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Challenges and Strategies of Inclusivity in Public Service Application Interface Design

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Abstract

Digital transformation in the public service sector has driven the urgency of implementing inclusivity principles in application interface design. This study aims to identify the challenges, strategies, and effectiveness of implementing inclusivity principles in the development of public digital service interfaces. Using a Systematic Literature Review (SLR) approach, this study analyzed 21 scientific articles published between 2013 and 2024. The results indicate that the main challenges include the digital literacy gap, developers' lack of understanding of accessibility principles, and minimal policy support. Strategies implemented include participatory design, user-based accessibility evaluation, implementation of WCAG guidelines, and personalization of service content. However, the effectiveness of these strategies varies and is strongly influenced by the social context, technological readiness, and stakeholder engagement. This study recommends integrating technical, participatory, and systemic policy approaches to improve equitable and just digital accessibility.

Keywords: Digital Accessibility; Inclusive Design; Public Services; Systematic Literature Review; User Interface.

I. Introduction

The ever-evolving digital transformation has encouraged government agencies and public service providers to adopt digital applications as their primary means of serving the public [1]. The primary goal of this digitalization is to increase efficiency, transparency, and service reach. However, the implementation of digital technology that does not adhere to the principle of inclusivity can create access barriers for user groups with special needs, such as people with disabilities, the elderly, and communities with low digital literacy [2]. Inclusive interface design plays a crucial role in creating public service systems that are equally accessible to all levels of society. Inclusive design principles emphasize the importance of building systems that consider differences in users' physical, sensory, cognitive, and linguistic abilities from the early stages of design [3]. Although this concept has been widely discussed in academic and design practice, its implementation in public

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service applications still faces various obstacles, such as a lack of binding regulations, limited resources, and a lack of awareness among developers [4]. Previous research suggests that strategies such as participatory design, implementation of Web Content Accessibility Guidelines (WCAG), and accessibility training for developers can be potential solutions [5]. However, the effectiveness of these strategies varies depending on local social, cultural, and policy factors [6]. To understand the current situation and strengthen inclusive practices in the public service sector, a comprehensive review of previous studies is needed.

This study aims to explore the challenges and strategies in applying the principle of inclusivity to the interface design of public service applications. The main focus of this study is described in the following three research questions: (1) What are the main challenges in implementing inclusive interface design in public service applications?, (2) What strategies have been implemented to overcome these challenges?, (3) How effective are the inclusivity strategies that have been used in supporting the accessibility of public digital services? By answering these questions, this study is expected to provide a comprehensive understanding of best practices and research gaps in developing inclusive public service interfaces.

II. Related Work

. Research on inclusive interface design in public digital services has grown significantly over the past decade, particularly in response to increasing concerns regarding unequal access to e-government systems. Early studies primarily focused on evaluating the accessibility compliance of public service websites using technical standards such as the Web Content Accessibility Guidelines (WCAG). Al-Azzawi and Hussein [1], through a systematic literature review, identified that many e-government services fail to meet basic accessibility requirements, highlighting recurring issues such as poor navigability, lack of alternative text, and incompatibility with assistive technologies. Similar findings were reported in national contexts, including Indonesia, where Putri and Rachmawati [6] demonstrated that a significant number of government websites did not comply with WCAG 2.1 standards.

Beyond technical compliance, several studies emphasized that accessibility challenges are deeply intertwined with social and cognitive factors. Dickinson et al. [3] argued that inclusive ICT design must account for user diversity, including differences in physical abilities, cognitive capacity, and digital literacy. This perspective is reinforced by Hiltunen et al. [20], who found that older users often experience difficulties with digital public services not because of insufficient skills, but due to confusing and cognitively demanding interface designs. These findings suggest that technical accessibility alone is insufficient without considering usability and emotional accessibility.

Participatory design has been widely discussed as an effective strategy to address inclusivity issues. Sloan et al. [5] highlighted that involving users particularly those with disabilities in the design process of e-government services leads to interfaces that better reflect real user needs. Pretorius [23] further demonstrated that the absence of citizen participation in rural public service design contributes to low adoption rates, indicating that inclusivity is closely linked to contextual relevance and user engagement. These studies position participatory design as a critical bridge between technical development and social acceptance.

Several researchers have also explored the role of developers and institutional capacity in inclusive design implementation. Abu-Doush et al. [4] and Abu-Doush et al. [37] found that limited understanding of accessibility principles among developers, combined with insufficient training and weak regulatory enforcement, significantly hampers the effectiveness of inclusive strategies. This is consistent with findings from Ismailova [38], who reported widespread accessibility errors in government websites due to weak governance and quality control mechanisms.

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In developing and transitional countries, inclusivity in digital public services is often overshadowed by infrastructure-focused digital transformation agendas. Mukamurenzi et al. [35] observed that e-government initiatives in Rwanda prioritized service availability rather than equitable access, while Latupeirissa et al. [39] concluded that the success of digital public services is highly dependent on institutional readiness, digital literacy, and citizen involvement. These studies underline the importance of systemic and policy-level support in sustaining inclusive practices.

Overall, existing research demonstrates that inclusive interface design in public services is a multidimensional issue encompassing technical standards, user participation, cognitive accessibility, and governance structures. However, many studies remain fragmented, focusing on specific sectors or evaluation methods. This indicates a need for a comprehensive synthesis that maps challenges, strategies, and effectiveness across different contexts an objective addressed by this study through a Systematic Literature Review approach.

III. Research Methods

This study uses a Systematic Literature Review (SLR) approach to identify, evaluate, and synthesize empirical evidence related to the challenges and strategies in implementing inclusive interface design in public service applications. This approach was chosen because it is considered capable of providing a deeper and more comprehensive understanding of the topic being studied, by systematically and critically reviewing various relevant literature [7]. This methodology follows the guidelines proposed by Kitchenham and Charters [7], which emphasize the importance of a transparent, structured, and replicable literature review process, especially in software engineering and interaction design activities. In addition, the SLR reporting structure in this study refers to the PRISMA 2020 (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines which provide a standard reporting framework so that the article selection and synthesis process can be documented clearly and systematically [8].

The main objective of this SLR is to summarize existing scientific knowledge regarding inclusive practices in digital interface design in public services, identify common barriers encountered in its implementation, and evaluate strategies that have been used to improve accessibility and user convenience. Literature searches were conducted through several academic search engines such as Google Scholar and Semantic Scholar with the help of the Publish or Perish application, using structured keywords based on Boolean operators so that the results obtained are relevant and according to the desired topic [9]. After the articles were collected, a selection process was carried out considering the previously determined inclusion criteria. Articles that met the criteria were then analyzed thematically to identify common patterns, differences, and the contribution of each study to the formulated research questions. This entire process was conducted using a narrative synthesis approach so that the results presented were not only summarized but also able to explain the relationships between concepts and future research directions [10].

By using the SLR method, this research is expected to provide scientific contributions in the form of a challenge map and inclusive interface design strategies for digital public services, as well as being a reference for developers and policy makers in building a more responsive and fair service system for all levels of society [11].

A. Formulating Research Questions

In formulating research questions systematically and in a targeted manner, this study uses the PICOC approach, which consists of five elements: Population, Intervention, Comparison, Outcome, and Context. The PICOC approach is commonly used in literature review-based research because it helps researchers determine the scope and focus of the study clearly and consistently [12].

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The following table summarizes the PICOC elements used in this study:

TABLE I

PICOC FRAMEWORK IN RESEARCH

Criteria	Scope
Population	Digital public service applications used by the general public.
Intervention	Implementation of inclusive interface design strategies or approaches.
Comparison	Interface design without an inclusive approach (conventional).
Outcome	Challenges of implementing and effectively implementing inclusive strategies for user access.
Context	UI/UX design in public service applications, 2013–2024 period.

Based on this framework, three main research questions (RQs) were formulated, which served as the focus of this systematic review. Each question was designed to address a specific aspect of the problem under study and also formed the basis for the search, selection, and analysis of relevant articles. The objectives of each RQ are summarized in Table 2.

TABLE II

RESEARCH QUESTION AND OBJECTIVES

ID	Research Question	Purpose
RQ1	What are the main challenges in implementing inclusive interface design in public service applications?	Identifying common barriers to implementing inclusive interface design in public digital services.
RQ2	What strategies have been implemented to address these challenges?	Develop and categorize strategies used to overcome barriers in inclusive design.
RQ3	How effective are the inclusivity strategies that have been used in supporting the accessibility of public digital services?	Evaluate the success or limitations of the strategies implemented based on previous studies.

The formulation of the RQ and objectives is in line with practices in preparing SLRs, which emphasize the importance of focusing on aspects of context, process, and impact in answering research questions comprehensively [13], [14].

B. Search Strategy

The literature search strategy is a crucial stage in developing a Systematic Literature Review (SLR), as the quality of the study results depends heavily on the completeness and accuracy of the identification process for relevant studies. In this study, a systematic literature search was conducted using various credible

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scientific databases such as Google Scholar, Scopus, and Semantic Scholar, with the assistance of Publish or Perish (PoP) software to efficiently manage and extract search results [15]. To ensure the search process yielded relevant articles covering a variety of perspectives, the researchers developed a search strategy using a combination of primary keywords derived from the PICOC elements and previously formulated research questions. Keywords were structured using Boolean operators such as AND, OR, and quotation marks "..." to ensure more accurate search results.

The search was conducted for articles published between 2013 and 2024, in both Indonesian and English. These years were selected to ensure that the studies reviewed reflect current activities and dynamics in the development of digital public services. The search process was conducted in May 2025, and each article found was classified and retained for further screening. As part of methodological quality assurance, searches were iteratively and updated to ensure no new literature was missed. This practice aligns with the recommendation of Booth et al. [14], who stated that a comprehensive and adaptive search strategy can minimize selection bias and increase the richness of the study findings. The results of this search process were then used as the basis for article selection, data extraction, and thematic synthesis. This process will also be visualized in the form of a PRISMA 2020 flowchart in the next section, to demonstrate the transparency of the overall study identification and selection process [16].

C. Inclusion Criteria

The inclusion criteria for this study aimed to ensure that the selected studies were truly relevant, high-quality, and aligned with the focus of the study. The inclusion criteria were designed based on the PICOC elements and their relevance to the formulated research questions. Articles included in this review had to meet several key requirements. First, the articles had to be published between 2013 and 2024, to ensure up-to-date information and relevance to the latest developments in digital public service interface design. Second, the articles had to be written in English or Indonesian, the two primary academic languages mastered by the researchers.

Furthermore, only articles available in full-text and legally accessible form were considered. Articles had to explicitly discuss user interface (UI/UX) design in public service applications, whether in the form of web applications, mobile applications, or other digital platforms. Furthermore, the studies had to address the topics of inclusivity, accessibility, or inclusive design strategies, which are central to the focus of this research. Finally, only articles that had undergone peer-review or were published in reputable journals or scientific proceedings were accepted, to ensure the quality and validity of the analyzed data [17]. These criteria were consistently applied throughout the selection process to ensure that all analyzed studies genuinely contributed to the understanding of the challenges and strategies for inclusive interface design in digital public services.

D. Study Selection Process

The article selection process for this study was conducted in a step-by-step and systematic manner, adhering to the PRISMA 2020 framework. This approach consists of four main phases: identification, screening, eligibility checking, and final inclusion. This approach is designed to eliminate irrelevant studies in a transparent and structured manner, ensuring that only literature truly aligned with the research focus is further analyzed [16].

The selection process began with the identification process, which involves an initial literature search using a combination of predetermined keywords. At this stage, 98 articles were obtained from various scientific databases such as Google Scholar, Scopus, and Semantic Scholar. These articles then proceeded to the screening stage, where 25 articles were eliminated after reviewing their titles and abstracts, as they were deemed irrelevant or inappropriate to the scope of the study.

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The next stage was an eligibility evaluation, conducted on the 63 articles that passed the previous stage. Researchers thoroughly read the full-text content to ensure compliance with the established inclusion criteria, including topic, context of public service applications, and completeness of publication. The results of this stage indicated that only 21 articles met all requirements and were selected as worthy of further analysis.

The articles that passed this final selection were then analyzed thematically to answer the three previously formulated research questions (RQ1, RQ2, and RQ3). All stages of this study selection process were thoroughly documented and visualized using a PRISMA flowchart, as recommended in systematic reviews to ensure transparency of the process and avoid selection bias [16], [18].

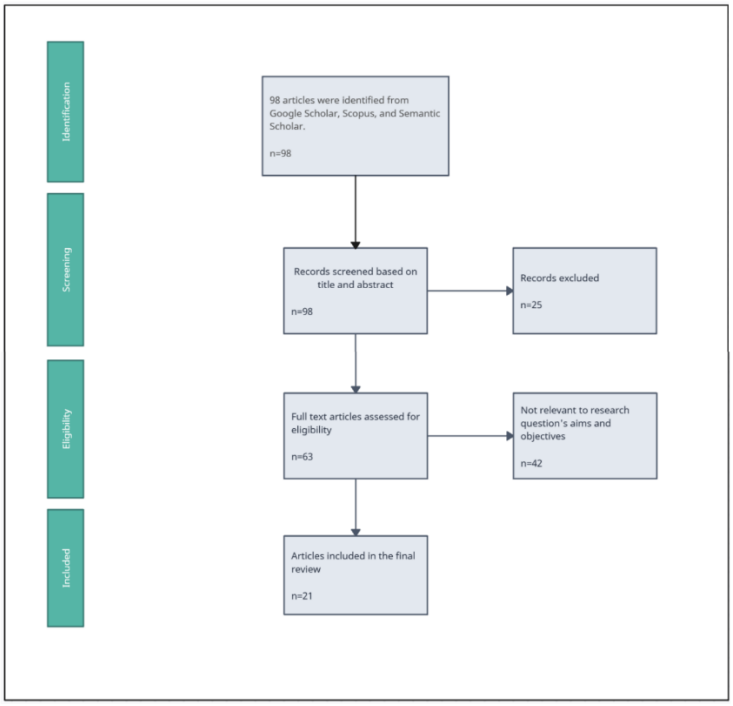

Fig. 1. PRISMA Diagram

IV. Results And Discussion

A. RQ1. What are the main challenges in implementing inclusive interface design in public service applications?

Implementing inclusive interface design in public service applications faces multidimensional challenges related to technological, social, cognitive, and policy aspects. One major challenge is the digital literacy gap, particularly among vulnerable groups such as the elderly, people with disabilities, and those with low levels of education. Kocsis et al. [19] highlighted that despite the rapid development of information and communication technologies, a large portion of the global population, particularly individuals with disabilities or limited digital literacy, is unable to utilize them optimally. This barrier is exacerbated by a lack of technical understanding and the complexity of interconnected devices within digital services.

Another significant challenge is the lack of understanding and support for accessibility principles among developers. Many developers still view accessibility as complex, exclusive to experts, and difficult to implement without specific guidance [19]. This results in inclusive features often being overlooked or simply added on at the final stage of development, rather than being part of the design process from the outset.

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Hiltunen et al. [20] also noted that cognitive and emotional accessibility are often overlooked in digital service development, despite their critical importance to older users. In their study of over 1,100 respondents aged 75 and over in Finland, they found that difficulties using digital devices and online services stemmed more from confusing interfaces than from a lack of user skills. Furthermore, there is a need for ongoing education for public service providers to enable them to support and respond to the digital needs of vulnerable users. From a technical implementation perspective, Halbach et al. [21] point out that many challenges are related to non-inclusive user feedback mechanisms. Users with disabilities often struggle to communicate their issues due to the lack of appropriate communication channels. The lack of user-friendly and responsive feedback systems results in reported accessibility issues rarely being addressed.

A study by Alayed [22] highlights that violations of the Web Content Accessibility Guidelines (WCAG) principles are still common in digital financial service interfaces, particularly in terms of operability and content perception by visually impaired users. The lack of alternative text on visual elements and navigation that does not support screen readers hinders independent interaction by users with disabilities. Furthermore, Pretorius [23] found that in rural South Africa, the lack of user research and citizen participation in the design of digital services is a major cause of e-government adoption failure. Services that do not understand the social context and real-world needs of local users are less likely to be optimally utilized.

Minõn et al. [24] add that the complexity of adapting interfaces to specific user needs in real time is also a barrier. Many development platforms lack support for the integration of flexible and contextual accessibility adaptation rules, making it challenging for developers to create interfaces that are truly responsive to user diversity. Thus, the primary challenges in implementing inclusive interface design in public services lie not only in the technical aspects but also in cultural and participatory aspects, as well as service management policies, which are often one-way. A design approach that involves users from the outset and the use of adaptive frameworks needs to be prioritized to bridge this gap.

B. RQ2. What strategies have been implemented to address these challenges?

To address the challenges of inclusive interface design, various strategies have been implemented, particularly in the context of digital public services. One prominent strategy is the combination of automated evaluation and user testing. Research by AlSaeed et al. shows that while evaluation tools such as AChecker and Total Validator are capable of identifying violations of WCAG accessibility guidelines, many real barriers, such as the system's inability to support screen readers, are only detected through the direct involvement of visually impaired users [25]. A user-centered approach is also embodied in the MIAV method developed by Carneiro and Rocha. This method allows visually impaired users to conduct unsupervised accessibility evaluations by combining automated testing and subjective, experience-based assessments. This strategy emphasizes the importance of engaging users as direct evaluators of the systems they use [26].

Furthermore, technology acceptance-based strategies also play a crucial role in supporting the successful adoption of inclusive digital systems. Alotaibi and Wald, in their research, used the UTAUT (Unified Theory of Acceptance and Use of Technology) model to evaluate user acceptance of identity management systems in the context of e-government. This model highlights that performance expectations, ease of use, and social influence significantly influence user intentions and behavior, especially in public services that require security and convenience in access [27]. Furthermore, enhancing user experience through content personalization and information synthesis is also a strategy used in the digital library domain. Paneva-Marinova et al. emphasize the importance of content synthesis tools that are adaptive to the context and cognitive needs of users, in order to increase emotional engagement and strengthen the sense of inclusion in digital services [28].

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In the context of digital health, Senbekov et al. explain that the use of technologies such as artificial intelligence, big data, and telemedicine significantly expands the accessibility of medical services, especially for vulnerable populations or those living in remote areas. These systems not only improve the efficiency of diagnosis and consultations but also encourage personalized services based on user data [29]. Furthermore, research by Salaheddin and Mason reveals that accessibility barriers are not only technical but also psychological and social, such as stigma and a preference for self-solve. Therefore, strategies for developing inclusive interfaces should also include social and educational interventions to increase service uptake, particularly in the context of mental health [30]. Finally, a study by Sambrook Smith et al. emphasizes that barriers to accessing mental health services, particularly for women with perinatal disorders, occur at multiple levels: individual, organizational, socio-cultural, and structural. Effective inclusive strategies must comprehensively address each of these barriers [31].

Therefore, strategies implemented to address challenges in inclusive interface design are multidimensional, combining technical, participatory, adaptive, and socio-cultural approaches. These approaches strengthen the argument that inclusivity is not just about technical access, but also about equality of experience and participation of users from diverse backgrounds.

C. RQ3. How effective are the inclusivity strategies that have been used in supporting the accessibility of public digital services?

The literature review shows that inclusive strategies in the development of public digital services have been implemented through various approaches, but their effectiveness still faces substantial challenges in various countries. One commonly used strategy is the implementation of technical guidelines, such as the Web Content Accessibility Guidelines (WCAG), for both websites and mobile applications. However, a study by Kamoun and Almourad showed that in the Dubai context, there is a discrepancy between the high ranking of an e-government website and the quality of its accessibility. This indicates that accessibility dimensions are often not a primary evaluation indicator in digital service development [32].

Furthermore, research by Serra et al. in Brazil highlights the limited effectiveness of WCAG when applied to mobile e-government applications. Many applications still do not meet basic accessibility principles, despite being audited against WCAG. This indicates the need for methodological adaptations to ensure accessibility strategies can be applied effectively in the context of mobile platforms [33]. Furthermore, non-technical aspects also influence the effectiveness of strategies. Siqueira et al. found that people with disabilities in Brazil are less likely to report accessibility violations. Low legal awareness, distrust in the effectiveness of complaints, and the complexity of the reporting process are key inhibiting factors [34].

A contribution by Mukamurenzi et al. highlights that in the context of developing countries like Rwanda, the focus of e-government service development is still dominated by infrastructure and service availability, rather than on fair access or an inclusive user experience. This suggests that while inclusiveness strategies may have been introduced, their implementation has not become a systemic priority [35]. A similar phenomenon was observed in Acosta-Vargas et al.'s evaluation of government websites from highly competitive countries. The results showed that the majority of these websites did not meet WCAG accessibility standards, demonstrating that the effectiveness of strategies is influenced not only by technological capabilities but also by commitment to inclusive digital policies and governance [36].

In a study in Jordan, Abu-Doush et al. found that developers' limited understanding of accessible design principles and a lack of adequate training contributed to the low effectiveness of the implemented accessibility strategies. Furthermore, evaluations were not conducted regularly, thus hampering continuous improvement [37]. In the context of Kyrgyzstan, Ismailova reported that approximately 69% of government

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websites experienced accessibility errors, indicating weak regulations and technical oversight of the quality of public digital services [38]. Furthermore, a comprehensive review by Latupeirissa et al. showed that the effectiveness of digital transformation of public services is significantly influenced by local technological readiness, digital literacy levels, and citizen involvement in designing inclusive digital policies [39].

In general, the findings of this systematic review indicate that the effectiveness of inclusive strategies is significantly influenced by the synergy between technical approaches, policy support, user participation, and institutional readiness. Without the integration of these four aspects, inclusive strategies risk remaining largely symbolic and failing to significantly impact equal access to digital services for all levels of society.

V. Conclusion

This study concludes that implementing inclusive interface design in public service applications still faces significant challenges from technical, social, and policy perspectives. The digital literacy gap, lack of developer competency in accessibility, and weak regulations are key obstacles. Although various strategies have been implemented, such as participatory design, user-based evaluation, and the use of technical guidelines like WCAG, their effectiveness depends heavily on systemic support and local context. Creating truly inclusive digital services requires synergy between technology, public policy, and community empowerment. This study contributes by mapping challenges and strategies that can serve as a reference for developers, policymakers, and researchers in building digital service systems that are more equitable, adaptive, and responsive to user diversity.

REFERENCES

[1] A. Al-Azzawi dan B. A. Hussein, "Evaluating the Accessibility of E-Government Services: A Systematic Literature Review," *International Journal of Advanced Computer Science and Applications*, vol. 12, no. 3, pp. 151–160, 2021. doi: 10.14569/IJACSA.2021.0120319.

[2] S. Werren, H. Grieder, dan C. Scherb, "Towards an Inclusive Digital Society: Digital Accessibility Framework for Visually Impaired Citizens in Swiss Public Administration," *arXiv preprint*, arXiv:2503.09824, 2025. [Online]. Available: https://arxiv.org/abs/2503.09824

[3] A. Dickinson, P. Gregor, dan F. Newell, "Inclusive design of ICT: The challenge of diversity," *Universal Access in the Information Society*, vol. 10, no. 2, pp. 105–114, 2011.

[4] H. Abu Doush et al., "Accessibility design guidelines for e-government websites," *Government Information Quarterly*, vol. 36, no. 4, 2019. doi: 10.1016/j.giq.2019.07.002.

[5] M. Sloan, C. Heath, dan J. Hamilton, "Participatory Design in the Development of Inclusive e-Government Services," *Universal Access in the Information Society*, vol. 17, no. 2, pp. 271–285, 2018.

[6] D. Putri dan E. Rachmawati, "Analisis Tingkat Aksesibilitas Website Instansi Pemerintah Indonesia terhadap Standar WCAG 2.1," *Jurnal Teknologi Informasi dan Ilmu Komputer*, vol. 8, no. 1, pp. 23–30, 2021. doi: 10.25126/jtiik.202181123.

[7] B. Kitchenham dan S. Charters, "Guidelines for performing Systematic Literature Reviews in Software Engineering," EBSE Technical Report EBSE-2007-01, Keele University, 2007. [Online]. Available: https://www.researchgate.net/publication/302924724_Guidelines_for_performing_Systematic_Literature_Reviews_in_Software_Engineering

[8] M. J. Page et al., "The PRISMA 2020 statement: an updated guideline for reporting systematic reviews," *BMJ*, vol. 372, p. n71, 2021. doi: 10.1136/bmj.n71.

[9] J. Harzing, "Publish or Perish," [Online]. Available: https://harzing.com/resources/publish-or-perish. Diakses pada: 20 Mei 2025.

[10] D. Thomas dan A. Harden, "Methods for the thematic synthesis of qualitative research in systematic reviews," *BMC Medical Research Methodology*, vol. 8, no. 1, p. 45, 2008.

[11] D. Petticrew dan H. Roberts, *Systematic Reviews in the Social Sciences: A Practical Guide*, Oxford: Blackwell Publishing, 2006.

[12] B. Kitchenham et al., "Systematic literature reviews in software engineering – A systematic literature review," *Information and Software Technology*, vol. 51, no. 1, pp. 7–15, 2009. doi: 10.1016/j.infsof.2008.09.009.

ITDM: Information Technology Development And Management
Volume 1, (1) 2025, p. 15-24
E-ISSN: XXXX-XXXX

[13] M. Brereton, B. A. Kitchenham, D. Budgen, M. Turner, dan P. Khalil, "Lessons from applying the systematic literature review process within the software engineering domain," *Journal of Systems and Software*, vol. 80, no. 4, pp. 571–583, 2007. doi: 10.1016/j.jss.2006.07.009.
[14] A. Booth, A. Sutton, dan D. Papaioannou, *Systematic Approaches to a Successful Literature Review*, 2nd ed., London: SAGE Publications, 2016.
[15] J. Harzing, "Publish or Perish," [Online]. Tersedia: https://harzing.com/resources/publish-or-perish. Diakses pada: 20 Mei 2025.
[16] M. J. Page et al., "The PRISMA 2020 statement: an updated guideline for reporting systematic reviews," *BMJ*, vol. 372, p. n71, 2021. doi: 10.1136/bmj.n71.
[17] D. Moher et al., "Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement," *PLoS Medicine*, vol. 6, no. 7, p. e1000097, 2009.
[18] J. Gough, S. Oliver, dan J. Thomas, *An Introduction to Systematic Reviews*, 2nd ed., London: SAGE Publications, 2017.
[19] O. Kocsis et al., "DSpace: An Inclusive Repository for Cost-Efficient Development of Accessible Control Interfaces," *Proc. IEEE Int. Conf. on Software Engineering and Applications*, 2016.
[20] S. Hiltunen et al., "The experiences of Finnish people over 75 years old with digital health and social services," *Finnish Publications of the Government's Analysis, Assessment, and Research Activities*, 2023.
[21] T. Halbach et al., "User Insights for Better and More Inclusive Online Public Services: A Survey Study," *Stud Health Technol Inform*, vol. 297, pp. 36–42, 2022.
[22] A. Alayed, "Are Saudi Arabian banks' mobile applications accessible for blind or partially sighted users?: a customers' perspective and evaluation," *Universal Access in the Information Society*, vol. 24, pp. 585–606, 2025.
[23] M. Pretorius, "Focus on the Citizen: User Research in the Rural Areas of the Western Cape Government," *Proc. SAICSIT*, 2014.
[24] R. Minõn et al., "Integrating adaptation rules for people with special needs in model-based UI development process," *Universal Access in the Information Society*, vol. 15, no. 4, pp. 419–435, 2015.
[25] D. AlSaeed et al., "Accessibility Evaluation of Saudi E-Government Systems for Teachers: A Visually Impaired User's Perspective," *Appl. Sci.*, vol. 10, no. 21, pp. 1–32, 2020.
[26] G. A. S. Carneiro and M. A. A. Rocha, "MIAV: An Inclusive Method for Accessibility Assessment by Visually Impaired People," in *Proc. Int. Conf. Interfaces and Human Computer Interaction*, 2019.
[27] S. J. Alotaibi and M. Wald, "Evaluation of the UTAUT Model for Acceptable User Experiences in Identity Access Management Systems," in *Proc. Int. Conf. Internet Technology and Secured Transactions (ICITST)*, 2013.
[28] D. Paneva-Marinova et al., "Improved User Experience in Digital Library through Advanced Content Synthesizing," in *Proc. ICICM*, Prague, 2019.
[29] M. Senbekov et al., "The Recent Progress and Applications of Digital Technologies in Healthcare: A Review," *Int. J. Telemed. Appl.*, vol. 2020, Article ID 8830200, pp. 1–18, 2020.
[30] K. Salaheddin and B. Mason, "Identifying Barriers to Mental Health Help-Seeking Among Young Adults in the UK: A Cross-Sectional Survey," *Br. J. Gen. Pract.*, vol. 66, no. 651, pp. e686–e693, 2016.
[31] M. Sambrook Smith et al., "Barriers to Accessing Mental Health Services for Women with Perinatal Mental Illness: Systematic Review and Meta-Synthesis of Qualitative Studies in the UK," *BMJ Open*, vol. 9, no. 1, p. e024803, 2019.
[32] F. Kamoun and M. B. Almourad, "Accessibility as an integral factor in e-government website evaluation: The case of Dubai e-government," *Information Technology & People*, vol. 27, no. 2, pp. 208–228, 2014.
[33] L. C. Serra et al., "Accessibility Evaluation of E-Government Mobile Applications in Brazil," *Procedia Computer Science*, vol. 67, pp. 348–357, 2015.
[34] M. S. Siqueira et al., "Reporting Behaviour of People with Disabilities in Relation to the Lack of Accessibility on Government Websites," *Disability, CBR & Inclusive Development*, vol. 33, no. 1, pp. 52–63, 2022.
[35] S. Mukamurenzi, Å. Grönlund, and S. M. Islam, "Improving qualities of e-government services in Rwanda: A service provider perspective," *Electronic Journal of Information Systems in Developing Countries*, vol. 85, no. 5, pp. e12089, 2019.
[36] P. Acosta-Vargas, S. Luján-Mora, and L. Salvador-Ullauri, "Quality Evaluation of Government Websites," in *Proc. of ICEDEG 2017*, Quito, Ecuador, 2017.
[37] I. Abu-Doush et al., "Towards a more accessible e-government in Jordan: An evaluation study of visually impaired users and web developers," *Behaviour & Information Technology*, vol. 32, no. 3, pp. 273–293, 2013.
[38] R. Ismailova, "Website accessibility, usability and security: a survey of government websites in Kyrgyz Republic," *Universal Access in the Information Society*, vol. 14, pp. 129–138, 2015.
[39] J. J. P. Latupeirissa et al., "Transforming Public Service Delivery: A Comprehensive Review of Digitization Initiatives," *Sustainability*, vol. 16, no. 7, p. 2818, 2024.