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Bridging the Digital Divide: A Gap Analysis of Awareness and Utilization of E-Governance Services among Rural Citizens under the Panchayati Raj System

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Abstract

The Panchayati Raj system's introduction of e-governance has completely changed how services are delivered, especially in rural areas. However, because of the ongoing digital divide, the advantages of these digital initiatives are still not evenly distributed. With an emphasis on gender-based disparities, this study, *"Bridging the Digital Divide: A Gap Analysis of Awareness and Utilization of E-Governance Services among Rural Citizens under the Panchayati Raj System,"* attempts to investigate the discrepancy between awareness and actual use of e-governance services. Using a descriptive and analytical research design, structured questionnaires were used to gather data from 502 rural respondents. The association between gender and the degree of awareness and use of different e-governance services was examined using cross-tabulation and chi-square tests. The findings show a statistically significant difference in awareness and utilization between male and female respondents. Because of things like low digital literacy, sociocultural barriers, and lack of access to digital infrastructure, female respondents trailed behind male respondents, who tended to be more aware of and involved with online services. The results highlight the pressing need for gender-sensitive interventions, such as awareness campaigns aimed at women, mobile-based service accessibility, and localized digital literacy

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programs. The study comes to the conclusion that attaining inclusive and equitable rural governance requires closing the gender digital divide.

Keywords: Panchayati Raj, E-Governance, Rural Citizens, Gender Sensitivity, Digital Literacy.

Introduction

The emergence of e-governance services is regarded as a transformative strategy in governance, particularly regarding rural India. As technology and internet access become more widespread, government entities are increasingly investigating the effectiveness of digital platforms to improve service provision and encourage citizen participation. E-governance includes a wide range of online services designed to make government procedures more accessible and efficient. Nonetheless, despite the promising benefits, a notable digital divide continues to exist, especially in rural regions, where inadequate infrastructure and limited digital literacy pose significant obstacles. This gap not only diminishes the effectiveness of these services but also challenges the inclusive ideals that underpin e-governance initiatives. (Pimenidis et al., 2011)

Fundamentally, the digital divide manifests as both a physical and a conceptual gap that affects how citizens can access and utilize government services. In developing regions, inadequate internet infrastructure and heavy reliance on traditional channels often deter citizens from engaging with e-governance platforms. Moreover, the lack of innovative service design tailored to the specific needs of rural populations contributes to the alienation experienced by many potential users. As e-governance systems increasingly rely on web-based interactions, it becomes imperative to address the barriers that inhibit access to these platforms. Infrastructure enhancement must be coupled with initiatives to build digital literacy, ensuring that all citizens can confidently navigate and benefit from online services. The promise of e-governance as a tool for more equitable governance can be realized only when these critical gaps are effectively bridged, enabling a genuine transformation in how government-citizen dynamics are perceived and practiced in rural India.

To harness the full potential of e-governance in addressing the digital divide, it is crucial to adopt a holistic, inclusive approach that encompasses technology investment, user-centric service design, and community engagement initiatives. Only then can the vision of a connected and informed citizenry become a reality, thereby fostering trust and faith in government institutions. By prioritizing these strategic areas, rural India may progress towards achieving

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the intended benefits of e-governance systems, leading to enhanced governance, transparency, and community participation.

Awareness

E-services have completely changed how people and companies communicate with financial institutions, government organizations, and service providers. By enabling online transactions, information access, and application submission, these digital platforms provide efficiency, accessibility, and convenience. In the current digital era, citizens must be aware of e-services in order to benefit from streamlined procedures, less paperwork, and time savings. Governments and organizations can increase public participation, increase transparency, and lower administrative costs by spreading awareness of the available e-services. To guarantee fair access and optimize the advantages of these digital solutions for every member of society, it is equally critical to address potential obstacles to e-service adoption, such as gaps in digital literacy and worries about data security.

Digital divide: Concept and implication

The digital divide encompasses the disparities in access to technology and the internet, which have significant implications for social equity and economic development in rural areas. These disparities can lead to exclusion from essential services, hinder economic opportunities, and perpetuate cycles of poverty. Thus, addressing the digital divide is critical for promoting inclusive growth and ensuring that rural populations can fully participate in the digital economy. This participation not only enhances their access to essential services but also empowers them to engage with governmental processes more effectively. Furthermore, bridging the digital divide can lead to improved educational and economic opportunities, ultimately fostering a more equitable society. This transformation is particularly significant in rural areas, where access to technology can mitigate the transformation is particularly significant in rural areas, where access to technology can mitigate the challenges posed by geographical isolation and limited resources. Furthermore, the integration of e-governance services can empower local communities by providing essential information and resources, fostering greater participation in decision-making processes. This enhanced access to

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information not only improves transparency but also builds trust between citizens and government entities. As a result, it can lead to more informed and engaged communities that are better equipped to advocate for their needs and priorities. This empowerment allows for greater participation in local governance and facilitates the development of tailored policies that address specific challenges faced by rural populations.

Defining the Digital Divide

The digital divide refers to the gap between those who have easy access to digital technology and the internet and those who do not, significantly impacting various aspects of life, including education, healthcare, and governance. This disparity often leads to unequal opportunities and outcomes, particularly in rural areas where infrastructure and resources may be limited. Addressing the digital divide is crucial for enhancing e-governance services, as it ensures that all citizens can access essential information and services provided by the government, thereby promoting inclusivity and equity. This access is particularly significant in rural areas of India, where traditional barriers such as lack of infrastructure and digital literacy can hinder effective participation in e-governance initiatives. As a result, targeted efforts must be made to improve connectivity and educate citizens about the available services. This includes both infrastructure improvements and digital literacy programs that can empower rural residents to make full use of these services.

Utilization of E-governance

The effective utilization of e-governance services in rural India is pivotal for enhancing access to essential services, improving transparency, and fostering citizen engagement. This not only enables villagers to access government schemes and programs but also helps build trust between citizens and public institutions. Furthermore, the integration of local languages and culturally relevant content into these platforms can significantly enhance usability and effectiveness. This not only helps in increasing access to government information but also fosters a sense of inclusion among the rural population. By ensuring that e-governance services are user-friendly and accessible, we can promote greater digital literacy and encourage more citizens to engage with these vital services. This will not only enhance their ability to navigate

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digital platforms but also empower them to utilize these services for accessing government information, applying for benefits, and participating in local governance initiatives. As communities become more engaged with these platforms, they will be better equipped to voice their concerns and influence policy decisions that directly impact their lives. This increased participation can lead to more responsive governance that addresses the unique needs of rural populations. Moreover, by utilizing these digital services, citizens can access vital information, facilitate communication with local authorities, and contribute to community development initiatives.

Literature Review

The literature surrounding e-governance and its implications for rural citizens, particularly within the framework of the Panchayati Raj system, reveals a complex interplay of technology, governance, and socio-cultural dynamics. (Fraunholz & Unnithan, 2006) initiate this discourse by positioning e-governance as a facilitator of democracy and citizen empowerment, emphasizing the necessity for transparency and accessibility in government services. They argue that while e-governance can enhance citizen engagement, issues such as data privacy and equitable access remain significant barriers. (Venu Menon, 2007) expands on this by evaluating the Panchayati Raj system in India, highlighting that the anticipated socio-political changes, including social equality and gender equity, have yet to materialize. She identifies systemic hurdles such as elite control and bureaucratic inefficiencies that stifle grassroots empowerment, particularly for marginalized groups. This critique underscores the importance of contextualizing e-governance initiatives within the unique socio-political landscapes of rural India. (Tiwari & Tiwari, 2008) further contribute to the discussion by examining the role of Information and Communication Technologies (ICTs) in poverty alleviation through rural projects like e-Choupals. Their findings indicate that while these initiatives can enhance information delivery and economic opportunities, they often fail to engage women effectively, thereby perpetuating existing gender disparities in access to technology and resources. (Jeet Singh, 2008) calls for a more citizen-centric approach to e-governance in India, emphasizing the need for strategies that prioritize equity and participation. He critiques the tendency to import e-governance models from developed nations, which may not align with the realities of rural Indian contexts. This perspective is echoed by (Hallberg et al., 2011), who explore the

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significance of understanding local needs in the implementation of digital services, particularly for women and girls in rural Kenya. (K. Sein, 2011) discusses the role of intermediaries in facilitating e-government services, suggesting that the effectiveness of these initiatives often hinges on local engagement and understanding of community dynamics. (Wahid, 2012) provides a broader review of e-government research in developing countries, highlighting a shift towards interpretive paradigms and the need for theoretical grounding in future studies. (Borah, 2012) reflects on the unfinished agenda of Gandhi's vision for Gram Swaraj, asserting that the lack of political will and systemic inefficiencies in the Panchayati Raj system hinder genuine democratic participation. This sentiment is echoed by (Clifton Hill, 2016), who identifies socio-cultural determinants that affect access to e-governance, particularly in the water and sanitation sector.(G. Rahim et al., 2017) advocate for a multi-channel approach to e-governance that considers diverse user needs, while (N. Adiele, 2017) emphasizes the potential of e-governance to enhance public sector productivity, despite the challenges of implementation in developing contexts. (Murenzi & Olivier, 2017) highlight the necessity of addressing both supply and demand-side factors in promoting e-government utilization, particularly in rural municipalities. (Chhabra, 2017) identifies critical factors influencing technology adoption in public distribution systems, pointing to the persistent gaps between planned and actual use of e-governance initiatives. (Naidu & Chand, 2018) discuss the cultural challenges impacting e-government adoption, suggesting that societal norms significantly influence technology acceptance. (Souphavady, 2018) focuses on the Lao PDR, noting that low acceptance levels of e-government initiatives are a significant barrier to effective service delivery. (Joshi et al., 2018) explore the importance of community engagement in promoting e-government services, advocating for tailored delivery channels based on citizen feedback. (E. Okeke-Uzodike & Dlamini, 2019) reveal that traditional participation methods often overshadow e-participation in local governments, limiting the effectiveness of digital engagement strategies. (K A et al., 2021) provide a contemporary analysis of rural internet connectivity in India, identifying critical barriers that exacerbate the digital divide, particularly in the wake of the COVID-19 pandemic.(Paul, 2022) addresses the accessibility of e-government websites, emphasizing the need for inclusive design to cater to diverse user needs, while (Atique et al., 2024) highlight the potential of e-governance to enhance transparency and accountability in governance, advocating for ICT integration in public service delivery.This literature review, thus, underscores the multifaceted challenges and opportunities presented by

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e-governance in bridging the digital divide for rural citizens under the Panchayati Raj system, revealing a critical need for context-sensitive approaches that prioritize inclusivity and equitable access.

Objectives:

1. To Examine the citizen awareness on various E—Governance platform.
2. To Identify the gap between Citizen awareness level and utilization of services.
3. To propose strategic recommendations for enhancing awareness, improving participation.

Research Methodology

This section outlines the research design and methodology employed to investigate the effectiveness of e-governance services in bridging the digital divide in rural India. The methodology includes both qualitative and quantitative approaches, enabling a comprehensive analysis of how these services are perceived and utilized by rural populations. Data collection methods such as surveys, interviews were employed to gather insights from various citizen including local government officials, service users. Additionally, the study examines the challenges faced by these communities in accessing e-governance services, as well as the impact of digital literacy initiatives.

This study which focuses on Awareness and utilization of E-governance services by the citizen which is analysed by survey method, a structured questionnaire prepared, since the main focus is panchayat E-governance service, the target respondents are panchayat beneficiary. The study area is Dakshina Kannada, total 502 responses are collected, the data are then by using the IBM SPSS cross tab and chi square test is used to find the awareness of citizen on various E-governance services and Gap analysis are done to find the gap between awareness and Utilization of the services.

Gap analysis is done to identify the gap so that policy suggestion could be provided to bridge the gap. Few services are selected which is classified into 11 groups i.e., personal identification documents, residential and domicile documents, caste and community certificates, income and

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employment related services, welfare and social security services, property and utility services, agricultural services, Trade and business services, student related certificate, administrative and grievance services, and Population and demographic certificate. This study helped the researcher to understand which area needs attention.

Findings and Discussion

Table 1. Awareness of Citizen about the E-governance services.

Awareness about services		
	Frequency	**Percentage**
Yes	258	51.4
No	244	48.6
Total	**502**	**100**

Table 1. Shows that the data indicates that 51.4% of the participants possess knowledge of various E-Governance services, reflecting a moderate degree of awareness among the populace. Although it is commendable that more than half of the population exhibits some awareness, the reality that approximately 48.6% remain unaware underscores a substantial disparity. This finding underscores the

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necessity for more focused awareness campaigns and digital literacy programs, particularly in rural or underserved regions, to facilitate equitable access and engagement in E-Governance platforms.

Table 2. Sufficiency of the information provided by the Government.

Sufficiency of information provided by the authority		
	Frequency	**Percentage**
Yes	314	62.5
No	188	37.5
Total	**502**	**100**

Table 2. The results indicate that 62.5% of the participants perceive the services rendered by the authorities through E-Governance to be adequate. This implies a favourable perspective among the majority of citizens concerning the sufficiency of the existing digital services. Nevertheless, the remaining 37.5% who assess the services as inadequate highlight areas that may necessitate enhancements in service delivery, accessibility, or responsiveness. This disparity underscores the significance of ongoing assessment and feedback mechanisms to augment the efficacy and outreach of E-Governance initiatives at the community level.

Table 3: Citizen knowledge on availability of online service.

Knowledge about the availability of online services		
	Frequency	**Percent**
Yes	294	58.6
No	208	41.4
Total	502	100.0

The results indicate that 62.5% of the participants perceive the services rendered by the authorities through E-Governance to be adequate. This implies a favourable perspective among the majority of citizens concerning the sufficiency of the existing digital services. Nevertheless, the remaining 37.5% who assess the services as inadequate highlight areas that may necessitate

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enhancements in service delivery, accessibility, or responsiveness. This disparity underscores the significance of ongoing assessment and feedback mechanisms to augment the efficacy and outreach of E-Governance initiatives at the community level.

Awareness Utilization Gap

The table presents data on the awareness and utilization of various public services by gender, highlighting the gap between awareness and actual utilization. The key insights from this data are as follows:

Awareness Utilisation Gap										
Services	Awareness		Utilization		GAP		Gap%		Utilization	
	Gender		Gender		Gender		Gender		Gender	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Birth Certificate Service	138	181	83	147	55	34	39.86	18.78	60.14	81.22
Living Certificate Services	65	64	57	55	8	9	12.31	14.06	87.69	85.94
Caste Certificate Service	128	193	89	157	39	36	30.47	18.65	69.53	81.35
Income Certificate Service	119	191	79	153	40	38	33.61	19.90	66.39	80.10
Minority Certificate Service	40	50	31	43	9	7	22.50	14.00	77.50	86.00
OBC Certificate Service	40	50	33	40	7	10	17.50	20.00	82.50	80.00
Marriage Certificate Service	56	92	45	82	11	10	19.64	10.87	80.36	89.13
Residential Certificate	84	106	65	95	19	11	22.62	10.38	77.38	89.62
Service Population Certificate	44	51	36	48	8	3	18.18	5.88	81.82	94.12
Utility Service	37	46	29	42	8	4	21.62	8.70	78.38	91.30
Service of Ration Card	134	192	51	108	83	84	61.94	43.75	38.06	56.25
Service of Property Tax	104	133	70	112	34	21	32.69	15.79	67.31	84.21
Water Connection Service	107	140	73	122	34	18	31.78	12.86	68.22	87.14
Social Security Scheme	112	143	76	128	36	15	32.14	10.49	67.86	89.51
Service Unemployment Certificate	110	142	77	125	33	17	30.00	11.97	70.00	88.03
Aadhar Correction	114	172	62	141	52	31	45.61	18.02	54.39	81.98
Record of Rights, Tenancy and Crop(RTC)	64	77	44	65	20	12	31.25	15.58	68.75	84.42
Agri Service	75	98	46	78	29	20	38.67	20.41	61.33	79.59
HK Region Eligibility Certificate	17	17	15	15	2	2	11.76	11.76	88.24	88.24
Residence/Domicile Certificate	72	110	44	74	28	36	38.89	32.73	61.11	67.27
Widow/Not Re-Married Certificate	25	37	22	35	3	2	12.00	5.41	88.00	94.59
No-Government Job Certificate Service	3	3	3	3	0	0	0.00	0.00	100.00	100.00
Grievance Redressal Service	31	31	25	27	6	4	19.35	12.90	80.65	87.10
Trade Licence Service	55	59	40	53	15	6	27.27	10.17	72.73	89.83
No-Objection Certificate For Trade	34	22	27	22	7	0	20.59	0.00	79.41	100.00
Service of Distance Certificate For Students	51	69	46	57	5	12	9.80	17.39	90.20	82.61
Caste Welfare Fund Service	23	38	21	36	2	2	8.70	5.26	91.30	94.74
Disability Welfare Fund Service	33	62	29	57	4	5	12.12	8.06	87.88	91.94
Death Certificate Service	81	109	60	95	21	14	25.93	12.84	74.07	87.16

Awareness of services generally exceeds their utilization, indicating a gap in service adoption across the board. However, utilization rates often differ by gender, with females generally showing higher rates than males, as seen in services like the Widow/Not Re-Married Certificate (94.59% utilization for females vs. 88% for males) and Population Certificate (94.12% for

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females vs. 81.82% for males). In contrast, some services, such as the No-Objection Certificate for Trade, have near-total adoption among women (100% utilization by females vs. 79.41% by males), pointing to successful outreach or needs-based utilization.

Despite high awareness levels for certain services like the Birth Certificate Service (39.86% gap for males and 18.78% for females) and Income Certificate Service (33.61% gap for males and 19.90% for females), significant gaps in utilization persist. Conversely, services like the No-Government Job Certificate Service (100% utilization for both genders) and Caste Welfare Fund Service (8.70% gap for males and 5.26% for females) show minimal gaps, suggesting effective outreach and needs-based use. Notably, some services, such as the Service of Ration Card (61.94% gap for males vs. 43.75% for females) and Aadhar Correction Service (45.61% gap for males vs. 18.02% for females), exhibit significantly higher utilization gaps for males than females, which suggests the need for targeted interventions to address logistical, financial, or informational barriers and ensure equitable access.

Discussion

The results unequivocally show a persistent disparity between e-governance service awareness and actual use, which differs by service category and gender. For many services, awareness is relatively high, but utilization rates do not always match, indicating systemic difficulties in putting awareness into practice. The gender gap in use is among the most important revelations. Even though their levels of awareness are comparable or lower, women frequently exhibit higher utilization rates than men. For example, the Widow/Not Re-Married Certificate and the Population Certificate show much greater use by women, indicating either a greater need or better targeting of female recipients. However, the gaps in males' use of services like the Aadhar Correction and Ration Card Services are significantly greater. Higher opportunity costs, a lack of digital literacy, or more could all be contributing factors.

The execution of e-governance services within rural India possesses the capacity to markedly augment access to information and diminish the obstacles encountered by marginalized populations. Through the provision of a platform for communication and resource dissemination, these services can enable citizens to participate more actively in governance processes. Such participation not only promotes transparency but also assists in customizing

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services to address the particular requirements of these communities. By comprehending local contexts and integrating feedback mechanisms, e-governance can guarantee that the services rendered are pertinent and advantageous, ultimately culminating in heightened user satisfaction and community engagement. This methodology not only amplifies the efficacy of e-governance initiatives but also cultivates a sense of ownership among the rural populace. Furthermore, the incorporation of digital literacy programs will empower citizens to fully engage with these services, thereby reinforcing the significance of participatory governance.

Recommendation

Programs for Gender-Sensitive Outreach: Create focused awareness and facilitation efforts for male citizens in particular for services like Aadhar Correction Services and Ration Cards where male use is trailing behind. Localized Digital Literacy Drives: Provide digital training with an emphasis on e-governance portal navigation at the grassroots level, particularly for men in underserved and rural areas. Needs-Based Service Promotion: To guarantee inclusivity, local communication tactics should be used to promote services with high gendered demand, such as the Widow Certificate for women. Feedback Mechanisms: To identify service bottlenecks, especially for those with high awareness but low uptake, strengthen user feedback systems. Gender-specific disaggregated data can reveal particular obstacles. Mobile-Based Facilitation: To address access challenges and increase service reach, particularly in workplaces with a preponderance of men, install community kiosks or mobile van services in outlying areas.

Conclusion

In order to achieve equitable service delivery, it is necessary to address the notable disparities found in the gender-based analysis of e-governance service awareness and utilization. Despite having similar levels of awareness, men encounter greater obstacles to using several important services, even though women seem to be benefiting from them more regularly. A combination of increased accessibility, focused outreach, and continuous user needs assessment is needed to close this gap. The full potential of e-governance can be achieved with inclusive and

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responsive strategies, guaranteeing that all citizens, regardless of gender, gain an equal share of benefits from digital public services.

Refference:

1. Alarabiat, A. and Wahbeh, N. (2021). Unearthing citizens' acceptance factors for e-participation initiatives through facebook. The Electronic Journal of Information Systems in Developing Countries, 87(6). https://doi.org/10.1002/isd2.12194

2. Atique, M., Su Htay, S., Mumtaz, M., Ullah Khan, N., & Altalbe, A. (2024). An analysis of E-governance in Pakistan from the lens of the Chinese governance model. ncbi.nlm.nih.gov

3. Borah, P. (2012). Unfinished Agenda of Gandhi's Gram Swaraj- Present Status of Panchayati Raj in Assam.

4. Chhabra, V. (2017). Technology adoption in the public distribution system of Chhattisgarh, India: Analysis of factors that facilitate the transition to technology utilization in food distribution.

5. Clifton Hill, W. (2016). Identifying socio-cultural determinants to access: implications for e-governance in the water & sanitation sector.

6. E. Okeke-Uzodike, O. & Dlamini, B. (2019). Citizens' E-Participation at Local Municipal Government in South Africa.

7. Fraunholz, B. & Unnithan, C. (2006). E-governance-inhibitor or facilitator for democracy and citizen empowerment?

8. G. Rahim, A., Akintunde, O., A. Omotoyinbo, C., R. Obanla, O., & S. Aremu, N. (2017). Transformative Potentials of E-governance: The intrinsic role of Information and Communication Technology in Reinvigorating Public Service Delivery in Nigeria.

9. Gardenier, A., Est, R., & Royakkers, L. (2024). Technological citizenship in times of digitization: an integrative framework. Digital Society, 3(2). https://doi.org/10.1007/s44206-

ISSN PRINT 2319 1775 Online 2320 7876

Research paper © 2012 IJFANS. All Rights Reserved, UGC CARE Listed (Group -I) Journal Volume 13, Iss 2, 2024

024-00106-1

10. Hallberg, D., Kulecho, M., Kulecho, A., & Okoth, L. (2011). Case studies of Kenyan digital villages with a focus on women and girls.

11. Huffman, B. (2017). E-participation in the philippines: a capabilities approach to socially inclusive governance. Jedem - Ejournal of Edemocracy and Open Government, 9(2), 24-46. https://doi.org/10.29379/jedem.v9i2.461

12. Jeet Singh, P. (2008). Recommendations for meaningful and successful e-governance in India.

13. Joshi, P., Islam, S., Joshi, P., & Islam, S. (2018). E-Government Maturity Model for Sustainable E-Government Services from the Perspective of Developing Countries.

14. K A, S., G, I., & Chaudhari, S. (2021). A Survey on Rural Internet Connectivity in India.

15. K. Sein, M. (2011). The "I" between G and C: E-Government intermediaries in developing countries.

16. Kolsaker, A., & Lee-Kelley, L. (2008). Citizens' attitudes towards e-government and e-governance: a UK study. International Journal of Public Sector Management, 21(7), 723–738. https://doi.org/10.1108/09513550810904532

17. Murenzi, P. & Olivier, B. (2017). E-government Challenges Faced by Selected District Municipalities in South Africa and Rwanda.

18. N. Adiele, G. (2017). IMPROVING PRODUCTIVITY IN THE PUBLIC SECTOR THROUGH E-GOVERNANCE PROGRAMMES.

19. Naidu, S. & Chand, A. (2018). Exploring the problems, issues and challenges of e - government in Kiribati.

20. Nunes, S., Martins, J., Branco, F., Gonçalves, R., & Au-Yong-Oliveira, M. (2017). An initial approach to e-government acceptance and use: a literature analysis of e-government acceptance determinants. https://doi.org/10.23919/cisti.2017.7976044

21. Paul, S. (2022). Accessibility analysis using WCAG 2.1: evidence from Indian e-government websites. ncbi.nlm.nih.gov

22. Pimenidis, E., Iliadis, L, K. Georgiadis, C., Pimenidis, E., Iliadis, L., & K. Georgiadis, C. (2011). Can e-Government Systems Bridge the Digital Divide.

23. Przeybilovicz, É., Cunha, M., Geertman, S., Leleux, C., Michels, A., Tomor, Z., … & Meijer, A. (2020). Citizen participation in the smart city: findings from an international comparative study. Local Government Studies, 48(1), 23-47. https://doi.org/10.1080/03003930.2020.1851204

24. Purwanti, Y., Purwanto, B., & Jamaludin, M. (2022). Citizen participation in electronic public administration: the considerations of functionality and the technology acceptance model. International Journal of Public Policy and Administration Research, 9(4), 90-101. https://doi.org/10.18488/74.v9i4.3206

ISSN PRINT 2319 1775 Online 2320 7876

Research paper © 2012 IJFANS. All Rights Reserved, UGC CARE Listed (Group -I) Journal Volume 13, Iss 2, 2024

25. Sapru, Y. (2020). Augmenting public service delivery through online feedback systems. Indian Journal of Public Administration, 66(3), 297-311. https://doi.org/10.1177/0019556120958914

26. Shibu, S., & Naik, A. (2017). An approach to increase the awareness of e-governance initiatives based on cloud computing. 3, 1–4. https://doi.org/10.1109/icomicon.2017.8279168

27. Souphavady, L. (2018). A Qualitative Investigation of Factors Underlying Slow Development of E-Government in Lao People's Democratic Republic.

28. Tiwari, M. & Tiwari, M. (2008). ICTs and poverty reduction: user perspective study of rural Madhya Pradesh, India.

29. Vakeel, K. and Panigrahi, P. (2018). Social media usage in e-government. Journal of Global Information Management, 26(1), 1-19. https://doi.org/10.4018/jgim.2018010101

30. Venu Menon, S. (2007). Grass root democracy and empowerment of people: evaluation of Panchayati Raj in India.

31. Wahid, F. (2012). The current state of research on eGovernment in developing countries: A literature review.

32. Webster, C. and Leleux, C. (2018). Smart governance: opportunities for technologically-mediated citizen co-production. Information Polity, 23(1), 95-110. https://doi.org/10.3233/ip-170065