

Factors Affecting User Experience of E-Government Services: An Exploratory Review



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Received Date : February 27, 2024 Accepted Date: March 25, 2024 Published Date: April 06, 2024

ABSTRACT

As governments worldwide increasingly embrace digital transformation, e-government services have become integral in providing citizens with convenient access to public services and information. However, the success of these digital initiatives depends heavily on the user experience (UX) they offer. This paper presents an exploratory review of the user experience factors influencing e-government services. Drawing upon existing literature and empirical studies, this review identifies and examines key factors that shape the UX of e-government platforms, including accessibility, usability, security, personalization, multi-channel accessibility, content quality, and feedback mechanisms. The paper explores how these factors contribute to the public value generated by e-government services, encompassing benefits such as enhanced accessibility, improved efficiency, increased citizen engagement, greater transparency, cost savings, and innovative service delivery. Furthermore, the review highlights the need for governments to prioritize user-centered design principles and continuously evolve their digital offerings to meet the evolving needs and expectations of citizens. By synthesizing existing research and insights, this paper provides a comprehensive understanding of the UX factors influencing e-government services and offers valuable insights for policymakers, practitioners, and researchers seeking to enhance the effectiveness and impact of digital government initiatives.

Key words: User experience, user interactions, e-government, services, factors.

1. INTRODUCTION

The importance of user experience (UX) in e-government services to connect governments with their citizens cannot be understated. To this end, designing must be done based on users' priorities and comfort levels thus enhancing the overall quality of experiences by the targeted audience[1][2]. Governments see user experience as a key element that can help them develop better e-government services at low costs, enhance efficiency and deliver prompt quality services to their citizens. Nevertheless, even with more focus on UX, e-government services may still lack it [1]. Researchers have

shown how crucial it is for users to participate in the design and development of e-government initiatives for successful adoption [4].

Governments need to give priority to user research and adopt a "users' needs first" approach when digitizing services in order to tackle the gap between user experience and e-government[3]. The use of public servants with user research skills and embracing digital design and agile project management helps to improve the user experience of e-government services by Government[3]. Moreover, if governments concentrate on delivering faster, cheaper, more efficient services rather than increasing the number of services they offer, this can result in improved user satisfaction as well as adoption [3].

Different factors that affect e-government services in terms of user experience were investigated in a number of studies. For instance, Dash and Jain [4] analyzed user comments on UMANG mobile application in India and found eight major themes associated with citizen's experiences such as usefulness, ease of use, and customer care experience. Sabani et al. [5] conducted interviews in Indonesia and found that performance expectancy, effort expectancy, and system quality play significant roles in e-government adoption.

Puja Nugraha and Susanto [6] also studied factors influencing E-Government Innovations from perspective of civil servants, which include organizational dimension, individual dimension and technological dimension.

Muhammad and Kaya [7] who found that performance expectancy, effort expectancy, investigated the adoption of e-government in Nigeria and perceived risk influenced citizens' attitude towards e-government while attitude and facilitating conditions influenced their behavioral intention to use e-government services. These studies give invaluable insights into the factors that affect the user experience and adoption of e-governance.

Ultimately, improving the user experience in e-services requires a move towards more citizen-centered design, which prioritizes the needs and desires of citizens. By bridging the empathy gap through effective user research and design practices, governments can provide true value-adding digital services to users thus enhancing overall satisfaction with e-governance initiatives.

The rest of this paper, section 2 present the overview of e-government and User experience, section 3 discuss the factor affecting user experience in e-government, section 4 present User Experience and Public Value of E-government Services , finally the conclusion.

2. E-GOVERNMENT AND USER EXPERIENCE

The main objective of E- government is to make sure that online services are efficient and user-friendly. User experience has a great impact on the success of any e-government project. To boost user satisfaction and improve public involvement in government programs, intuitive design, ease of use, and promptness should be considered in e-government platforms. For credibility and trustworthiness in e-government systems, it is necessary to adopt a user-oriented approach that will enhance acceptance by users [12].

E-Government (E-Gov) is short for electronic government and refers to the use of information technology particularly internet to enable citizens, businesses and other governmental agencies access government services such as governance information & resources. In regards to e-government usability issues with its applications are more relevant than ever before as shown in figure 1 [12][25].

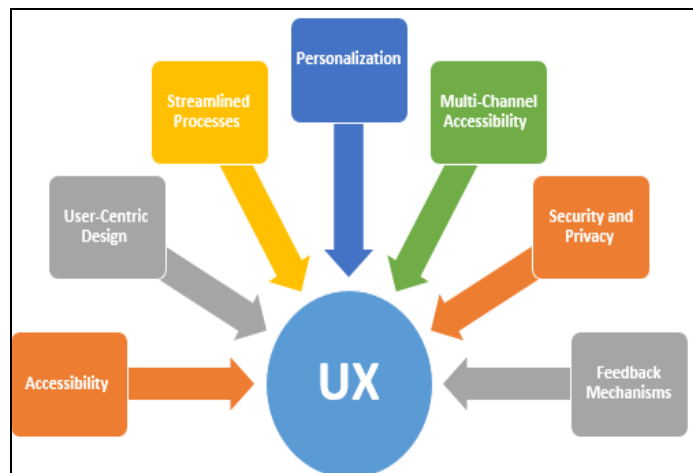


Figure 1: e-government usability issues applications with User Experience

In essence, e governance and user interaction are deeply connected, with design principles focused on users leading the way, in creating effective and people oriented digital government services. By giving importance to user requirements and choices, administrations can improve the ease of use, efficiency and general satisfaction of e projects.

3. FACTORS FOR USER EXPERIENCE OF E-GOVERNMENT

Various aspects can have an impact, on how users experience e government services. It is crucial to understand and address these factors to ensure that digital government platforms are user friendly, accessible and efficient. Below are some factors that influence the user experience of e government services;

Accessibility; Ensuring accessibility is vital for making e government services usable for all citizens, including those with disabilities. Factors like following web accessibility standards (such as WCAG) compatibility with technologies and providing alternative content formats (like text transcripts for videos) are essential for enhancing accessibility and inclusivity.

Usability; Usability refers to how users can interact with and navigate through e government platforms to complete their tasks. Elements like interface design, navigation paths, concise and understandable content and effective search features contribute to improved usability and a positive user experience.

Performance; Issues as if loading times, system errors and unresponsive interfaces can significantly diminish the user experience of e government services. Optimizing website and application performance reducing page load times and ensuring system reliability are crucial, for delivering an user experience.

Privacy; Users need to have faith, in e government platforms to protect their information and guarantee the safety of transactions. Elements such as data encryption reliable authentication methods, transparent privacy policies and adherence to data protection laws like GDPR are vital for establishing trust and assurance among users.

Content Quality and Relevance; It is crucial for e government platforms to provide quality, pertinent and current content to meet user expectations effectively. These platforms should present concise information that caters to diverse user groups needs regularly updating it to align with policy changes.

Multi Channel Accessibility; Citizens engage with e government services through channels such as websites, mobile apps, social media platforms and contact centers. Maintaining consistency and smooth transitions across these channels while supporting devices enhances accessibility. Enriches the user experience.

Personalization; Tailoring the user experience according to preferences behavior patterns and demographics can enhance engagement and satisfaction with e government services. Adapting content, services and recommendations, for users boosts relevance and usability levels ultimately enhancing the user experience.

Effective channels, for feedback and support play a role in empowering users to seek help report problems and share their thoughts on e-government services. Incorporating user-friendly feedback forms, customer support options and online assistance resources can boost user satisfaction. Support enhancements.

By focusing on these aspects and embracing design, principles centered on users' needs governments can elevate the user journey in e government services, citizen involvement and enhance satisfaction levels, with government projects.

4.USER EXPERIENCE AND PUBLIC VALUE OF E-GOVERNMENT SERVICES

User interaction plays a role, in enhancing the value of e government services for the public. Governments can optimize the advantages of services for citizens and society by focusing on making them user friendly accessible, transparent and engaging. The categorization pattern, for user experience variables outlined in Table 1, and the comparison between the studies shown in Table 2.

Table 1: Categorization Pattern for users experience outcome variables

Ref.	User experience variable	Merged/Modified variable
[9]	Success of e-government	Perceived net benefits
[10]	Attitude	Intention to read
[8]		Utilization of e-government
[11]		Government adoption
[12]	Attitude	Attitude
[13]	Continuous intention to use	Continuous intention to use
[15]		Use
[14]		Behavioral intention
[16]		E-government use behavior
[17] [18]		Actual use
[19]		Usage intention
[20]		Intention to engage
[21]		Intention to participate
[22]		Usage and accessibility

Table 2: Comparison Studies

Ref	Model	Technology	Sample size	Country	Year
[5]	Literature review	mainstream media	120	China	2018
[21]	Literature review	OGD initiatives	10	Saudi Arabia	2018
[19]	Grounded theory	e-gov services	56	China	2018
[15]	Literature review	e-G2B services	209	Saudi Arabia	2019
[6]	Means-end chain, Quality of Service, ISCM	e-gov services	1650	China	2020
[27]	UMEGA	e-gov services	216	Uzbekistan	2020
[14]	IS success model, TAM, Trust	m-gov services	355	China	2022
[12]	Literature	m-gov	81	India	2019

	review	services			
[14]	IS success model, TAM, Trust	e-gov services	289	Pakistan	2020
[22]	DTPB	digital government	396	Pakistan	

4. CONCLUSION

This comprehensive analysis has highlighted the role that user experience (UX) elements play in shaping the effectiveness and influence of e government services. By delving into studies and literature we have pinpointed aspects that impact the UX of e government platforms such, as accessibility, usability, security, personalization, multi-channel access, content quality and feedback systems. Our examination emphasizes the significance of prioritizing design principles centered around users in developing and implementing e government services. By concentrating on improving accessibility, simplifying usability ensuring security and privacy measures and tailoring experiences to cater to citizen requirements governments can optimize the value derived from digital government endeavors.

Moreover, we have outlined the impact of user experience (UX) elements, on the value of e government services. These factors ranging from increased citizen involvement and transparency to cost efficiency and innovative service provision play a role in unlocking the advantages of digital transformation within the public sector. Looking ahead it is crucial for policymakers, practitioners and researchers to delve deeper into and tackle the intricacies of UX within e government. This involves assessment and enhancement of platforms, incorporation of user feedback mechanisms and adaptation to evolving technologies and citizen preferences. By taking these steps governments can establish effective and citizen focused e government services that promote trust, participation and empowerment among citizens. Ultimately this analysis forms a basis for exploration and efforts aimed at enhancing the efficacy and influence of government initiatives, on a global scale.

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