
2. To study the kind of services provided to citizens residing in J&K through mobile governance.
3. To Analysis the reasons for emergence of M- governance & challenges associated it.
4. To determine the role of mobile governance in order to bring transparency and accountability in public services.

Methodology

The paper adopts document and analytical method. Data pertaining mobile governance initiatives taken by the government of J&K by way of implementing numerous M-governance services were collected and analyzed for the study. Further, official publications of Jammu and Kashmir government, other secondary data from books, journals and web sources had also collected for the study.

Discussion

Types of M-Governances

1. **M-government to citizens (MG2C):** This type of service consists the interaction between the government and citizen like online passport, licenses and certificates.
2. **M-government to business (MG2B):** this domain focused on the interaction between the Government to Business Interactions like E-tendering, E- payment and E filling of tax returns.
3. **M-Government to Employees (MG2E):** This is meant for the interaction between the Government to its employee's like public finance management system (PFMS) and no objection certificates etc.

4. **M -Government to Government (MG2G):** This defines interaction between the Governments to its agencies like biometric enabled attendance system-office etc. (Nagaraja K 2016).

Features of m-governance

The mobile governance is evolving day by day and it has much potential to explore & provides services delivery mechanism. It's very swift & easy in order to provide delivery of services through mobile phones. It's an evolving quickly as the new frontier in transforming government and making it extra accessible and citizen centered. It establishes two way communications between the government and people hence strengthening democracy by providing utilization of services. its prominently used in government departments especially in financial services, agriculture, health, education, communication, transportation services etc.. After the launch of 4G technology in India citizens are now able to access all basic services on their mobile phones. As the mobile based technologies are persistently evolving, more channels may be added in future as the need arises. Mobile makes the communication system much easy and accessible for the citizens in Jammu and Kashmir. It allows for many users at one time by sharing a finite amount of spectrum. it allows users to place calls, send texts and receive updates from the internet. It is easy to carry by a person and citizen can visit any site on a mobile device at any time. Mobile phone has a tremendous potency to expand the access and reach public services in Jammu and Kashmir.

Reasons for emergence of M-governance in J&K

Science and technology provides wide range of blessings for human comfort. The first mobile handset was developed by Martin Cooper in 1937. The discovery of mobile phone made the whole world understand the benefits of mobile handsets. It made globe as a global village because it has higher efficiency, productivity, quality, flexibility, ability to communicate in and out of the work place and ability to accept payments wirelessly etc. keeping the infinite number of benefits of mobile handsets

government of J&K working tirelessly and doesn't leave any stone unturned in order to provide the best services to their people in a time-bound manner. Mobile seva facilitates larger people's participation in the decision-making process of Government. Today, technology is advancing citizen empowerment and democracy that once drive their strength from constitution.

Technology is forcing governments to deal with massive volume of data and generate responses, not in 24hrs but in 24 minutes. One cannot deny the dependence on mobile cell phones in every aspect of their lives such technological discovery become an indispensable part of our lives and every generation today has a mobile cell phone which serves a vital role in their lives. The mobile seva needs some important pre-requisite components like network, handset and electricity. The government of J&K an integral part of India has finally taken the initiative of mobile governance in 2004 and made a comprehensive partnership with many service providers like BSNL, Airtel, and Jio etc. for achieving the aim and objectives of M-Governance. Some of the main reasons of emergence are as under :

1. **Topography and Media Coverage:** The topography of J&K is unique and peculiar as compared to other states of India. There are certain LOC strategic areas where there is very least media coverage due to bad conditions of roads, security reasons and lack of transportation. The Government of J&K decided to introduce and promote mobile governance in those areas and keep the life of public aware, safe & secure through mobile governance..
2. **Law & order:** The main job of the government is to maintain law & order in the state. As we know the fact that Kashmir is called land of massacre where stone pelting and violence is perpetual by the youth of Kashmir due to several reasons. The mobile governance helps the agencies to keep their eye on those who violate the law & order. Thus, we can say that for the proper maintenance of law & order in the state the government decided to adopt the mobile governance for smooth functioning and welfare of the state.
3. **Administrative Setup:** Jammu & Kashmir is a region administered by India as a union territory has two administrative capitals .which usually works from May to October in Srinagar secretariat region (Summer capital) while from the month of November-April the capital shifts to Jammu secretariat (winter capital) due to harsh climatic conditions. The government of J&K introduced mobile governance for smooth communication between the headquarters and field agencies in order to carry out the developmental functions and solve the problems.
4. **Natural Calamity:** Sudden occurrences and disasters have a large potential to damage the people as well as their property. The year of 2008 (Earthquake) & 2014 (Flood) made the government realise that m-governance is a best way to help the people during the unforeseen conditions through send them an advance SMS notifications to avoid the damage. Hence, the government of J&K took many initiatives for the mobile governance from time to time in order to help the people through mobile handsets.
5. **Tourism:** Kashmir is commonly regarded as paradise on the earth due to its heart throbbing picturesque landscape. Tourism is one of the main economic industry of the state of J&K, which is worldwide famous for its natural beauty. The tourists from whole world want to see the Kashmir. The mobile governance helps the tourists to book their hotels, ticket booking, track destinations etc. The visit of tourists increases the economy of J&K to large extent. Keeping this view into consideration the Govt of J&K promotes mobile governance for further development.
6. **Terrorism:** Terrorism is a global threat and Kashmir is under the lap of this threat since 1990. Due to militancy there is persistent bloodshed in Kashmir and Pakistan find new roots for delivery of weapons to militants in Kashmir. The mobile governance helps the Indian forces to get the news about militant's habitats. Thus they can easily cripple them. It is to be believed that mobile governance helps the

agencies to decline the rate of militancy and ensures unity, integration and peace in the state after having strong espionage system through mobile handsets.

- 7. Transparency and accountability:** Transparency and accountability are the two main ingredients of E-governance so for that thing the government of J&K took the initiative of M-governance in J&K. The M-governance keeps the administrators on their toes for all their omissions and commissions. Thus they exercise their power in a transparent manner and become answerable to people for all actions. It lessens the corruption in the administration. So, the M-governance is beneficial for transparency and accountability.

Solution on your Mobile Phones

Mobile Governance aims to link all the departments and agencies in order to deliver citizen centred services electronically through mobile channels. These services can be delivered by the romantic features of the mobile handsets. For this purposes the mobile handsets having features alike SMS, IVR, USSD and M- apps. The solutions provided by the mobile handsets are beneficial during unforeseen conditions throughout the country.

The various solutions envisioned under mobile seva are as under

- I. USSD:** USSD is an acronym of unstructured supplementary services data it's sometimes referred as "Quick Codes" or "Feature code" it assists the users to interact with the mobile network operator computers. This service is normally used for checking balance, prepaid call back, wap browsing. The USSD helps users to interact directly from their mobile phones by making selection from various menus.
- II. CBBS (Cell broadcasting basic services):** Mobile phones brought revolution in the modern world. CBBS is a technique of sending message/notifications to multiple users in a particular area by the authorities. This technique or service is much beneficial during any pre/post disaster management. It's a geo targeted or geo fenced messaging services.

III. Mobile payment services(MPS) :

Mobile payment services providing a golden and beautiful opportunity to the users to do any payment transition electronically from their mobile phones without visiting any bank. It's used in transferring funds to people/organisations that takes place through mobile device.it gives birth to e- payment or cashless economy.

IV. SMS/MMS GATEWAY:

SMS is an acronym of short message service while as MMS is an acronym of multimedia messaging service. Both the services allow the individual to ship and take message in the form of short message or multimedia service transmission. It is helpful during unforeseen conditions. It helps the administration to conduct the daily functions easily. Also it furnishes both push and pull message services for Government and citizen respectively.

V. The IVRS:

IVRS is an acronym of interactive voice response system- is an automated phone system technology that allows users to penetrate information via a voice responsive system of pre-recorded messages without having to talk to the representative. In the context of mobile governance, the IVRS application is intended to serve the C2G and G2C wings of the e-governance model. The important (Passport) and some basic (Ration card) services of the government are compelling services and draw a lot of enquiries from the citizens.

VI. LBS(Location based services):

LBS are an acronym stands for location based services denoting software service which gears geographic data or navigation information for users. It can be used in an agglomeration of context, work, entertainment, personal life, indoor object search etc. It revolutionised the navigation system and assists agencies/persons to track the person's location. In short this service pinpoints the location of anyone (**source: india.gov.in**)

The J &K Government Initiatives for Promoting M- governance

The Government of Jammu & Kashmir continuously using elbow grease and efforts for the promotion of m-governance in Jammu & Kashmir. The mobile seva in Jammu &

Kashmir was first time geared up in 2004 during the tenure ship of Former Late chief minister Mufti Mohammad Syed (PDP). The aim of the introduction of e-governance is only to simplify the work process. The Government of Jammu and Kashmir made a vision statement of e-governance is:

“Delivery of services at the doorsteps of common man at an affordable cost by using ICT in the process government functioning to bring about simple, moral, accountable, responsive, Transparent (SMART) Governance”

J&K is at the very immature stage of implementation of e-governance initiatives across the various departments of the state. The government’s aim is to make Jammu and Kashmir a smart state and keep the service delivery mechanism at the doorsteps of the citizens of J&K in an efficient, time bond, transparent and in responsive manner

1. The Government of India finally designed national E governance plan (NeGP) for using IT services delivery system for the citizens to build a crystal, efficient, accountable government. The policy has clear cut objectives for the states for e governance. The state of Jammu & Kashmir under NeGP scheme has geared up and has put the e governance initiatives in the state on a fast track execution mode. The state has no left stone unturned to make a state a “REAL KHUSHHAL STATE” The Wipro had conducted a survey for the state of Jammu and Kashmir and reported that the state has made a lot of development in terms of e-governance.
2. The Govt of Jammu & Kashmir established the e- Gov. Agency (JAKEGA) which works under the supervision of administrative secretary of information & technology department. The aim of of the agency is to promote transparency, efficiency and effectiveness for delivery of citizen services to common people through electronic devices like mobile phone, laptop etc.
3. The IT policy was made by the government of Jammu & Kashmir in the year of 2004. The policy laid down the establishment of e-governance and

additional IT initiatives also said policy defined the detailed guidelines related to all areas of e governance. It’s worth to mention here that the government of J&K revised the IT policy in 2020.

4. National informatics centre has been established in J&K for the promotion 7 contribution of ICT in various fields of administration along with the aim to provide special citizen centred services. The NIC is actively taking part with zeal & Zest in various E-governance projects in different sectors.
5. Another imitative of the government of J&K is setting up of two software technology parks for achieving the targets of e governance. These two parks are situated at Srinagar & Jammu. The purpose of these software parks is to provide uninterrupted and secure technological infrastructure like optic fibre connectivity, broad band connectivity, Wi-Fi access, video conferencing facilities etc.
6. Recently in the year of 2021 the Govt of Jammu & Kashmir launched mobile application “sataraknagrik” anti-corruption bureau with a purpose to facilitate seamless flow of information about corruption and enable citizens to submit their grievances with easy and mobility.
7. Another remarkable initiative of the Government of Jammu & Kashmir developed amobile application for the tourist which helps to increase the tourist footfall in Kashmir. This application assists the tourists in different ways like to find out the navigation of adventurous destinations also it provides sufficient knowledge about Jammu & Kashmir. The application is available in play store by the name of “JK tourist guide for Android”.

**Source: (JK Reports, Kashmir magazine, Kashmir life etc.)
Mobile Applications (m-APPS)**

Mobile application is a computer programme choreographed to run on smart phones. It is intended for productivity assistance like Email calendar etc. There is massive public demand for Apps which caused swift addendum in to other areas such as M-games, GPS, etc. So, there are now millions of apps available some

are free and others have a price. The mobile seva platform disposes Government services over mobile devices using mobile applications installed on the user's handsets. The J&K government and other stakeholders developed many applications which are available in mobile application store for better delivery of services to the people.

Mobile Applications

1. **IFC kashmir flood alert:** This app is developed by irrigation and flood control department. The application assists in examining the gauge level of river Jhelum during flood situation.
2. **Jammu and Kashmir RTO vehicle info:** This app is beneficial for police in order to know about the vehicle details.
3. **J&K water billing app:** Through this app the citizens of J&K may pay their water bills and can pay their bills online.
4. **University of Kashmir:** This Android app enables the students or employees of University of Kashmir to check the different things like notifications, admissions, results, salary etc.
5. **J&K bank mPAY:** This mobile application helps the citizens to fund transfer within bank and other bank, balance enquiry and cheque status.
6. **JK chrome:** This mobile browser was developed by Kashmiri student helps citizens to browse the different types of information.
7. **Kashmir crown:** This app led the digital revolution brings latest news, exclusive reports of Kashmir.
8. **JK super Kshitij:** This app is for the employees of JK Cement.
9. **Grofrills:** Kashmiri online grocery application- virtual super market which delivers the groceries straight to homes.
10. **Kashmir train timing:** This app helps the people to know about time table of all railway stations of Kashmir.
11. **JK tourist guide for Android:** This app is helpful for tourists to know about the tourist destinations of J&K.

(Source: Mobile play store)

Mobile Governance for Transparency & Accountability

Mobile governance has made public services delivery system more efficient and transparent. It assists the citizens to communicate to the government directly without visiting to a government office. Transparency means clearness, openness that information should be 24x7 available that helps to measure the authority's performance and prevent the officials to misuse their power & authority (Ibrahim Kuscheo 2016). The Government of Jammu and Kashmir through mobile governance connects people to internal administration. The mobile phone has a potency to capture and record activities of the officials hence made them answerable and keep them stand on their toes for all omissions & commissions. Hence mobile governance fosters transparency, accountability and builds trust in the government. Hence the mobile governance should be strengthened more and more so that the evils like corruption should be removed permanently from the roots. At last but not least, due to evolving nature of mobile governance the transparency, accountability is getting higher impulse in the administration of Jammu & Kashmir and made democracy much stronger.

Mobile Seva for Law & Order

The J&K Kashmir union territory is an integral part of India and its security lies on the shoulders of India. Mobile phone in the present era is considered as a great tool for maintaining law & order in the state. This security means freedom from threats and Kashmir is under the lap of threat since 1988. The Kashmir insurgency began in 1988 and got momentum during 1990s escalated into the most important internal security issue in India. Due to militancy persistent bloodshed is happening in Kashmir. It's to be believed that Pakistan finds new routes and modes of weapon delivery like air drops- to militants in Kashmir. Kashmir has seen an armed insurgency against Indian rule since 1989 and although violence and chaos has gone down considerably in the past few years, there have been occasional attacks by militants. Bombs and guns aside, a smartphone can be a powerful weapon in the hands of terrorists-but it can also provide intelligence

services with the tools to track them down. The smart phone can be the extremist's downfall as well as their best asset in Jammu and Kashmir. The militants came to know that local informers informed the security forces about their location hence militants threw many grenades at a mobile phone towers. The year of 2020 marked a remarkable shift in the trends of militancy indicating a downgrading in lethally despite high recruitment.

Challenges of Mobile Governance in J&K

The recent research demonstrated and interesting focus on the challenges.

1. Infrastructure: The Mobile Governance needs well equipped infrastructure for smooth functioning. IT is very unfortunate that Jammu and Kashmir is not having basic infrastructure facilities like Internet and Electricity. The state is depend on central grants because the state don not have that much potential of economy .Hence, it is the duty of central Government to take this matter in to keen consideration .

2. Cost: E governance or its sub domain needs finance as it is rightly said that finance is oxygen for administration for development. Without finance or cost an administration is like a boat without rudder. All the e-governance projects can't be carried out successfully if there is financial constraint. The J&K is economically weak usually reliable on the funds provide by the union government. Hence union govt must take the matter of financial constraint of J&K into keen consideration for implementing mobile governance in far flung areas. (Preeti Shrivastava, et.al 2014).

3. Privacy and security: The privacy and security is the major requirement for mobile users because the recent Data leak cases threatened the people. Therefore the implementation of M-Governance must have security protocols for safeguarding the interests of all masses. (Dr Deepti Maheshwari et.al 2014).

4. Digital Divide: The Digital divide in the modern era is the biggest challenge for carrying the benefits of mobile governance. The digital means defined the people into two categories i.e. one who have access to internet,

mobile phones and another one who don't have access to internet & mobile phones .This created a gap between the people The digital divide takes form in Rich- Poor, male, female, urban- ruler etc. and this gap needs to be narrowed down. (Sangeeta Jauhari et.al 2014).

6. Lack of Expertise: The Mobile Governance needs bucket of expertise that can ensure the privacy and security to citizens. The Jammu and Kashmir have skilled human expertise deficit this gap needs to be fulfilled for promotions of mobile Governance.

7. Conservative mind setup: For any positive change it is necessary to have flexible and positive mind-set .The traditional and conservative mind-set of people sees the mobile devices as an evil it hampers the growth of Mobile Governance in Jammu and Kashmir .

8. Low ICT literature: For Mobile Governance needs strong IC literacy for prosperous break through. There are some people who do not believe in technology prosperity.

9. Security Reason in J&K: Kashmir is called paradise on earth but in real sense it is called land of massacre. Kashmir is called land of wars usually held between the militants with Indian army forces. This situation leads to virtual curfew or mobile network barring in Kashmir. For smooth functions of mobile governance it demands smooth network connectivity. So the frequent network barring is the biggest challenge in Kashmir, it needs to be solved as soon as possible for smooth m-governance functions.

10. Political will:

For any development process there is a need of political will. The political will can cultivate the prosperity in any state. The development in any state is dependent on political will of the state. The Government must be stable in order carry out the developmental functions. Without the political will the development always remains a split fancies alike. There is always hung parliament in J&K due to different reasons which affects the development to the large extent

11. Language: language is the window of world without it a person is a like a bird without wings. Almost Every content or applications available online is usually in the English format that needs strong grip on English language by the user. So this factor is a challenge to the m –governance especially in those areas where the rate of literacy is very low and people don't have knowledge of English.

12. Electricity: Electricity has infinite uses in our day to day life and plays a vital rule in the field of mobile governance. The electricity is the pre-requisite criteria or component to access the mobile handsets and to enjoy services. The J&K has a good hydroelectricity potential for generating electricity but due to lack of planning and financial constraints the state is still in the state of sorry affairs. The frequent electricity cuts make the people unable to access the mobile phones.

13. Climate: The climate of J&K is very harsh particularly from the month of November to March due to heavy snowfall during these months there is no electricity at all. The heavy snow fall destroys the mobile network towers badly. This situation makes the people unable to access the mobile seva.

14. Barring of Mobile network & Internet connectivity:

The mobile governance needs proper internet connection in order to carry out the day to day functions without internet there is no means of mobile governance. Due to different security reasons the access to internet in Kashmir is snatching from people in the pre text of law and order. The Internet is becoming the town square for the global village of tomorrow. We are all now connected by the Internet, like neurons in a giant brain. In fact the internet became boon and bane for the people today. The hot button issues like ban on beef, terrorist attacks like pulwama, Jatagitation, and abrogation of special status of J&K made the government to think always to go for the network barring. This barring laid down titanic effect on the lives of students and businessman in different ways. After the long period of time now in the month of Feb, 2021 the internet 4G services has been restored in

Kashmir it remained suspended since 5th August, 2019 when centre ended the special status of state. it was also a long pending demand of the regional political parties to restore the services, which impacted the students and businessman. Finally The Jammu and Kashmir administration issued an order allowing the restoration of high-speed mobile internet services in the region, a move that came more than 17 months after 4G facilities were snapped ahead of the Centre's controversial decision to withdraw the erstwhile state's special status. Now the state is converted into union territory and is an integral of India. It's worth to mention here that access the internet is citizen's fundamental right and it should not be taken away in the pre text of law and order.

(Source: www.greaterkashmir.com & ([www.kashmirtribune.in/Kashmir magazine.com](http://www.kashmirtribune.in/Kashmir%20magazine.com)))

Declaration of conflicting interest

The author declared no potential conflict of interests with respect to the research, authorship. And/or publication of this article.

Funding

The author received no financial support for the research, authorship, and/or publication of this research article.

Acknowledgement

I would give my most gigantic appreciation to every single one person who gave me the probability to complete this paper. An extraordinary appreciation I oblige my **Guide Dr. P. Sakthivel** whose commitment in insights and comfort helped me with arranging my article in a period bond way.

Other than I should see with much appreciation the significant piece of those researchers and researchers who had adequately drafted their papers on a close to district their references and reference helped me a sensational approach to complete my article conveniently.

Conclusion

M- governance in Jammu and Kashmir is to provide efficient and effective government services through mobile devices technology. Mobile governance is one of the important elements of the government in the present times whether to provide public services to the

people of the state. It establishes a way of communication between the government and people. One cannot deny the dependence on mobile cell phones in every aspect of their lives. The m-governance has been geared up in Jammu and Kashmir for several unique reasons like boosting up of the tourism, maintain law & order, cripple terrorism etc. However, the services need some requirements on part of users like privacy, quality and accessibility etc. The m-governance contributes in reducing costs and greater coordination & communication.

M-government is a value added service and a complementary to E-government that facilitates the services delivery to rural areas and for emergency notifications. Its key attribute is mobility, where citizens can access services anywhere and anytime. When the government of J&K started launching many initiatives for M-governance, it has become one of the emerging service delivery mechanisms due to its potentiality of ICT. Till now, the government has implemented various initiatives with different projects (JAKEGA, Satarnagri, Mobile Apps etc) in J&K. M-governance is still at a new stage and still needs more improvement to get a better M-governance. Currently, M-governance in J&K is still facing challenges in both

management and technology. The mobility of M-governance opened doors for diverse benefits and applications. Although designing and implementing M-government brings up some of the challenges to government like digital literacy, privacy, security, internet connectivity and accessibility.

M-government technology will be accepted if it is designed and implemented properly and its services can be introduced in an easy way to users. The paper covers the strategy that could be accepted by the government of J&K in order to make M-governance successful and get acceptance by all citizens. At last but not least, the youth of Kashmir should understand the benefits of science and technology and they must shun the gun culture and stone pelting. War and violence is not a solution to any generation, what the solution is i.e. maintenance of peace which is always backed by the development and prosperity. The review of challenges calls for future work on each issue discussed where researchers can experientially and empirically explore such areas. Finally, M-governance is advancing like a snowball with the new smart phones, which open doors for more advanced options for E-government services.

References

1. Abu-Shanab, E., & Haider, S. (2015). Major factors influencing the adoption of m-government in Jordan. *Electronic Government, an International Journal*, 11(4), 223-240.
2. Behn, R. D. (2007). The Challenge of Evaluating M-Government, E-Government, and P-Government: What Should Be Compared with What?. *Governance and information technology*, 215-238.
3. Jauhari, S., & Maheshwari, D. (2014). M Governance: Challenges and Prospects. *International Journal of Innovative Research and Development*, 3(12).
4. Katara, S. K., & Ilavarasan, P. V. (2013, October). Mobile technologies in e-governance: A framework for implementation in India. In *Proceedings of the 7th International Conference on Theory and Practice of Electronic Governance* (pp. 352-353).
5. Kumar, D. (2014). Enhancing the reach of public services through mobile governance: The Mobile Seva Initiative in India. Available at SSRN 2575270.
6. Mishra, S., & Singh, M. (2020). A conceptual framework and architecture for m governance. *International Journal of Vehicle Information and Communication Systems*, 5(1), 90-108.
7. Nagaraja, K. (2016). E-Governance in India: Issues and Challenges. *IOSR Journal of Economics and Finance*, 7(5), 50-54.
8. Narayan, G. (2007). Addressing the Digital Divide: E-Governance and M-Governance in a Hub and Spoke Model. *The Electronic Journal of Information Systems in Developing Countries*, 31(1), 1-14.
9. Rafia, N. A. Z. (2009). E-governance for improved public service delivery in

- Fiji. Journal of Service Science and Management, 2(03), 190.
10. Ojo, A., Janowski, T., & Awotwi, J. (2013). Enabling development through governance and mobile technology. *Government Information Quarterly*, 30, S32-S45.
 11. Pardeshi, V. (2014). m-Governance: Next Frontier in Governance from Indian Context. *Advances in Industrial Engineering and Management*, 3(2), 5-12.
 12. Tair, H. Y. A., & Abu-Shanab, E. A. (2014). Mobile government services: Challenges and opportunities. *International Journal of Technology Diffusion (IJTD)*, 5(1), 17-25.
 13. JYerramilli, R., & Swamy, N. K. (2017, August). Mobile governance—A complement for successful eGovernance (Study on Challenges in mobile governance). In *2017 International Conference on Smart Technologies For Smart Nation (SmartTechCon)* (pp. 1549-1554). IEEE.
 14. Pandey, R., & Sekhar, K. V. (2013). From e-Governance to m-Governance—The Way Forward. *E-Governance Techno-Behavioural Implications*. www.excelpublish.com, 117-128.
 15. Kumar, R., Kumar, M., Kamal, K. K., Saquib, Z., & Bhatia, K. (2014, October). Assessment of the performance and efficiency of public services being delivered through mobile seva. In *Proceedings of the 8th International Conference on Theory and Practice of Electronic Governance* (pp. 431-434).
 16. Binti, K., Bagga, R. K., & Sekhar, K. V. (2011). M-governance future in Indian context. *Technical trends*. *CSI Communications*, 11-15.
 17. Kanaan, R. K., Abumatar, G., Al-Lozi, M., & Hussein, A. M. A. (2019). Implementation of m-government: leveraging mobile technology to streamline the e-governance framework. *Journal of Social Sciences (COES&RJ-JSS)*, 8(3), 495-508.