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E-Governance in Uttar Pradesh: Concept, Initiatives and Challenges

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Abstract: In India, governments' at all three levels - national, state, and local - are working to implement information and communication technology in order to provide people with more effective and timely services. As a result, the Uttar Pradesh government implements e-governance programmes, with the goal of providing as many services electronically as possible. When it comes to e-governance, the year 1970 is usually the starting point. Since then, we've had a number of e-governance-related initiatives. Meanwhile, the Uttar Pradesh government has launched a number of e-government initiatives, including Nivesh Mitra, e-Parinay Patra, Bhulekh, Koshvani, e-District and others. Each of these initiatives appears to benefit people to a greater extent. Apart from this, however, there are some obstacles to overcome when it comes to e-governance implementation. In other terms, these challenges appear to be roadblocks to success of e-governance. This includes social and economic issues, as well as cultural and technological concerns, as well as privacy and security concerns. There are, however, numerous challenges and obstacles but the government is committed to overcoming these obstacles and paving the way for effective e-governance. The evolution, initiatives, and challenges of e-governance in Uttar Pradesh are discussed in this paper.

Keywords: E-Governance, Uttar Pradesh, G2C, G2B, G2G, Technological Development

I. INTRODUCTION

Electronic-Governance or e-Governance can be defined as the use of information and communication technology (ICT) in the provision of government services, information exchange, transactions, integration of pre-existing services and information portals and websites.

The Council of Europe has referred to e-Governance as: "E-governance is about the use of information technology to raise the quality of the services governments deliver to citizens and businesses. It is hoped that it will also reinforce the connection between public officials and communities thereby leading to a stronger, more accountable and inclusive democracy."

E-Governance aims to help strengthen the government's drive to a more effective Government and increase transparency that better manages social and economic resources for development. The main purpose of e-governance is not only to enter government records online; the ultimate goal of e-governance is to transform government. Indeed e-Government has at most 20% technology and at least 80% is about people, processes and organizations.

A. The Need for E-Governance

The main motivation for the e-governance in India and the noble motto - to provide the SMART government-"SMART" being an Acronym for Simple, Moral, Accountable and Accountable, Responsive and Transparent Government.

The government is now making efforts to change the standard of governance through various e-governance programs. With the help of e-governance it facilitates the exchange of information with citizens, businesses or other government departments, faster and faster delivery of public services that improves internal efficiency, lower costs / rising costs, reorganization of administrative processes, quality of service delivery.

B. Benefits of E-Governance

E-Governance offers many benefits to government, across all sectors. It facilitates the delivery of government services to citizens, business and industry. It provides information to government and the public at low cost with great ease of use. The administration of e-governance makes the Government accountable as all Government data and information is available online. The main advantages are as follows...

- 1) Fast, Convenient and Cost Effective Service Delivery
- 2) Transparency, Accountability and Reduced Corruption
- 3) Increased Participation by People



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II. LITERATURE REVIEW

Margetts, H. (1999) in his book recognised Information Technology is recognized as a strategic tool that can greatly improve the efficiency of government. Abramson, M. A., & Morin, T. L. (2003) in his book describe that Government in all three categories institutional, state and local government bodies such as the Municipality and the Panchayati Raj Institution are now using IT for good governance. Bedi, K., Singh, P. J., & Srivastava, S. (2001) & Evans, G. (2017) describe that E-governance brings governments and citizens together by removing / reducing the various levels involved in providing services and information and improving delivery and quality, without transparency. Yadav, N., & Singh, V. B. (2012) in her paper sheds light on what kind of technology was adopted by the govt. e-governance also pointed out that, e-governance made govt. transparent, effective operation for Indian citizens. Shrinivas, M. A. (2013) in his paper emphasizes some of the issues and challenges of e-governance and proposes some solutions to the failure of governance in India. Malik, P., Dhillon, P., & Verma, P. (2014) in the paper shed light on e-governance systems in various regions of India, and includes challenges, the failure of e-governance projects, good governance solutions, etc. Khan, I., Khan, N., & Nazia. (2015) discuss the transformation of e-governance in terms of challenges, challenges and strategies for managing in India.

A. Statement of the Problem

The existing literature describes about e-governance related strategies, new technologies, implementation, challenges and challenges and hopes for the future, etc. in India. But those texts did not focus on evolution, recent initiatives, etc. of the various regions of India especially with Uttar Pradesh. Therefore, this paper focuses on the evolution and the latest e-governance in Uttar Pradesh.

- B. Objectives
- 1) Study the emergence of e-governance in Uttar Pradesh
- 2) Focus on recent e-governance initiatives in Uttar Pradesh
- 3) Analyzing the issues and challenges of e-governance in Uttar Pradesh

C. Methodology

This paper is a descriptive only. Data collected for this study from secondary sources. The main purpose of this paper is to discuss egovernance in Uttar Pradesh and its objectives.

III. E-GOVERNANCE MODELS

E-governance services can be shared between citizens, business and government. Basically these three models of E-Governance are recognized as core models of E-Governance...

A. Government to Citizens (G2C)

This E-Governance model refers to government services used by citizens. Here, citizens visit the link and choose the type of services they want to use. This models strengthen the bond between the government and its citizen. The types of services offered by this model include: -

- 1) Payment of online bills such as electricity, water, telephone etc.
- 2) Online filling of complaints.
- 3) Availability of any kind of online information.
- 4) Online registration of applications.
- 5) Copies of land-record.

B. Government to Government (G2G

This model refers to shared resources within government. Here information is shared between the various spheres of government, the department and organizations. These types of services or information are: -

- 1) Sharing of information between police departments.
- 2) Finance and budget work.
- 3) Exchange of government documents.



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C. Government to Business (G2B)

In this way, the relationship between the private sector and government grows. Share information about this model as: -

- 1) Collection of taxes.
- 2) Payment of all kind of bills and penalties.
- 3) Rejection and approval of various applications related to business.
- 4) Inspection/evaluation of factories/ production house etc.

D. Evolution of E-Governance

Evolution of e-governance in India could be traced back to 1970. Prior to that, initially, e-governance emerged in the field of defense, economic monitoring, planning and deployment of IT in elections, census, tax administration, etc. govt. of India established an electronic department, followed by the NIC in 1977. In fact, it had made great efforts to coordinate all quarter quarts in eighteen years. By the way, in the late 1980s a certain amount of govt. Officials used computers, but their requests were limited to word processing in 1987, with the launch of the national satellite based computer network (NICNET), India's e-governance system became more powerful. In addition, since the early 90's, technology has been developed by ICT to increase its use of comprehensive annual applications in terms of policy emphasis on rural access and greater participation in NGOs and the private sector. Among the developing countries, India has always embraced the beginnings of e-governance. After 1970s, there has been several initiatives with projects regarding e-governance, namely, Gyandoot, e-seva, Union Ministry of IT, smart govt., national e-governance plan, e-kranthi, digital locker and digital India ,etc.

IV. E-GOVERNANCE INITIATIVES IN UTTAR PRADESH

Uttar Pradesh is India's most populous state and also India's fourth largest state economy. The Government of Uttar Pradesh is dedicated to bringing government services to citizens' doorsteps in an effective and transparent manner through a network of various e-governance initiatives that can be accessed from any computer or smart phone with an active internet connection. In 2006, U.P. has taken steps to implement and disseminate e-governance through capacity building. Under the e-governance program, Government plans to improve transparency in public administration and make the delivery system more efficient. Records with government departments are computerized to ensure that there is a seamless service delivery through a dedicated or online delivery network and that connects all the Districts, Tehsils and Blocks with the State capital. The State Data Centre (SDC) was established to function as a comprehensive pool of data, information and services from various government departments. In Uttar Pradesh the government is continuing to try to expand the base of its e-governance services. These services are provided through internetenabled centres at the village level in all districts.

UP has established leadership in many e-Governance initiatives. E-Governance projects in UP cover the entire field of interfaces - G2G, G2C and G2B. Under the e-governance plan, government departments compiled applications such as: land record, health, food security, human resources, social services, road, property registration, agriculture, municipalities, gram panchayat, commercial tax, police and employment exchanges. UP Government and almost all departments have its websites where information can be accessed by citizens. The following are some of the important initiatives...

A. Government to Citizens (G2C) Initiatives

S.No.	Project & URL	Brief Description
1.	Food and Civil Supplies Department https://fcs.up.gov.in/	This portal provides all basic services related to supply of food grain, procurement of food grain also ration card. On this portal several other related information & services also available for public.
2.	Anti Bhu-Mafia Portal http://jansunwai.up.nic.in/ABMP.html	Anti Bhu Mafia portal -IGRS is an integrated Grievance Redressal System implemented by UP Govt for all type of Complaints related to illegal encroachment. In cases of illegal occupation of public and private land by land mafias, the public can easily register their grievances, get information about the action taken on the complaint, give their feedback and suggestions and continuously monitor the action taken by senior officials.
3.	Bhulekh http://upbhulekh.gov.in/	The Bhulekh web portal has been set up in order to computerise Uttar Pradesh's land records in order to streamline the land records' daily operations. The Bhulekh portal keeps track of Khatauni's entire life cycle.

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4.	CM Helpline	Anyone can lodge complaints related to all the facilities provided by the state government.
٠.	Calling Number 1076	Whose timely disposal is done only after satisfactory feedback is received from the
		complainant.
5.	e-District (Janhit Guarantee Act)	e-District UP plans to provide government services to residents through Citizen Service
٥.	http://edistrict.up.gov.in	Centers (CSC) in order to save time and effort in providing timely and efficient services to
	ntep.// calstrict.up.go v.m	the public. Services from various departments are connected to the common location.
		Government of UP has implemented the project in all the 75 districts of the state.
6.	e-Nagar Sewa	The "e-nagarsewa" central application was created and launched to provide services to
	http://e-nagarsewaup.gov.in/ulbapps/	citizens of Uttar Pradesh as well as employees of Urban Local Bodies. Latest trends and
		technologies like SMS Integration, Payment Gateways, USSD, Android Apps, CSC
		Integration, IVR Call have been used to address citizens. Citizens services are also provided
		via citizen dashboard after registration at the e-nagarsewa. The e-nagarsewa application is a
		stable, dependable, and scalable application that can handle thousands of users.
7.	e-PARIKSHA	PARIKSHA is a one-stop shop for direct and examination-based recruitment to vacant
	http://pariksha.up.nic.in	positions in Uttar Pradesh's government departments. PARIKSHA assists candidates in
		completing application forms and offers a comprehensive technical solution for the
		commission's internal processes, publishing advertisements, sorting and scrutinising
		submitted application forms, scheduling interviews based on verification of uploaded claim
		documents and academic and professional merit, and conducting preliminary and main
		exams in order to make a final recommendation to the government.
8.	e-Parinay Patra	Property registration, search of property, certificate of registered document, marriage
	http://igrsup.gov.in	registration, certificate of discharge, certified copy of deeds
9.	Farmers Loan Waiver Scheme	The portal use for Farmers Loan Waiver Scheme. On April 4, 2017, the Uttar Pradesh
	https://www.upkisankarjrahat.upsdc.g	government announced a Rs. 30,729 crore scheme that will waive crop loans up to Rs. 1.00
	ov.in	lakh for small and marginal farmers. In addition, Rs.5,630 crore was set aside to write off the
		bad loans of around seven lakh farmers who had become nonperforming assets (NPAs) for
		banks. The total amount allocated for loan relief now stands at Rs.36,359 crore.
10.	IGRS-Jan Sunwai	Integrated grievance Redressal System, UP is an integrated system for the redress of citizens'
	http://jansunwai.up.nic.in	grievances in the state of Uttar Pradesh. People will use this service to file complaints, track
		their IGRS status, and provide feedback to the government. It is an online system that
		promotes transparency and ensures that government departments are accountable to people.
11.	Mahila Samman Kosh	Ensure that women who are victims of violence receive monetary and medical relief,
	http:///msk.upsdc.gov.in	including reconstructive surgeries, as well as educational assistance; minor children of such
		victims receive educational and medical assistance as needed. To help women and girls who
		aren't direct victims of violence but still need crucial social and economic empowerment.
		Public contributions to the Fund can either be utilized towards a specific activity in a specific
10	DDEDNIA	district, as desired by the contributor, or as a general contribution to the Fund.
12.	PRERNA	The Uttar Pradesh government's flagship programme, Mission Prerna, aims to increase the
	https://prernaup.in/	quality of education in the state's 1.6 lakh schools run by the Basic Shiksha Department. The programme was launched with a particular emphasis on fundamental learning skills. These
		skills include a child's ability to read with comprehension and perform basic math
		calculations, which will serve as the foundation for all of their future learning.
13.	RTI Online Portal	This is an online portal for filing RTI applications and first appeals, as well as a payment
13.	https://rtionline.up.gov.in/	gateway. Net Banking should be used to pay the fees. Indian citizens can only file RTI
	https://tuomine.up.gov.iii/	applications/first appeals for the departments/ public authorities of the Uttar Pradesh
		government via this portal.
14.	Scholarship	The Uttar Pradesh Scholarship and Fee Reimbursement Online System is an initiative aimed
- 11	https://scholarship.up.gov.in/	at providing financial assistance to students at various levels of education in the state. The
		Uttar Pradesh (UP) Scholarship includes several pre-matric and post-matric schemes for
		candidates from the SC/ST/OBC/Minority/General categories.
15.	UP Anti Corruption Portal	Through this portal, any citizen of the state may file a complaint against any department or
	http://jansunwai.up.nic.in/AntiCorrupt	officer in the state. Following that, an investigation into those corrupt departments or
	ion.html	officials will be conducted And if they are found guilty, then the strictest action will be taken
		against him.
		100 100



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B. Government to Business (G2B) Initiatives

S.No.	Project & URL	Brief Description
1.	Directorate of Industries & Enterprise Promotion http://diupmsme.upsdc.gov.in/	Directorate of Industries and Enterprise Promotion is an executive arm of the Department of Micro Small and Medium Enterprise and Export Promotion which is engaged in implementation of government policies for all-round development of industries in the. Through this portal anyone can apply for Mukhyamantri Yuva Swarozgar Yojana, One District One Product (ODOP) Support Scheme for Financing, One District One Product Training and Toolkit Scheme, Vishwakarma Shram Samman Yojana, U.P. and other related schemes.
2.	e-tender https://etender.up.nic.in	The Uttar Pradesh e-Procurement System allows Tenderers to download the Tender Schedule for free and then submit their bids online through this portal. The electronic procurement system (eProcurement System) is a method of procuring items through the internet. This facility cuts the tendering cycle time in half, lowers most indirect costs, and improves procurement transparency.
3.	Nivesh Mitra http://niveshmitra.up.nic.in	The "Nivesh Mitra", a dedicated Single Window System of Govt. of Uttar Pradesh. Through progressive regulatory processes, efficient systems, and effective observable timelines, to cooperate in the holistic development of an industry-friendly environment. The system's main goal is to make it easier for entrepreneurs to do business in Uttar Pradesh by providing an electronic-based, transparent system for online application submission and monitoring including online fee payment.
4.	Transit Pass Mining http://upmines.upsdc.gov.in	This portal is use for Inter-State Transit Pass and To promote exploration activity in the Private sector for search of new mineral deposits. To take up sponsored exploration and consultancy activities. To provide technical know - how and facilities for scientific mining with environmental safe guards and optimum mineral utilization. To provide laboratory and testing facilities at scheduled rates.
5.	Udyog Bandhu http://udyogbandhu.com/	"Udyog Bandhu" [Friend of Industry] is an organisation of the Uttar Pradesh State Government in India, devoted to facilitating investment in the industrial and service sectors, as well as solving various problems of existing and emerging industries, as well as issues relating to various Government departments.
6.	Uttar Pradesh Khadi & Village Industries Board http://www.upkvib.gov.in/Index- hi.aspx	Uttar Pradesh Khadi & Village Industries Board through its portal provides assistance for Mukhya Mantri Gramodyog Rojgar Yojna, Prime Minister's Employment Generation Program and Khadi and Village-Based Schemes.
7.	Department Of Commercial Taxes http://comtax.up.nic.in	Department Of Commercial Taxes through its portal provide services related to GST and VAT.



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C. Government to Government (G2G) Initiatives

S.No.	Project & URL	Brief Description
1.	DARPAN http://up.dmdashboard.nic.in	DARPAN, a Dashboard for Analytical Review of Projects Across Nation, transform complex government data into compelling visuals. It provides the district administration with a tool that allows them to provide real-time, dynamic project monitoring through web services without the need for coding or programming. By consolidating multiple data sources into one centralised, easy-to-access platform, it improves analytical capabilities through data collection.
2.	e-Madarsa https://madarsaboard.upsdc.gov.in	The Uttar Pradesh government is trying to bring madrasas on the integrated platform through a special portal. Registration of all recognized madrasas on the portal has been made mandatory. The Council's examinations of Munshi / Maulvi (Secondary) / Aalim (Senior Secondary) / Kamil and Fazil are being conducted from the year 2018. With the online implementation of the portal and the schemes, transparency, quality and reliability will be brought in the work of the council.
3.	E-Office-UP https://eoffice.gov.in/index.php	E-Office is a Mission Mode Project (MMP) funded by the Uttar Pradesh government's National e-Governance programme. The National Informatics Center (NIC) developed this product with the goal of making all activities and procedures in the Government of Uttar Pradesh's departments and offices more efficient, effective, and transparent.
4.	Koshwani http://koshvani.up.nic.in/	The Koshvani website initially developed with the intent of maintaining the state's financial health and increasing transparency in government transactions. This website is designed to assist Finance Departments and Financial Controllers in various departments. This will assist more than 6000 state DDOs in reconciling receipt and payment information with treasury figures.
5.	Manav Sampada http://ehrms.upsdc.gov.in/	The e-Human Resource Management System (Manav Sampada Uttar Pradesh Portal) is an online portal for Uttar Pradesh government employees that aims to maintain an online record of each employee.
6.	Shasnadesh http://shasanadesh.up.gov.in/	The main objective of the portal is to provide the details of the mandates issued by the government. On the UP Shasandesh Portal, these mandates are updated every day. With this initiative, residents of Uttar Pradesh will be able to review various mandates from the comfort of their own homes with a single click. According to the government, this initiative will ensure that government services are transparent.
7.	Teachers Transfer System http://upbasiceduparishad.gov.in	This portal use for inter-district transfer of various teachers, those working in schools of UP Basic Shiksha Parishad.

V. MAJOR CHALLENGES

E-governance is a powerful tool to reduce widespread corruption in Uttar Pradesh as well as in India. However, some people indulge in corruption by misusing the available funds for e-governance. Even though few e-governance initiatives have been successful and that impacted millions of peoples positively. We need change in governance, transparency and accountability to make e-governance a reality in Uttar Pradesh. Here we are describing three types of basic challenges:

- A. Technical Challenges
- 1) Interoperability
- 2) Privacy
- 3) Security

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- B. Organizational Challenges
- 1) Lack of Integrated Services
- 2) Lack of Key Persons
- 3) Language problem
- C. Economical Challenges
- 1) Cost
- 2) Maintainability
- 3) Reusability
- 4) Portability

Other Challenges: Scope, Quality, Communication, Human Resource are other challenges that affects e-governance initiatives.

VI. CONCLUSION

Performance analysis of various e-governance initiatives has shown that good planning alone can guarantee success. It is important to identify the characteristics of the local people and the region in terms of strengths and weaknesses, in which the project will be implemented. Therefore a SWOT analysis (Strengths, Weaknesses, Opportunities and Threats) requires project implementation. Successful initiatives involve local people, especially the youth. People should be educated about the potential benefits of such initiatives, before actually applying them. It is important to have sound infrastructure and technology to support e-governance programs. Another prerequisite is that officials involved in such projects should also be encouraged to accept the changes and should be trained to use computers.

However, some obstacles to e-governance remain, such as the digital divide between urban and rural areas, poverty, illiteracy, security, and implementation costs, to name a few. The government is concerned about each of these issues and challenges. Currently, past and present govt. launched a number of initiatives by overcoming the above challenges and issues. However, govt. should spend more money on these initiatives to make it more transparent, easier, safer and friendlier for citizens to boost people's confidence in to good democratic e-governance.

REFERENCES

- [1] Abramson, M. A., & Morin, T. L. (2003). E-government 2003. Lanham, MD: Rowman & Littlefield.
- [2] Bedi, K., Singh, P. J., & Srivastava, S. (2001). Government net: New governance opportunities for India. New Delhi: Sage.
- [3] Chatterji, Z. (2006). Uttar Pradesh e-Governance. Retrieved March 04, 2021, from https://egovindia.wordpress.com/category/uttar-pradesh-egovernance/
- [4] Evans, G. (2017). Implementing E-Government: An executive report for civil servants and their advisors. Place of publication not identified: ROUTLEDGE.
- [5] Govt. of UP. (2017). Uttar Pradesh Information Technology & Start-Up Policy 2017-2022. Retrieved November 26, 2020, from http://itpolicyup.gov.in/wp-content/uploads/2017/12/UP-IT-Start-up-Policy-2017-English.pdf
- [6] Govt. of UP. (n.d.). Key E-Governance Projects. Retrieved January 10, 2021, from http://up.gov.in/egov/link.html
- [7] Khan, I., Khan, N., & Nazia. (2015). E-Governance Reforms In India: Issues, Challenges And Strategies An Overview. International Journal of Computer Science Issues (IJCSI), 12(1), 2nd ser., 42-53. Retrieved March 12, 2021, from https://ijcsi.org/papers/IJCSI-12-1-2-42-53.pdf.
- [8] Malik, P., Dhillon, P., & Verma, P. (2014). International Journal of Science, Engineering and Technology Research (IJSETR), 3(7).
- [9] Margetts, H. (1999). Information technology and central government: Britain and America. London: Routledge.
- [10] Nandan, S. (2009). Lesson from E-government Initiatives in Uttar Pradesh. SIG on EGovernance, 26-32. Retrieved March 08, 2021, from https://www.csi-sigegov.org/egovernance_pdf/4_26-32.pdf.
- [11] NCERT. (2020). Projects in Local Context. In Computers and Communication Technology (pp. 349-356). New Delhi: NCERT.
- [12] Prabhu, C.S.R. (2012). E-Governance: Concepts and Case Studies. (2nd Ed.), PHI Learning Pvt. Ltd. India
- [13] Resnick, D., & Birner, R. (2005). Does Good Governance Contribute to Pro-poor Growth?: A Conceptual Framework and Empirical Evidence from Cross-Country Studies. Proceedings of the German Development Economics Conference, Kiel, 5. Retrieved February 01, 2021, from https://www.econstor.eu/bitstream/10419/19798/1/Birner.pdf.
- [14] Shrinivas, M. A. (2013). E-Governance: Issues and challenges. Epitome: An Online Interdisciplinary, Multidisciplinary Journal, 2(2).
- [15] World Bank. (2016). India States Briefs Uttar Pradesh. Retrieved October 15, 2020, from https://www.worldbank. org /en/country/india/brief/india-states-briefs-uttar-pradesh
- [16] Yadav, N., & Singh, V. B. (2012). E-Governance-Past, Present and Future in India. International Journal Of Computer Science Applications, 53(7), 35-47. Retrieved March 10, 2021, from https://www.ijcaonline.org/archives/volume53/number7/8437-2220.









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