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Antecedents of Citizen-Centric E-Government Adoption: A Systematic Literature Review and Future Research Agenda

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Abstract. Although e-government adoption has been widely studied, limited attention has been given to citizen-centric adoption, despite citizens' willingness being central to e-government success. This study systematically synthesises the literature to identify and conceptualise the multidimensional antecedents of citizen-centric e-government adoption. Following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines, peer-reviewed studies published between 2004 and 2025 were retrieved from Scopus and Web of Science. A total of 87 studies were analysed to address four research questions. The review identifies 21 antecedents grouped into six dimensions: trust factors, technology acceptance constructs, system quality, user competency, enabling conditions, and security and privacy concerns. The Unified Theory of Acceptance and Use of Technology (UTAUT) emerged as the most frequently applied framework, followed by the Technology Acceptance Model (TAM). The findings show that citizen adoption is multidimensional and is best explained through integrated theoretical perspectives. The proposed taxonomy offers researchers a structured basis for empirical validation and provides policymakers with theory-informed guidance for improving adoption. Without addressing these interconnected antecedents, e-government may continue to operate alongside, rather than transform, traditional service delivery.

Keywords: citizen-centric e-government adoption; adoption antecedents; UTAUT; trust; systematic literature review

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1. INTRODUCTION

The application of information communication technologies (ICTs) to enhance public service delivery has led to the emergence of electronic government (e-government). E-government refers to the use of ICTs by governments to deliver information and services to citizens and businesses [1]. Globally, most countries are optimistic about leveraging ICTs to enhance public service delivery, seeking to provide citizens with digital public services that enable access to information and online transactions with government departments and agencies [2], [3], [4], [5], [6], [7]. The adoption of digital technologies in government services has significantly changed how citizens interact with public institutions in the 21st century [8], [9]. In particular, the shift toward citizen-centric e-government represents a paradigm change from traditional government-centred approaches to models that prioritise citizens' needs. A citizen-centric perspective frames e-government as a process of digitally connecting citizens to government agencies for communication and transactions via online platforms [10], [11], [12], [13], [14], [15], [16]. In this context, the success of e-government services depends on citizens' willingness to adopt them. However, despite considerable government investments in digitising the public sector, citizens' adoption of e-government services remains significantly lower than anticipated, especially in developing countries [17], [18], [19], [20], [21], [22], [23].

While existing studies identify various determinants of e-government adoption [12], [21], [23], [24], [25], [26], [27], [28], [29], [30], [31], [32], the literature remains fragmented across theoretical frameworks (e.g., TAM, UTAUT, TPB, ISSM). These traditional lenses often fail to capture adoption as a cohesive, multidimensional, and inherently citizen-centric phenomenon. To bridge this gap, this systematic literature review advances existing e-government research in two primary ways. First, the study moves beyond the use of isolated theories to conceptualise citizen adoption through a unified perspective. Second, this review synthesises the fragmented literature to construct a six-dimensional taxonomy of citizen-centric antecedents.

This systematic literature review aims to develop a comprehensive understanding of citizen-centric e-government adoption. Specifically, the study seeks to analyse the theoretical frameworks and models that have been applied to explain citizens' e-government adoption behaviour. It also aims to identify and synthesise the antecedents

that influence citizens' decisions to adopt or not adopt e-government services. In addition, the study examines the moderating role of demographic factors in the relationships between adoption antecedents and citizens' e-government adoption behaviour. Finally, the review explores existing research gaps and proposes future research directions to advance the theoretical and empirical development of citizen-centric e-government adoption research.

To achieve these objectives, the study addresses four research questions. First, which theoretical frameworks and models have been used to explain citizens' e-government adoption behaviour? Second, what antecedents influence citizens' adoption or non-adoption of e-government services? Third, how do demographic factors moderate the relationships between these antecedents and citizens' e-government adoption behaviour? Fourth, what research gaps and future directions can be identified to advance e-government adoption research from a citizen-centric perspective?

The organisation of this paper proceeds as follows: Methodology is discussed in Section 2, findings and discussion in Section 3, contributions to the research in Section 4, gaps and future research directions in Section 5, and conclusions in Section 6.

2. METHODS

The study conducted a systematic literature review (SLR) to synthesise the current state of knowledge on citizen e-government adoption. We employed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) protocol [33] to ensure a transparent, well-structured framework for extracting and reporting results. This process enhances reliability in findings and deepens understanding of citizen e-government adoption. The current study followed a systematic literature review protocol comprising five sequential steps. First, the purpose of the review and the research questions were determined to guide the search for relevant studies on citizen-centred e-government. Second, a search strategy was implemented using the Scopus and Web of Science databases. This step involved applying predefined search strings and Boolean operators to find the desired information. Third, duplicate records were identified, followed by a thorough review of their titles and abstracts to filter out irrelevant studies using the inclusion and exclusion criteria. Fourth, selected articles were analysed to extract and

synthesise data and identify common antecedents of e-government adoption. The SLR follow PRIMA guideline as shown in Figure 1.

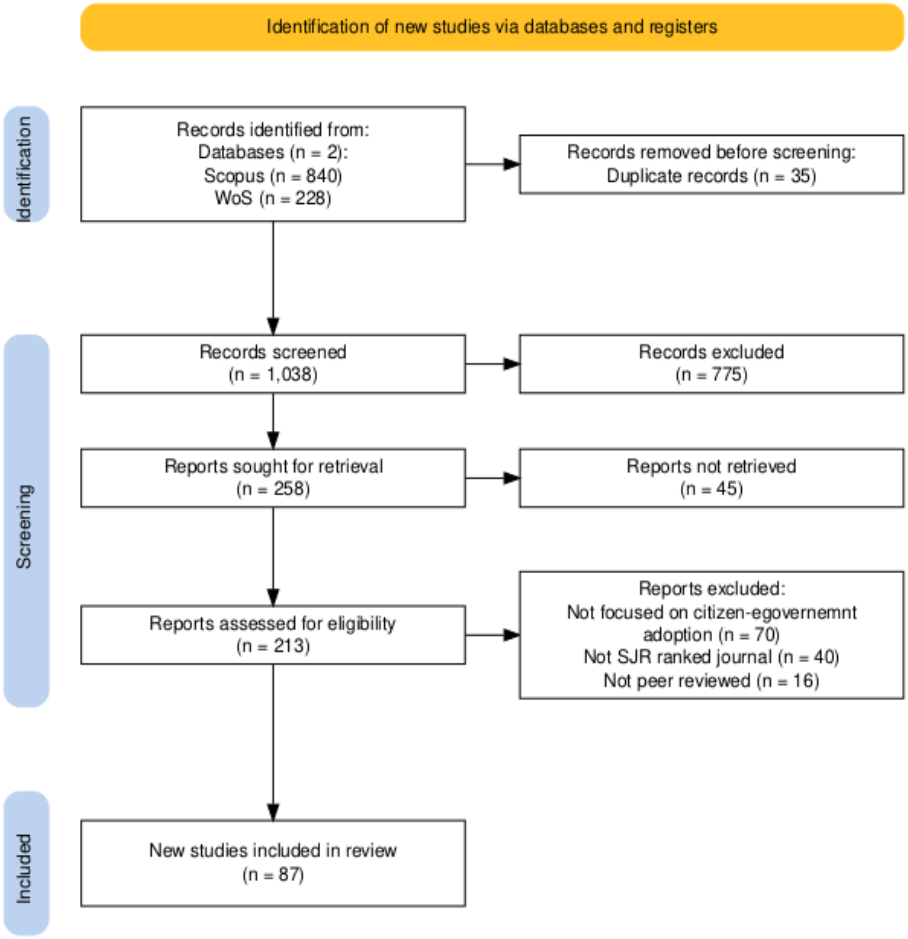

Figure 1. PRISMA flow diagram for SLR

2.1. Identification

We conducted a literature search from Scopus and Web of Science (WoS) databases. The selection of Scopus and WoS is justified by the extensive indexing of diverse scientific research. Both databases are internationally recognised for their academic rigour and comprehensive indexing [34], [35]; hence, drawing on articles from Scopus and WoS ensured comprehensive, high-quality coverage of relevant literature. Limiting the search to Scopus and Web of Science was a deliberate scope decision to ensure a baseline of high-impact, peer-reviewed literature. Nevertheless, the study acknowledges that excluding databases such as IEEE Xplore, ACM Digital Library, and Google Scholar may have led to the omission of some relevant studies, particularly conference proceedings

and regional publications, which constitutes a limitation of the review. The search focused on peer-reviewed English-language articles published from 2004 to 2025. This 21-year span traces citizen-focused e-government research from its beginnings to complex contemporary perspectives. In 2004, citizen-focused e-government research emerged, drawing on established theories of technology adoption, such as the TAM and the DOI. During this period, researchers introduced empirical models to study citizens' intentions and actual use of e-government services. A keyword-based strategy using Boolean operators ('AND, 'OR') was applied to identify studies on citizen e-government adoption. The search strings used in the SLR are shown in Table 1. The choice of the search terms was driven by the need to retrieve articles that used terminology related to primary keywords: e-government, adoption, and antecedents. The initial search returned 1068 articles (Scopus: 840; WoS: 228). After removing 35 duplicates, 1,033 unique records remained for screening.

Table 1. Search strings used in SLR

Database	Search string
Scopus	TITLE-ABS-KEY (("e-government" OR egovernment OR "electronic government" OR "digital government" OR "e-gov" OR "online government") AND (adoption OR acceptance OR uptake OR use OR usage OR "intention to use" OR continuance) AND (antecedent* OR determinant* OR driver* OR factor* OR predictor* OR barrier* OR enabler*))
WoS	TS = (("e-government" OR egovernment OR "electronic government" OR "digital government" OR "e-gov" OR "online government") AND (adoption OR acceptance OR uptake OR use OR usage OR "intention to use" OR continuance) AND (antecedent* OR determinant* OR driver* OR factor* OR predictor* OR barrier* OR enabler*))

2.2. Screening of articles

The screening agreement between reviewers was not formally measured using statistical methods such as Cohen's kappa. The process was conducted by two independent reviewers in two stages, using the predefined inclusion and exclusion criteria shown in Table 2. Discrepancies in article selection were resolved through discussion and consensus, with the third reviewer consulted. The first stage involved reading titles and abstracts of retrieved articles to assess their relevance to the review questions. Title abstract screening can reduce the workload of conducting systematic reviews [36]. We

conducted a preliminary screening of articles based on their titles and abstracts, excluding 775 irrelevant articles. The second stage involved downloading and reading the full text of the retrieved articles. Studies were excluded based on the following criteria: published before 2004, not peer-reviewed, not in English, or not focusing on citizen e-government adoption. We also excluded grey literature such as conference papers, book chapters, industry reports, policy reviews, and dissertations to ensure rigour. Examples of excluded articles based on research focus are listed in Table 3. The full texts of the remaining 258 articles were assessed for eligibility.

Table 2. Inclusion and exclusion criteria

Criteria	Inclusion	Exclusion
Publication period	2004 to 2025	Before 2004
Language	English	Non-English
Document types	Peer-reviewed journal articles	Industry reports, dissertations, conference papers, book chapters, policy reviews, and non-peer-reviewed articles.
Study focus	Individual/Citizen e-government adoption	Business and employee e-government adoption

Table 3. Sample excluded articles

Authors	Title	Research focus
[37]	"The willingness of e-Government service adoption by business users: The role of offline service quality and trust in technology"	e-government service adoption by business users
[38]	"Determinants of e-government service adoption: an empirical study for business registration in Southeast Vietnam"	e-government service adoption for SMEs business registration
[39]	"Factors affecting e-government adoption in the UAE public sector organisations: the knowledge management perspective"	e-government adoption in public sector departments
[40]	"Impacts of organizational assimilation of e-government systems on business value creation: A structuration theory approach"	public organizations utilising an e-governmental system

2.3. Included

Studies were included for review if they were published between 2004 and 2025, were peer-reviewed, were grounded in a theoretical framework, were written in English, and explicitly focused on citizen e-government adoption. The inclusion and exclusion criteria are shown in Table 3. In the included stage, 87 articles were included in the final review. According to [33], a field with at least 40 articles suggests it has matured enough to warrant a systematic literature review. This makes systematic literature reviews valuable contributors to the field.

2.4. Study quality assessment

Journal quartile rankings were used as a selection criterion to avoid including articles published in lower-ranked journals. Journal quartile rankings were applied as a quality filter, resulting in the inclusion of 55 Q1, 28 Q2, 3 Q3, and 1 Q4 journal articles. We ensured the quality of the included articles by sorting them by Q1, Q2, Q3, and Q4 journal ranks, as determined by SCImago. Quartiles of journal publications (Q1-Q4) were primarily used as filters for publication quality rather than as tools for evaluating study quality. Although this method provides a standard for academic quality, it recognises that it cannot serve as an adequate basis for evaluating each study's quality and risks. To maintain the rigour and credibility of the literature synthesis, a quality appraisal was conducted for all included studies. Following recommendations for quality assessment in systematic reviews [41], a review-specific quality appraisal instrument (see Table 4) was developed to evaluate the methodological quality and relevance of the included studies. Studies received a score of 2 = Fully meets criterion, 1 = Partially meets criterion, and 0 = Does not meet criterion. All 87 selected studies met the quality assessment criteria and had a very low risk of bias. The quality assessment rubric for all 87 studies is presented in Appendix A and constitutes the final corpus of studies included in the systematic literature review.

Table 4: Quality assessment criteria

Criterion	Assessment Question	Score
QA1	Are the study objectives clearly stated?	0–2
QA2	Is the research methodology adequately described?	0–2
QA3	Are findings supported by sufficient evidence or analysis?	0–2
QA4	Are conclusions logically derived from the findings?	0–2

2.5. Data extraction

For each included study, we used a Microsoft Excel file to record the following details: year, author, title, country, journal title, quartile rank, theoretical framework/model, methodology, data analysis methods, and antecedents. These details were used in the SLR to characterise the studies' general characteristics and classify the antecedents. This standardised coding template ensured consistent data extraction across all papers. Data extraction was performed by the primary researcher using a predefined extraction form. To enhance reliability, a second reviewer independently reviewed a subset of the extracted studies, and any discrepancies were resolved through discussion and consensus.

2.6. Data analysis and synthesis

Data synthesis in a systematic literature review involves analysing and combining findings from included articles to generate new insights. By synthesising data, we aimed to contribute to the understanding and classification of the antecedents of citizen-centric e-government adoption and their theoretical frameworks. The included studies differed in context, service type, and theoretical framework. This heterogeneity made a formal meta-analysis unfeasible. Instead, we used narrative and thematic synthesis and systematically tabulated the findings. We organised the results around major themes: Antecedent categories, theoretical models, moderating variables, and a future research agenda. Based on the thematic synthesis, a six-dimensional taxonomy is proposed as a conceptual framework for understanding the multidimensional antecedents of citizen-centric e-government adoption. A total of 21 antecedents of citizen-centric e-government adoption were identified from thematic analysis. An inductive thematic analysis approach was then used to organise the coded antecedents into higher-order categories based on conceptual similarity and their theoretical foundations in technology adoption, information systems success, and e-government literature. This process resulted in six higher-order dimensions: Trust, Technology Acceptance, System Quality, User Competence, Enabling Factors and Security and Privacy. Demographic factors (e.g., age, gender, education, digital literacy, and prior e-government experience) were treated as separate moderating variables rather than as direct antecedents of adoption.

3. RESULTS AND DISCUSSION

3.1. Descriptive Analysis

Figure 2 presents the annual distribution of Q1–Q4 journal publications on citizen e-government adoption from 2004 to 2025 based on data retrieved from Scopus and WoS as of November 30, 2025. Between 2004 and 2009, publication output was limited, with only one study per year and no eligible articles in 2006. This gap indicates the early developmental stage of citizen adoption research in high-ranked journals, during which e-government studies primarily focused on technological readiness and service rather than citizen adoption. From 2010 onward, the number of publications increased steadily, with marked growth after 2015 and a peak in 2022. This period aligns with the expansion of citizen-centric e-government services and the increased empirical application of e-government adoption frameworks. The slight decline between 2023 and 2025 is likely due to publication lag, as Q-ranked journals have long turnaround times.

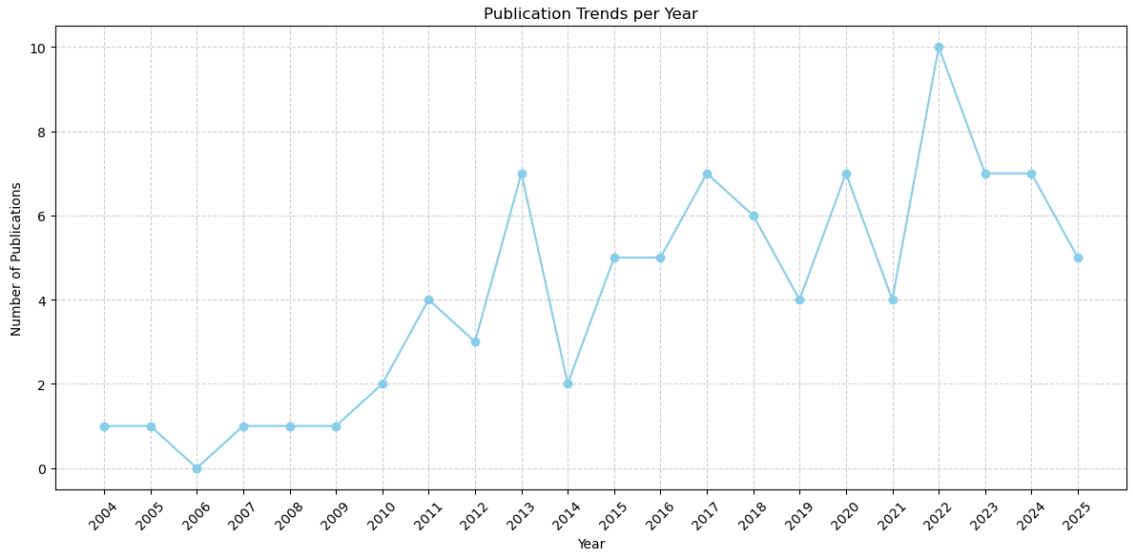

Figure 2. Publication trend

Figure 3 illustrates the geographical distribution of studies on citizen e-government adoption. China (8 studies) and India (7 studies) are the most frequently examined countries. This is likely due to their large populations, rapid digital transformation, and sustained government investment in e-government initiatives. A secondary group of countries includes Jordan and the United Arab Emirates (5 studies each), followed by the United Kingdom (4 studies). Saudi Arabia, Ghana, Malaysia, and Turkey (3 studies each) are

receiving increased attention. In contrast, countries such as Canada and the United States (each with 2 studies) are underrepresented, suggesting a shift in research priorities. The limited representation of many Global South countries highlights persistent gaps in context-specific evidence. Overall, studies are concentrated in a few countries, especially China and India. However, it remains fragmented across other regions. This pattern underscores both the contextual diversity and the geographical limitations of current research on citizen e-government adoption.

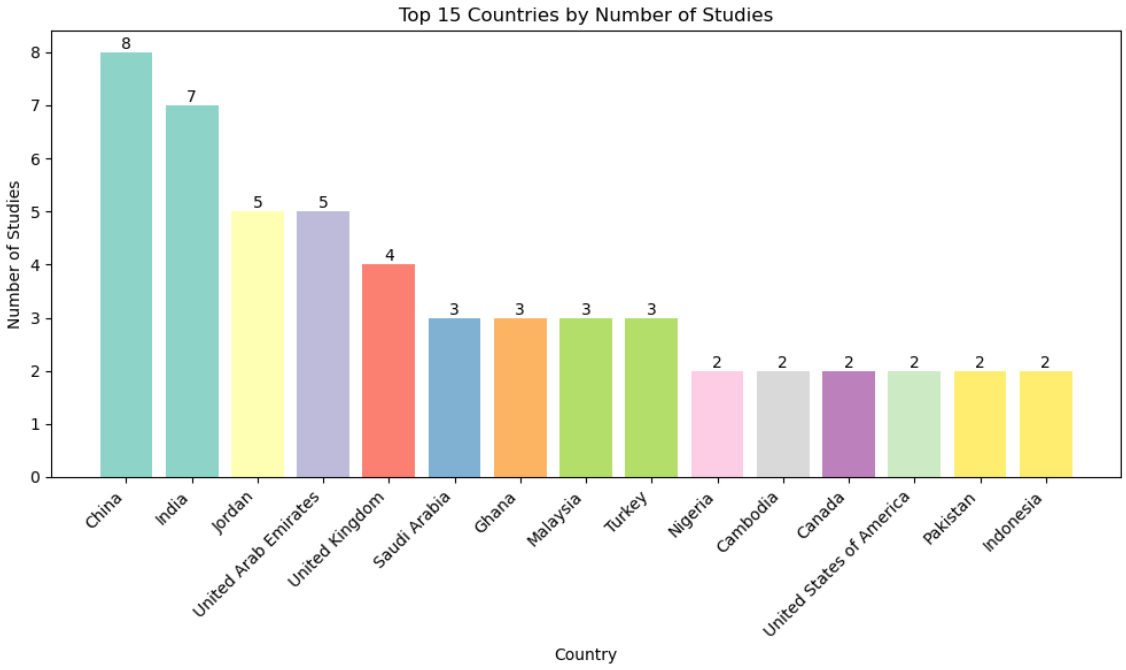

Figure 3. Distribution by countries

As illustrated in Figure 4, the distribution of the reviewed studies by publication is presented, with emphasis on the top 20 journals. The distribution clearly highlights the multidisciplinary nature of citizen-centric e-government adoption, which has been significantly influenced by Information Systems (IS), Public Administration, and Government Policy. The distribution also suggests that research on citizen-centric e-government adoption has advanced to become a credible field of scholarly study. Moreover, considering publication sources can be an additional way to validate this literature review, as it demonstrates that peer-reviewed scholarly journals support the developed taxonomy.

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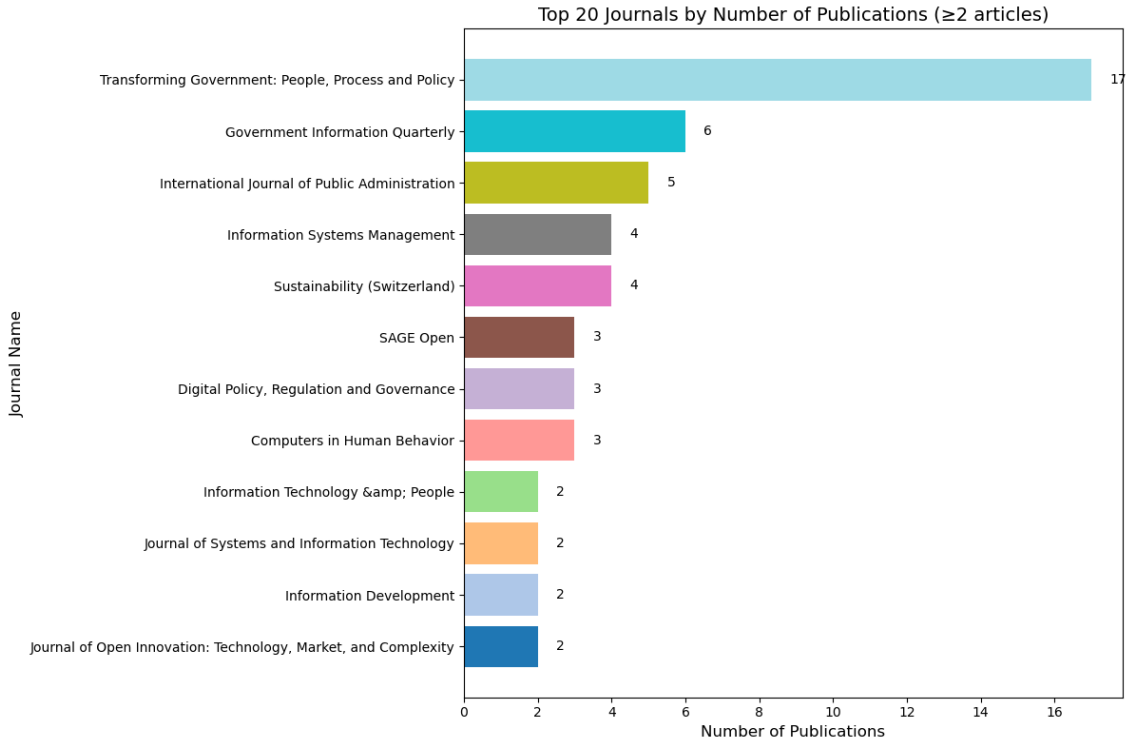

Figure 4. Top 20 Journal distribution

The 87 articles included in this review were published across 46 journals, demonstrating a diverse publication landscape (Table 5). Transforming Government: People, Process and Policy emerged as the most prominent publication outlet, with 14 articles, underscoring its central role in advancing scholarship in this field. Government Information Quarterly followed with seven articles. Sustainability ranks third, with 5 articles, while the International Journal of Public Administration and Information Systems Management has published 4. Sage, Digital Policy, Information Technology & People, Regulation and Governance, and Computers in Human Behaviour contributed three articles each. Information Development, Journal of Systems and Information Technology, Journal of Open Innovation: Technology, Market, and Complexity, International Journal of Environmental Research and Public Health, and Behaviour & Information Technology each published two articles. The remaining 32 journals published one article each. This distribution indicates considerable diversity and fragmentation among publication outlets, suggesting that research on citizen e-government adoption is interdisciplinary and dispersed across multiple academic domains rather than concentrated within a single journal ecosystem.

Table 5. Journal distribution

Ser no.	Journal name	SJR ranking	No. of articles
1	Transforming Government: People, Process and Policy	Q2 (0.596)	14
2	Government Information Quarterly	Q1 (2.861)	7
3	Sustainability	Q1 (0.688)	5
4	International Journal of Public Administration	Q2 (0.725)	4
5	Information Systems Management	Q1 (4.486)	4
6	Digital Policy, Regulation and Governance	Q2 (0.528)	3
7	Information Technology & People	Q1 (1.567)	3
8	Computers in Human Behavior	Q1 (2.923)	3
9	SAGE Open	Q1 (0.514)	3
10	Information Development	Q1 (1.439)	2
11	Journal of Systems and Information Technology	Q3 (0.280)	2
12	Journal of Open Innovation: Technology, Market, and Complexity	Q1 (1.215)	2
13	International Journal of Environmental Research and Public Health	Q2 (0.919)	2
14	Behaviour & Information Technology	Q1 (1.103)	2
15	Electronic Commerce Research and Applications	Q1 (1.411)	1
16	Electronic Journal of Information Systems in Developing Countries	Q3 (0.375)	1
17	Electronic Library	Q2 (0.412)	1
18	European Journal of Information Systems	Q1 (3.459)	1
19	Information Polity	Q2 (0.471)	1
20	Information Systems and e-Business Management	Q2 (0.670)	1
21	Information Systems Frontiers	Q1 (2.002)	1
22	Information Systems Journal	Q1 (3.652)	1
23	Information Technology for Development	Q1 (1.439)	1
24	International Journal of Public Sector Management	Q1 (0.646)	1
25	International Review of Administrative Sciences	Q1 (1.133)	1
26	Internet Research	Q1 (2.110)	1
27	Journal of Enterprise Information Management	Q1 (1.675)	1
28	Journal of Information, Communication and Ethics in Society	Q1 (0.578)	1
29	Journal of Internet Commerce	Q1 (1.154)	1
30	Journal of Science and Technology Policy Management	Q2 (0.694)	1

Ser no.	Journal name	SJR ranking	No. of articles
31	Public Management Review	Q1 (2.243)	1
32	Acta Oeconomica	Q3 (0.201)	1
33	Social Science Computer Review	Q1 (1.374)	1
34	Administrative Sciences	Q2 (0.706)	1
35	Frontiers in Sociology	Q1 (0.707)	1
36	International Journal of Information Management	Q1 (6.260)	1
37	International Journal of Information Systems in the Service Sector	Q1 (0.235)	1
38	Journal of Asia Business Studies	Q1 (0.701)	1
39	Journal of Decision Systems	Q1 (0.761)	1
40	Journal of Governance and Regulation	Q4 (0.195)	1
41	Journal of Policy Studies	Q1 (2.066)	1
42	Journal of Urban Management	Q1 (1.055)	1
43	Online Information Review	Q1 (1.025)	1
44	Production Planning and Control	Q1 (2.198)	1
45	Security Journal	Q1 (0.932)	1
46	Telematics and Informatics	Q1 (2.131)	1

Figure 5 demonstrates that quantitative approaches (n = 62) overwhelmingly dominate the methodological profile of the reviewed literature, with qualitative (n = 6) and mixed-methods studies (N = 4) representing a small minority. This distribution reflects a pronounced preference for positivist and model-testing research designs in citizen e-government adoption studies. Table 6 indicates that Structural Equation Modelling (SEM) is the most frequently employed data analysis method, appearing in 36 studies, highlighting its centrality in examining complex causal relationships among the antecedents of citizen e-government adoption. Regression analysis (19 studies) and Partial Least Squares Structural Equation Modelling (PLS-SEM) (14 studies) are also prevalent, further demonstrating the dominance of multivariate statistical techniques focused on model validation and hypothesis testing. In contrast, qualitative and mixed-methods approaches are underrepresented. Grounded theory was used in only four studies, while narrative analysis, content analysis, and meta-analysis were each applied in a single study. Traditional inferential techniques, including correlation analysis, ANOVA, t-tests, and exploratory factor analysis, were each reported in three studies. Overall, the

methodological landscape of citizen e-government adoption research is characterised by a predominance of quantitative, confirmatory approaches, particularly SEM-based techniques, whereas qualitative and integrative methods remain comparatively underutilised. These trends carry significant weight regarding the argument presented in this study. More specifically, there is a growing inclination among researchers to test non-linear adoption models that account for interactions among several independent variables. This shift reflects the growing recognition that e-government adoption is influenced by interdependent rather than isolated factors.

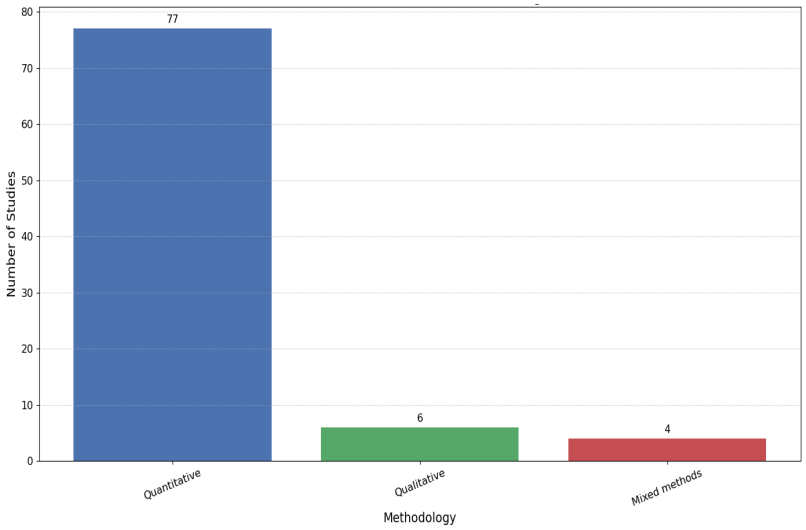

Figure 5. Research methodology

Table 6. Data analysis techniques

No.	Data analysis technique	No. of articles
1	Structural Equation Modeling (SEM)	36
2	Regression analysis	19
3	Partial Least Squares Structural Equation Modeling (PLS-SEM)	14
4	Grounded theory	4
5	Correlation	3
6	ANOVA	3
7	t-test	3
8	Exploratory factor analysis	3
9	Narrative	1
10	Content analysis	1
11	Meta-analysis	1

3.2. Theories used in explaining citizens' e-government adoption behaviours

A wide range of theories, frameworks, and models have been used to understand the antecedents for e-government adoption. Figure 6 shows the distribution of the theoretical models used in the papers under review. This is critical for understanding the conceptual basis of research on citizen-centric e-government adoption and for identifying theoretical shortcomings in the field. The most frequently applied theories are the Unified Theory of Acceptance and Use of Technology (UTAUT) [42], used 36 times, and the Technology Acceptance Model (TAM) [43], applied 26 times. They are followed by the Unified Model of Electronic Government Adoption (UMEGA) with 12 articles, Diffusion of Innovation theory (DOI) [44], and SERVQUAL [45], each with 11 articles. Combined theories have 10 articles, while the Theory of Planned Behavior (TPB) [46] and Social Cognitive Theory (SCT) [47] have nine and eight articles, respectively, followed by the Government Adoption Model (GAM) with six articles and the Expectation Confirmation Model (ECM) with five articles. The Theory of Reasoned Action (TRA) [48] has the fewest articles, with 4. This distribution reflects the comprehensiveness of UTAUT and TAM as well as the recognition of emerging e-government theoretical frameworks.

On the other hand, the TPB provides a theoretical lens for understanding and predicting why citizens choose to adopt or reject e-government services [49], [50], [51], [52], [53]. UMEGA uniquely advances e-government adoption research by integrating behavioural intention frameworks and explicitly recognising trust in government as a key moderating factor [12], [54], [55], [56], [57], [58], [59], [60], [61], [62]. The SCT, based on Bandura's triadic reciprocal model, posits that human behaviour arises from the interaction among personal, behavioural, and environmental factors. GAM is a specialised framework for assessing and explaining how citizens adopt e-government services [63], [64], [65]. It focuses on transactional e-government applications, where citizens conduct official transactions with government agencies online. Unlike broader adoption theories that cover various information technology contexts, GAM addresses the unique features of government service delivery. It also examines factors influencing citizens' acceptance or resistance to e-government platforms. GAM was developed to address the shortcomings of more general technology adoption models, such as the Technology TAM. It helps researchers and practitioners understand the critical factors for the success of transactional e-government initiatives.

ECM is also an emerging theoretical framework for understanding why citizens continue to use e-government services. ECM addresses the more critical post-adoption phases of behaviour and continuance intention. Furthermore, the DOI framework elucidates how innovations spread through populations over time and identifies factors that influence the rate and extent of adoption. This makes it particularly relevant for examining global e-government implementation challenges and successes. The theory asserts that innovation adoption occurs through sequential stages: knowledge, persuasion, decision, implementation, and confirmation. This staged model is valuable for researchers investigating e-government adoption, as it recognises that technology uptake is gradual and varies among user segments. However, researchers selectively adopt DOI rather than apply it fully, suggesting that some constructs may be inappropriate in certain e-government adoption contexts.

The growing category of extended or integrated models and theories that combine UTAUT or TAM with other behavioural theories, trust, risk, and context-specific factors shows greater explanatory power [66], [67], [68], [69], [70], [71], [72]. As shown in Figure 6, no single theoretical approach adequately captures the complexities of citizens' behaviour when adopting e-government systems. This suggests that as e-government services evolve and citizen expectations shift, researchers refine and extend theoretical frameworks to ensure the continued relevance and predictive validity of theoretical models.

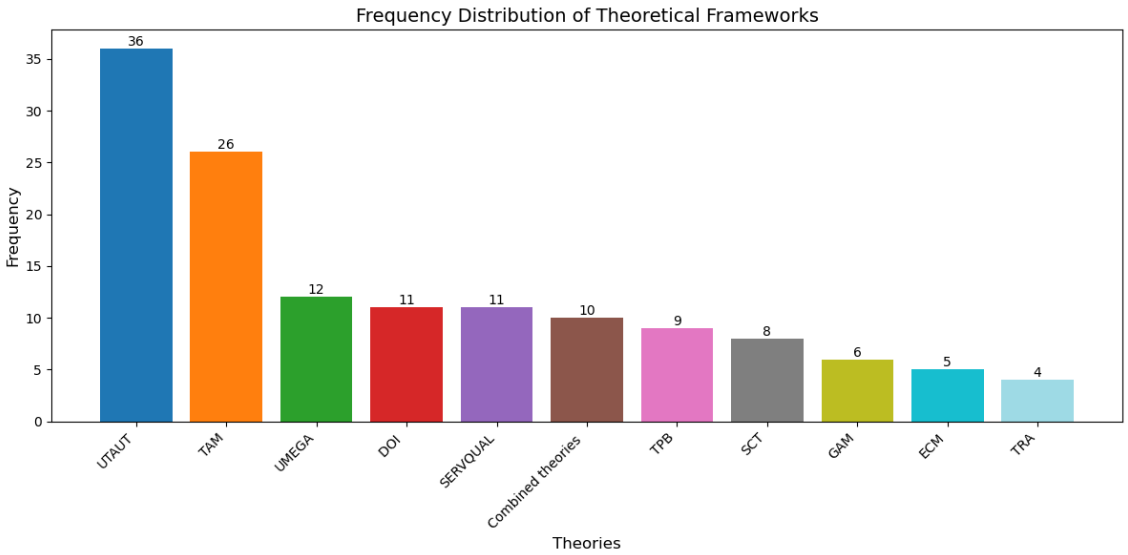

Figure 6. Distribution of theoretical models in e-government adoption research

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3.3. Antecedents of citizen-centric e-government adoption

An analysis of previous studies from Scopus and WoS shows that various antecedents influence citizen adoption of e-government services. Figure 7 presents the frequency distribution of the 21 antecedents identified in the reviewed studies: *trust factors, technology acceptance factors*, *system and information quality factors*, *user competence factors*, *enabling factors*, and *security and privacy factors*. We identified three trust factors: *Trust in government, Trust in e-government services, and Trust in the internet.* Among these factors, we found that trust in government has the strongest direct effect on citizen loyalty to e-government services [24], [31], [54], [73], [74], [75], [76], [77], (n=35). This is followed by trust in e-government services [7], [74], [78], [79], [80], [81], [82], [83], [84], mentioned 34 times. The third factor in this category is trust in the internet [85], [86], [87], [88], [89], [90], [91], [92], [93], [94], mentioned 28 times. This factor captures citizens' confidence in the security and reliability of online transactions.

Technology acceptance factors include *performance expectancy*, *effort expectancy*, *perceived usefulness, perceived ease of use,* and *social influence*. These antecedents refer to specific factors that shape citizens' perceptions and decisions about using e-government platforms, emphasising ease of use and usefulness. This classification is dominated by performance expectance and effort expectance, appearing in 32 and 30 studies, respectively. The systematic literature review shows that performance expectancy had a strong positive effect on e-government adoption [7], [12], [50], [54], [94], [95], [96], [97], [98], [99]. On the other hand, many studies identify effort expectancy as a significant predictor of e-government adoption, making it one of the core constructs of technology acceptance in the UTAUT model [12], [50], [93], [94], [100], [101], [102], [103]. Perceived usefulness, identified in 26 studies usefulness remains a critical determinant of intention to use e-government [22], [24], [66], [67], [104], [105], [106], [107]. Perceived ease of use, referenced by 24 articles, represents another significant technological acceptance factor, reflecting citizens' perceptions of the effort required to use e-government platforms [106], [108], [109], [110], [111], [112]. Social influence, identified in 25 studies, refers to how citizens feel that important others believe they should use e-government services [113], [114], [115], [116], [117]. Peer recommendations, social media visibility, family encouragement, and normative network pressure are channels through which social influence predicts e-government adoption.

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System and information quality factors reflect citizens' judgments about technical adequacy, information reliability, and service responsiveness in e-government platforms [109], [118], [119], [120], [121]. We identified System and information quality factors: *information quality*, *system quality*, *service quality*, and *website design quality*. Among these factors, 18 studies show that information quality positively affects e-government adoption [78], [122] while system quality was referenced in 16 studies [123], [124], [125], [126]. Service quality, as described in 15 studies, measures how well support services help citizens use e-government [37], [126], [127], [128]. Website design quality, cited in 13 studies, refers to user interface characteristics that shape citizens' ability to navigate and achieve their goals [16], [129], [130]. It interacts with effort expectancy: poor website design increases perceived effort and reduces e-government adoption, whereas intuitive design lowers effort and encourages adoption, especially among those who lack digital competencies.

Analysis of the literature identifies three primary user competence factors: *Computer self-efficacy* (14 studies), *Digital literacy* (11 studies), and *Technology readiness* (9 studies). These factors are critical determinants of individual capability influencing e-government adoption. The frequency distribution suggests that e-government research consistently views individual capabilities as vital for adoption. Self-efficacy influences adoption both directly [24], [29], [78], [93], [131], [132] and indirectly by reducing perceived effort expectancy [12], [55], [93], [94], [131], [133], [134]. Digital literacy also significantly affects e-government adoption outcomes [73], [135], [136], [137], [138]. Many studies in developing countries show that a lack of digital literacy impedes e-government adoption [90], [139], [140]. Thus, citizens with limited digital skills face substantial barriers to adopting e-government services.

We also identified that enabling factors, such as facilitating conditions (identified in 28 studies), technical support availability (16 studies), and government promotion or awareness (14 studies), are critical supports for citizen adoption of e-government services. These factors help citizens access and use e-government services efficiently. Facilitating conditions cover specific dimensions, such as technological infrastructure (broadband, devices), institutional support (training, help desks), and intermediary services (kiosks, assisted digital services) [12], [50], [93], [94], [100], [101], [141]. Technical support makes systems easier by resolving issues, assisting users, and demonstrating the

government's commitment to citizen adoption [90]. It includes help desk responsiveness, multi-channel accessibility, and assistance quality, and demonstrates significant effects on e-government adoption, particularly pronounced for complex transactions and vulnerable populations. Government promotion/awareness raises public awareness of e-government benefits, advertises available services, and encourages uptake, especially where public awareness is low, such as in developing countries and among less-educated groups [68], [100], [142], [143].

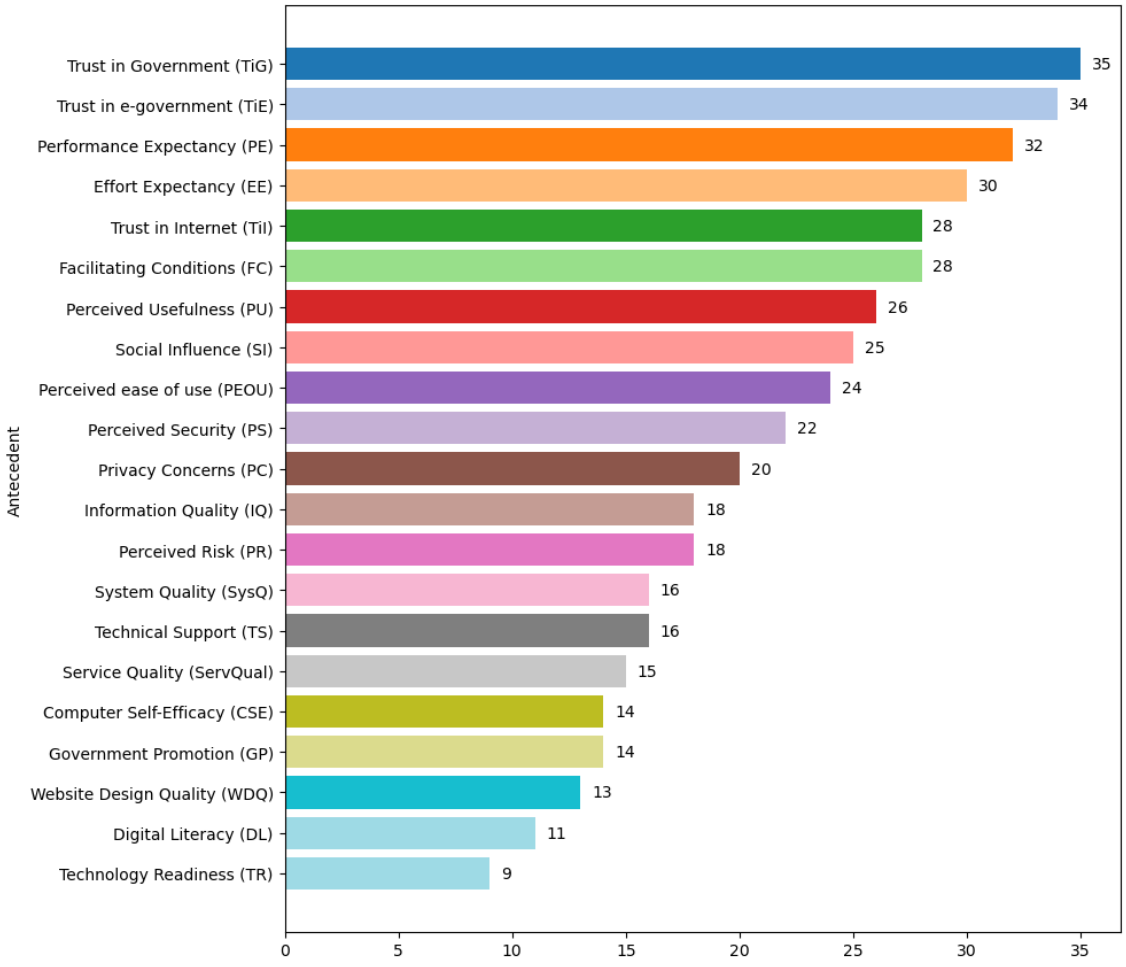

Figure 7. Antecedents for citizen-centric e-government adoption

Security and privacy factors consist of *perceived risk* (22 articles), *privacy concerns* (20 articles), and *perceived security* (18 articles). Perceived security deals with measures protecting personal information in e-government transactions, including encryption, authentication mechanisms, and security certifications [11], [74], [143], [144], [145], [146].

Privacy concerns influence adoption in contexts where citizens are concerned about government data-handling practices [17], [147], [148], [149]. Perceived risk, appearing in 18 studies, measures potential negative consequences of e-government use, including identity theft, financial loss, data breaches, and system failures [11], [74], [143], [145], [146], [150]. Studies integrating perceived risk, perceived privacy, and perceived security into adoption frameworks found that all three factors significantly impact adoption behaviour both directly and through trust and attitude pathways [11], [74], [143], [145], [146], [150].

3.4. Moderating factors in e-government adoption

We identified that e-government adoption also depends on moderating factors such as demographic variables and trust [120], [151], [152]. Demographic variables significantly moderate the effects of adoption antecedents on behavioural intention. We identified the following demographic variables: age, gender, education, digital literacy, and prior e-government experience [117], [153], [154]. Age and gender moderate the relationship between facilitating conditions and e-government use [28], [82], [134], [155], [156], while habit and usage exhibit moderate relationships [157], [158], [159]. We also found age, gender, educational level, and internet experience as moderating variables that affect the direction and magnitude of relationships between antecedents, such as perceived usefulness or ease of use, and behavioural intention [29], [66], [160]. Education level also affects adoption by increasing digital literacy and confidence in using e-government systems [161], [162], [163], [164]. Likewise, prior experience with e-government services and technology significantly moderates e-government adoption [21]. Digital literacy plays a dual role in e-government adoption: it serves as a direct antecedent, shaping individuals' likelihood of adopting e-government, and moderates the influence of other factors on adoption [8], [120], [139], [140], [155], [165]. Thus, the moderating effects of demographic variables suggest that e-government strategies must be tailored to different demographic segments to maximise adoption across diverse populations.

Trust operates through multiple pathways: directly influencing intention to use, mediating relationships between technology acceptance factors and adoption, and strengthening the effects of other adoption drivers [24], [78], [112], [166]. Research on e-government service adoption during COVID-19 found that trust in government significantly strengthened the relationship between health belief model factors and e-government service adoption intention [66], [87][167]. Trust also moderates the impact of

perceived security concerns: when citizens trust government institutions, they are less deterred by security concerns because they believe the government will protect their data. These findings highlight the importance of understanding trust as a dynamic moderating construct rather than simply a direct driver of adoption.

3.5. Discussion

Following the PRISMA methodology, this systematic review advances understanding of citizen-centric e-government adoption by synthesising theoretical, behavioural, and contextual insights from 87 studies on e-government adoption theories, models, and frameworks. The synthesis of research findings reveals a complex, multifaceted set of factors influencing citizen-centric e-government adoption. The findings demonstrate that e-government adoption is not driven by a single theory or antecedent; rather, it is jointly shaped by perceptions, trust, system quality, and enabling conditions. Consistent with prior research, the UTAUT [20], [53], [96], [168] and TAM [72], [137], [169], [170] remain the most frequently applied and empirically validated frameworks in citizen e-government research [98], [171], [172], [173], [174]. The dominance of UTAUT and TAM in the reviewed literature reflects their recognised strength in information systems research. However, despite these strengths, applying UTAUT and TAM in e-government contexts consistently reveals a significant limitation: the model's core constructs alone do not fully account for e-government adoption decisions. This has led to the development of extended technology adoption models that incorporate trust and risk factors. Accordingly, integrated or extended frameworks that incorporate trust, perceived risk, privacy, security, and institutional factors consistently outperform single-theory models. These findings support the argument that citizen e-government adoption fundamentally differs from consumer technology adoption, as interactions with government inherently involve greater perceived risk and more significant institutional considerations [87], [134], [175], [176].

Similarly, findings from specific e-government models, such as UMEGA and its extensions, indicate that technology acceptance theories do not fully explain e-government adoption [166], [177]. E-government interactions involve greater perceived risk and fewer choices for citizens because some services are mandatory. This necessitates the inclusion of trust, risk, and governance factors. UMEGA explicitly theorises satisfaction as a mediating mechanism, suggesting that citizen e-government adoption is not simply driven by

individual beliefs about usefulness and ease of use but rather shaped by the satisfaction experienced through engagement with e-government services. This represents a theoretical advancement by recognising the psychological and emotional dimensions of e-government adoption beyond realistic instrumental calculus. Thus, the greater explanatory power of integrated models supports the development of theories specific to e-government adoption rather than relying solely on traditional frameworks.

Nevertheless, this integrative approach introduces specific challenges. For instance, the DeLone and McLean model was initially developed to examine factors influencing the adoption of organisational information systems, with success assessed through objective organisational metrics. When this model is applied to citizen-centric e-government services, it must be adapted to incorporate subjective measures such as citizen satisfaction and public value creation, which may not correspond directly with conventional information systems success metrics. However, none of the reviewed studies used the Technology–Organisation–Environment (TOE) framework to examine citizen e-government adoption. This may be because TOE focuses on organisational factors, which limit its ability to address individual perceptions, trust, and behaviours fundamental to citizen adoption. The prominence of technology acceptance-based models suggests that citizen e-government adoption relies more on individual factors than on broader organisational or environmental factors.

Furthermore, the synthesis of antecedents demonstrates that citizen adoption of e-government services is driven by interacting mechanisms, rather than isolated predictors. Across the reviewed studies, trust emerges as the most influential and consistent antecedent of citizen e-government adoption, confirming earlier findings [49], [178]. This construct reflects citizens' concerns regarding competence, integrity, and data stewardship. This is commonly observed in developing countries, where historically low public trust in government institutions is widespread [24], [90], [179]. In line with previous studies, trust appears to reduce the uncertainty associated with online interactions and to increase confidence in digital public services [66], [78], [90], [166], [180]. The findings also suggest that system quality and information quality play an important role in shaping citizen adoption of e-government services. This result is broadly consistent with the Information Systems Success Model proposed by DeLone and McLean, which posits that the quality of information and system performance influences user satisfaction,

continued use, and overall system success. Our review further supports earlier studies that identify these factors as fundamental to effective e-government adoption [37], [37], [60], [119], [125], [181], [182], [183], [184]. Citizens are more likely to engage with e-government platforms when they perceive the system and information provided as accurate, timely, and reliable, and when systems operate efficiently and consistently.

User competence factors further reinforce the adoption of e-government services. For example, computer self-efficacy and digital literacy strongly influence perceived ease of use and behavioural intention in e-government contexts [85], [98], [101], [175], [177], [185], [186]. Individuals with high self-efficacy and adequate support can learn to use systems, even if they are initially uncertain about their value. These results are consistent with the broader literature, which indicates that lack of digital literacy and trust, rather than unwillingness alone, frequently account for low adoption of e-government services [17], [66], [69], [187]. The findings suggest that e-government adoption is primarily influenced by citizens' digital competence rather than resistance to technology. Citizens who are confident in their computer skills perceive e-government systems as less complex and easier to navigate. This effect is significant among older adults and those with limited digital literacy, who show greater variability in technology confidence.

Enabling factors, such as facilitating conditions, technical support, and awareness campaigns, are also critical to e-government adoption. These echo earlier studies identifying infrastructure and institutional support as prerequisites for e-government initiatives [8], [85], [104], [149], [188]. The impact of facilitating conditions is more significant in developing countries and among lower-income populations, where infrastructure and support are often lacking. Awareness of e-government services is essential for adoption; without awareness, citizens cannot use these services, regardless of the quality of the system design or their digital competency. These findings indicate that citizens often do not adopt e-government services because they lack awareness of their availability or the potential benefits. However, theoretical models often overlook this factor, yet adoption is impossible without e-government awareness. The findings highlight awareness as a foundational yet often underappreciated antecedent of citizen-centric e-government adoption.

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While much of the existing literature has focused on constructs such as trust, perceived usefulness, ease of use, and digital literacy, the present review suggests that citizens cannot adopt e-government services if they are not aware or do not understand their potential benefits. This finding extends previous adoption research by highlighting a prerequisite condition that is often assumed rather than explicitly examined. In practice, even well-designed, user-friendly e-government platforms are unlikely to achieve widespread adoption if citizens lack knowledge of the services available to them. The findings, therefore, suggest that awareness operates as an enabling mechanism that precedes other adoption factors. Consequently, government communication strategies play a role in encouraging adoption.

The findings indicate that security, privacy, and perceived risk remain important considerations in citizens' decisions to adopt e-government services. Consistent with previous research, perceived risk tends to discourage adoption because citizens are often required to disclose sensitive personal and financial information through digital platforms. However, the review suggests that this negative effect can be mitigated when citizens perceive e-government systems as secure and trustworthy. An interesting finding is that the influence of privacy concerns appears to vary across contexts.

Notably, citizen-centric e-government adoption identified behavioural intention to use, citizen satisfaction, and public value as the three most prominent dependent variables. This triadic outcome constitutes a substantial conceptual shift from earlier technology acceptance research, which focused mainly on behavioural intention and actual use. By incorporating public value as a central outcome, this paradigm shift acknowledges that e-government success extends beyond individual technology adoption to include broader societal benefits, enhanced governance, transparency, and accountability. However, few existing theoretical frameworks, which are primarily designed to explain individual technology acceptance, adequately theorise the mechanisms that connect individual adoption decisions to public value. On the other hand, demographic factors such as age, education, and prior experience shape how adoption drivers operate, aligning with UTAUT extensions and e-government research. Younger citizens respond more to social influence and new technologies, while older citizens focus on functional value and support, illustrating generational differences in digital socialisation.

3.6. Contributions

This review provides a systematic foundation for advancing citizen-centric e-government adoption research from both theoretical and practical perspectives.

3.6.1. Theoretical contributions

This systematic literature review advances e-government adoption theory in several ways. Figure 8 presents the conceptual framework developed from the synthesis of the reviewed literature and contributes to e-government adoption research by introducing a novel, citizen-centric classification of antecedents that systematically distinguishes adoption factors. Unlike prior reviews that treat antecedents as homogeneous adoption predictors or factors, this review organises them across six analytically distinct dimensions. This integrative structure clarifies fragmented findings in the literature and supports the development of more citizen-centric e-government adoption strategies. By categorising these antecedents into six dimensions, our SLR moves beyond traditional acceptance models and highlights the synchronicity of the enabling and constraining mechanisms influencing citizen-centric e-government adoption. By synthesising constructs from TAM, UTAUT, and TPB, hybrid models provide richer explanatory frameworks that simultaneously account for technological, psychological, social, and institutional dimensions. This suggests that the future of e-government adoption will depend on integrating multiple technologies and behavioural theories and models.

3.6.2. Practical contributions

This research presents several practical contributions for governments and policy makers seeking to improve citizen adoption of e-government services. First, the SLR underscores that building citizen trust in government, e-government systems, and the internet is not optional; it is a foundational requirement for e-government adoption and continued engagement of e-government services. The multidimensional nature of trust requires different strategies to address each dimension effectively. Second, citizens with lower digital literacy, self-efficacy, or prior e-government experience are disproportionately affected by effort expectancy and ease of use. Digital literacy programs, therefore, must be prioritised as fundamental enablers of e-government adoption, especially for marginalised populations. Third, enabling factors such as facilitating conditions, technical support, and awareness campaigns emerge as critical but underutilised factors in e-government adoption. We recommend that governments, especially in developing

countries, integrate communication, outreach, and technical assistance into e-government strategies for rural areas with significant information and infrastructure gaps. Finally, our systematic literature review suggests that "one-size-fits-all" e-government adoption strategies are ineffective. Therefore, recognising that citizen-centric adoption requires understanding citizen perspectives, rather than merely deploying technologies, constitutes a fundamental shift in e-government policy and practice.

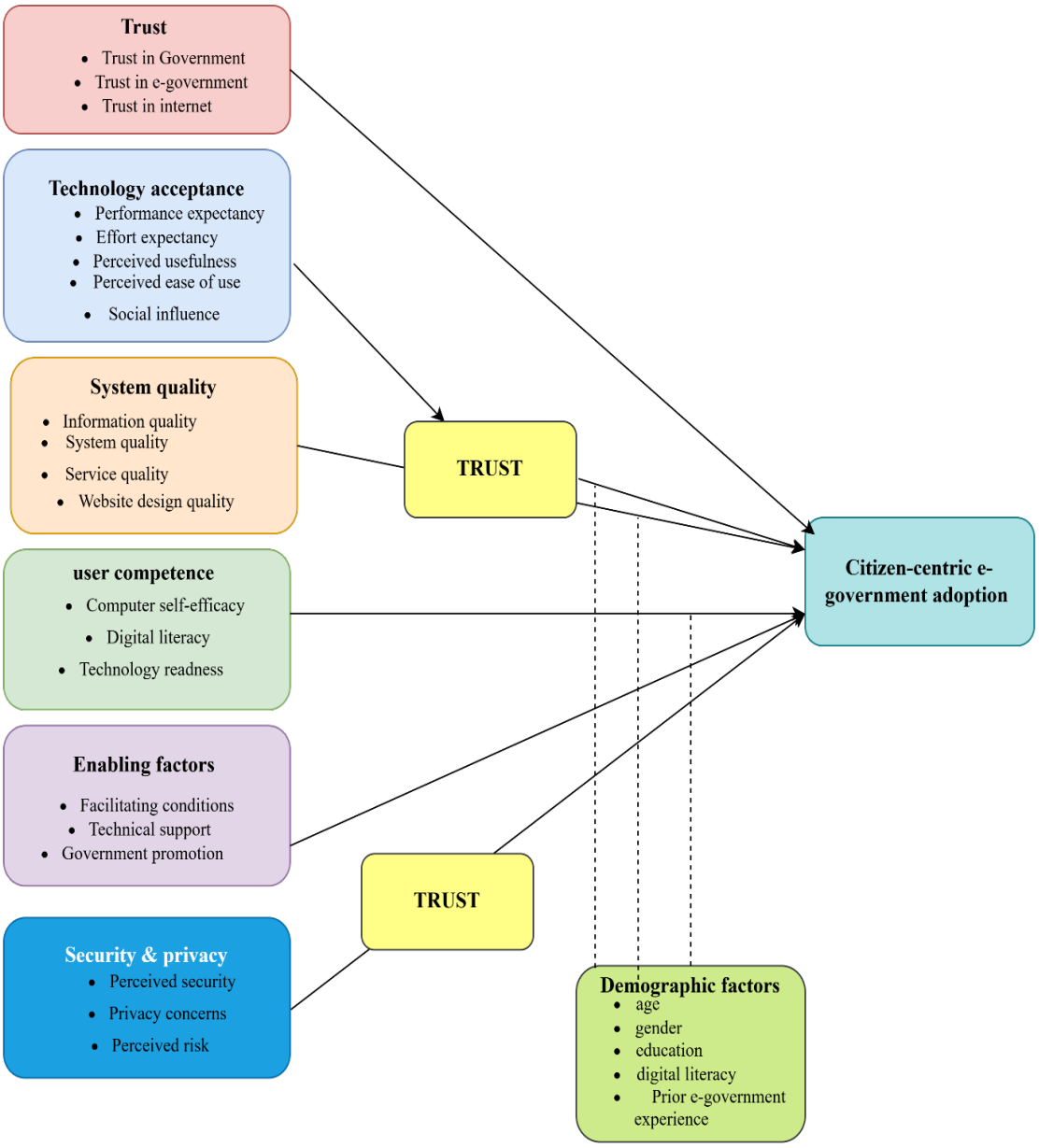

Figure 8. Antecedents of citizen-centric e-government adoption (Researchers' own work)

3.7. Research gaps and future research

3.7.1. Research gaps

First, there is potential for search and publication bias. Although databases such as Scopus and WoS were searched extensively, valuable studies published in journals not indexed in these sources may have been missed. Relying solely on articles from Scopus and WoS introduces bias in the findings, as low-impact but relevant research outlets may be underrepresented. As a result, the SLR could not reflect evidence from contextual insights and alternative perspectives. Second, the existing literature on citizen-centric e-government adoption lacks generalisability due to sample biases. Most studies focus on educated, urban, and internet-savvy populations. This may underestimate the impact of the digital divide and obscure how disparities in access and digital skills shape e-government adoption. Third, many studies focus on developed countries, with fewer examining developing countries, rural areas, or culturally diverse contexts.

Fourth, the systematic literature review also finds little research on e-government adoption across different service maturity levels: informational, interactional, transactional, and transformational, especially in developing countries. These contexts often perceive e-government as limited to lower maturity levels. Current e-government adoption theories, models, and frameworks fail to capture the stage-dependent nature of citizen engagement. This limited understanding of how adoption drivers change as e-government services grow from simple to complex levels of maturity. Sixth, despite extensive quantitative research on initial e-government adoption, there is a limited understanding of the underlying social, cultural, and behavioural mechanisms that shape adoption and continued use. Existing studies rely predominantly on cross-sectional and survey-based methods. These offer insufficient insight into how social norms, cultural values, religious beliefs, and word-of-mouth (WOM) influence citizens' behaviour. Moreover, post-adoption dynamics, such as satisfaction and continuance intention, remain underexplored. As a result, our understanding of long-term e-government use beyond initial adoption is limited and fragmented.

3.7.2. Future research

The study identified several gaps in existing research and suggests directions for future research to advance understanding of citizen-centric e-government adoption. These recommendations strengthen the theory and practical relevance of e-government

adoption research from the citizen perspective, with a focus on post-adoption stages. First, the reliance on Scopus and Web of Science underscores the need for broader, more inclusive evidence bases. Future systematic reviews should include additional databases such as Google Scholar, IEEE Xplore, and ACM Digital Library. This approach would capture a wider range of studies, including those from emerging journals, conferences, and policy outlets in underrepresented regions. Broader database coverage would help reduce publication bias and enhance the diversity and robustness of findings. Second, this systematic literature review adopted a theory-based approach to synthesise prior research. To maximise future contributions, studies should use framework-based review approaches, like the Antecedents–Decisions–Outcomes (ADO) framework, which explicitly maps how different antecedents shape adoption decisions and outcomes in citizen-centric e-government. By clarifying these causal pathways, such methods will integrate different adoption theories, models, and frameworks into a unified citizen-centric e-government theory.

Third, based on our taxonomy, which organises 21 antecedents into 6 distinct categories, there is an opportunity for future research to develop a comprehensive, integrated model specifically for citizen-centric e-government adoption by testing significant variables as antecedents, mediators, moderators, and outcome variables. Fourth, future research should also broaden geographical coverage, prioritise underrepresented low-income contexts, adopt cross-country comparative designs, and extend analysis beyond initial adoption to examine continued use and public value creation. Fifth, while quantitative survey research and SEM dominate the e-government adoption literature, qualitative research examining citizen perceptions would complement quantitative studies by capturing e-government adoption drivers that are not accessible through surveys. Such research is required to understand social norms, cultural values, religious beliefs, and the effects of WOM on e-government adoption. Sixth, future research should move beyond cross-sectional surveys by using longitudinal studies to track citizens' adoption behaviour over time. Also, future research should focus more on post-adoption behaviours, such as satisfaction and trust, that influence ongoing use, rather than solely on initial adoption, to strengthen evidence on adoption drivers. Lastly, future research should reconceptualise adoption antecedents by examining how their relevance and influence vary across different stages of e-government development, rather than treating adoption as a uniform process.

4. CONCLUSION

This systematic literature review aimed to synthesise evidence from e-government adoption theories, models, and frameworks to provide a comprehensive understanding of the antecedents of citizen-centric e-government adoption and establish a future research agenda. The review is limited to Scopus and Web of Science-indexed journal articles. The study concludes that citizen-centric e-government adoption is multidimensional and best understood through integrated frameworks that combine trust, technology acceptance, quality, user competence, enabling factors, and security/privacy concerns. Furthermore, the study concludes that failing to account for complex e-government adoption antecedents keeps e-government trapped in parallel with traditional physical service delivery. Future research should empirically validate the proposed taxonomy across diverse e-government contexts to assess its robustness, generalisability, and explanatory power for predicting citizen-centric e-government adoption.

REFERENCES

[1] I. Mohamad, L. Hughes, A. A. Alalwan, T. Malik, and Y. K. Dwivedi, "Examining the factors influencing citizen adoption of e-government chatbot services in Jordan: A longitudinal survey study," *Technol. Forecast. Soc. Change*, vol. 222, no. September 2024, p. 124398, 2026, doi: 10.1016/j.techfore.2025.124398.

[2] M. Alryalat, H. Alryalat, K. Alhamzi, and N. Hewahi, "E-Government Services Adoption Assessment from the Citizen Perspective in Jordan," *Int. J. Electron. Gov. Res.*, vol. 19, no. 1, pp. 1–17, 2023, doi: 10.4018/IJEGR.322440.

[3] W. Munyoka, "Electronic government adoption in voluntary environments – a case study of Zimbabwe," *Inf. Dev.*, vol. 36, no. 3, pp. 414–437, 2020, doi: 10.1177/0266666919864713.

[4] K. Olesen, L. C. Wood, and J. L. L. Chong, "Citizen Adoption in E-Government Systems: A Meta Analysis," *J. Glob. Inf. Manag.*, vol. 29, no. 6, pp. 1–28, 2021, doi: 10.4018/JGIM.294124.

[5] A. Apleni and H. Smuts, *An e-Government Implementation Framework: A Developing Country Case Study*, vol. 12067 LNCS. Springer International Publishing, 2020. doi: 10.1007/978-3-030-45002-1_2.

[6] S. Malodia, A. Dhir, M. Mishra, and Z. A. Bhatti, "Future of e-Government: An integrated conceptual framework," *Technol. Forecast. Soc. Change*, vol. 173, no. August, p. 121102, 2021, doi: 10.1016/j.techfore.2021.121102.

[7] N. Aleisa, "Key factors influencing the e-government adoption: a systematic literature review," *J. Innov. Digit. Transform.*, vol. 1, no. 1, pp. 14–31, 2024, doi: 10.1108/jidt-09-2023-0016.

[8] G. H. Djatmiko, O. Sinaga, and S. Pawirosumarto, "Digital Transformation and Social Inclusion in Public Services: A Qualitative Analysis of E-Government Adoption for Marginalized Communities in Sustainable Governance," *Sustain.*, vol. 17, no. 7, pp. 1–28, 2025, doi: 10.3390/su17072908.

[9] F. Zhao, S. Naidu, and J. Wallis, "An empirical study of e-government adoption in the United Arab Emirates: A social cognitive perspective," *Inf. Polity*, vol. 24, no. 1, pp. 91–109, 2019, doi: 10.3233/IP-180087.

[10] Y. C. Chen, "Citizen-Centric E-Government Services: Understanding Integrated Citizen Service Information Systems," *Soc. Sci. Comput. Rev.*, vol. 28, no. 4, pp. 427–442, 2010, doi: 10.1177/0894439309359050.

[11] S. Singh, V. Kumar, M. Paliwal, P. Verma, and B. Rajak, "A citizen-centric approach to understand the effectiveness of e-government web portals: Empirical evidence from India," *Inf. Polity*, vol. 27, no. 4, pp. 539–555, Dec. 2022, doi: 10.3233/IP-220001.

[12] A. S. Muhammad and T. Kaya, "Factors affecting the citizen's intention to adopt e-government in Nigeria," *J. Information, Commun. Ethics Soc.*, vol. 21, no. 3, pp. 271–289, 2023, doi: 10.1108/JICES-05-2022-0054.

[13] A. M. Ghareeb, N. R. Darwish, and H. A. Hefney, "E-government Adoption: A Literature Review and A Proposed Citizen-Centric Model," *Electron. Gov. an Int. J.*, vol. 15, no. 1, p. 1, 2019, doi: 10.1504/eg.2019.10017772.

[14] M. A. A. Alryalat, N. P. Rana, G. P. Sahu, Y. K. Dwivedi, and M. Tajvidi, "Use of social media in citizen-centric electronic government services: A literature analysis," *Int. J. Electron. Gov. Res.*, vol. 13, no. 3, pp. 55–79, 2017, doi: 10.4018/IJEGR.2017070104.

[15] V. Indama, "Digital Governance: Citizen Perceptions and Expectations of Online Public Services," *Interdiscip. Stud. Soc. Law, Polit.*, vol. 1, no. 2, pp. 12–18, 2022, doi: 10.61838/kman.isslp.1.2.3.

[16] S. Singh, V. Kumar, M. Paliwal, P. Verma, and B. Rajak, "A citizen-centric approach to understand the effectiveness of e-government web portals: Empirical evidence from India," *Inf. Polity*, vol. 27, no. 4, pp. 539–555, Dec. 2022, doi: 10.3233/IP-220001.

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[17] A. Mazhar, F. Iradat, N. Taşkın, and B. Metin, "Digital trust and the adoption of e-government services in Pakistan: a systematic literature review," *Secur. J.*, vol. 38, no. 1, pp. 1–29, 2025, doi: 10.1057/s41284-025-00506-z.

[18] J. P. Ramirez-Madrid, M. Escobar-Sierra, I. Lans-Vargas, and J. M. Montes Hincapie, "Factors influencing citizens' adoption of e-government: an empirical validation in a Developing Latin American Country," *Public Manag. Rev.*, vol. 26, no. 1, pp. 185–218, 2024, doi: 10.1080/14719037.2022.2078500.

[19] I. K. Mensah and S. Adams, "A Comparative Analysis of the Impact of Political Trust on the Adoption of E-Government Services," *Int. J. Public Adm.*, vol. 43, no. 8, pp. 682–696, 2020, doi: 10.1080/01900692.2019.1645687.

[20] P. Bhaskar, M. Vinay, and A. Joshi, "E-government adoption among employees in India: A qualitative approach," *Int. J. Inf. Syst. Change Manag.*, vol. 12, no. 2, pp. 95–118, 2020, doi: 10.1504/IJISCM.2020.115824.

[21] U. P. A. Withanage, L. Gunawardene, and D. M. Endagamage, "Why the Utilization of E-Government Services is Poor? – A study with the Citizens in Colombo Municipal Council Area in Sri Lanka," *Integr. J. Res. Arts Humanit.*, vol. 2, no. 4, pp. 7–13, 2022, doi: 10.55544/ijrah.2.4.35.

[22] T. K. Tran Pham, "Government administrative capacity, e-government performance and citizen's e-government adoption: evidence from a transition country," *Transform. Gov. People, Process Policy*, vol. 17, no. 3, pp. 443–458, Oct. 2023, doi: 10.1108/TG-09-2022-0120.

[23] R. Kumar, A. Sachan, and A. Mukherjee, "Adoption of e-government services at different maturity levels: a qualitative study in India," *Digit. Policy, Regul. Gov.* , vol. 25, no. 1, pp. 15–39, Jan. 2023, doi: 10.1108/DPRG-09-2021-0116.

[24] R. Kumar, A. Sachan, and A. Mukherjee, "Direct vs indirect e-government adoption: an exploratory study," *Digit. Policy, Regul. Gov.* , vol. 20, no. 2, pp. 149–162, 2018, doi: 10.1108/DPRG-07-2017-0040.

[25] F. Zhao, S. Naidu, and J. Wallis, "An empirical study of e-government adoption in the United Arab Emirates: A social cognitive perspective," *Inf. Polity*, vol. 24, no. 1, pp. 91–109, 2019, doi: 10.3233/IP-180087.

[26] Yuhefizar, Raemon Syaljumairi, Ervan Asri, and Roni Putra, "Evaluating E-Government Adoption in Rural Digital Transformation: A UTAUT Model Application in Indonesian Smart Village Initiative," *J. Syst. Eng. Inf. Technol.*, vol. 3, no. 2, pp. 54–60, 2024, doi: 10.29207/joseit.v3i2.6136.

[27] R. A. Saleh, R. N. H. Nor, M. T. Islam, Y. Y. Jusoh, and S. Abdullah, "The Unified Model of Electronic Government Adoption (UMEGA): A Systematic Literature Review with Meta-Analysis," *Pertanika J. Sci. Technol.*, vol. 31, no. 5, pp. 2531–2557, 2023, doi: 10.47836/pjst.31.5.26.

[28] R. A. Saleh *et al.*, "Citizen Adoption of E-Government Services: A Systematic Literature Review with Weight and Meta-Analysis," *Int. J. Adv. Sci. Eng. Inf. Technol.*, vol. 14, no. 4, pp. 1470–1479, 2024, doi: 10.18517/ijaseit.14.4.19868.

[29] R. Kumar, A. Mukherjee, and A. Sachan, *Factors influencing indirect adoption of e-Government services: a qualitative study*, vol. 21, no. 3. Springer Berlin Heidelberg, 2023. doi: 10.1007/s10257-023-00637-z.

[30] D. Abdelhakim and D. Idoughi, "Citizen adoption of mobile and customizable e-government services: A literature review and conceptual framework," *Int. J. Inf. Syst. Serv. Sect.*, vol. 13, no. 1, pp. 31–53, 2021, doi: 10.4018/IJISSS.2021010102.

[31] Y. Arslan and M. D. Gurer, "Citizens' Adoption of E-Government in Türkiye: Extending the UMEGA," *Electron. J. Inf. Syst. Dev. Ctries.*, vol. 91, no. 5, 2025, doi: 10.1002/isd2.70031.

[32] M. R. Y. D. V. Z. S. K.-B. T. M. A. D. Galina Ilieva Tania Yankova *et al.*, "Factors Influencing User Perception and Adoption of E-Government Services," *Adm. Sci.*, vol. 14, no. 3, 2024, doi: 10.3390/admsci14030054.

[33] M. J. Page *et al.*, "The PRISMA 2020 statement: an updated guideline for reporting systematic reviews," no. 1, 2021.

[34] V. K. Singh, P. Singh, M. Karmakar, J. Leta, and P. Mayr, "The journal coverage of Web of Science, Scopus and Dimensions: A comparative analysis," *Scientometrics*, vol. 126, no. 6, pp. 5113–5142, 2021, doi: 10.1007/s11192-021-03948-5.

[35] T. V. Asubiaro and S. Onaolapo, "A comparative study of the coverage of African journals in Web of Science, Scopus, and CrossRef," *J. Assoc. Inf. Sci. Technol.*, vol. 74, no. 7, pp. 745–758, 2023, doi: 10.1002/asi.24758.

[36] A. Gates *et al.*, "Decoding semi-automated title-abstract screening: findings from a convenience sample of reviews," *Syst. Rev.*, vol. 9, no. 1, p. 272, Dec. 2020, doi: 10.1186/s13643-020-01528-x.

[37] J. Lee, H. J. Kim, and M. J. Ahn, "The willingness of e-Government service adoption by business users: The role of offline service quality and trust in technology," *Gov. Inf. Q.*, vol. 28, no. 2, pp. 222–230, 2011, doi: 10.1016/j.giq.2010.07.007.

[38] H. Nguyen Trong, T. V. Dang, V. Nguyen, and T. T. Nguyen, "Determinants of e-government service adoption: an empirical study for business registration in Southeast Vietnam," *J. Asian Public Policy*, vol. 15, no. 3, pp. 453–468, 2022, doi: 10.1080/17516234.2020.1805396.

[39] A. J. Al Sayegh, S. Z. Ahmad, K. M. AlFaqeeh, and S. K. Singh, "Factors affecting e-government adoption in the UAE public sector organisations: the knowledge management perspective," *J. Knowl. Manag.*, vol. 27, no. 3, pp. 717–737, 2023, doi: 10.1108/JKM-09-2021-0681.

[40] M. D. Hossain, J. Moon, J. K. Kim, and Y. C. Choe, "Impacts of organizational assimilation of e-government systems on business value creation: A structuration theory approach," *Electron. Commer. Res. Appl.*, vol. 10, no. 5, pp. 576–594, 2011, doi: 10.1016/j.elerap.2010.12.003.

[41] C. Okoli and K. Schabram, "A Guide to Conducting a Systematic Literature Review of Information Systems Research," *SSRN Electron. J.*, vol. 10, 2012, doi: 10.2139/ssrn.1954824.

[42] V. Venkatesh, M. G. Morris, G. B. Davis, and F. D. Davis, "User acceptance of information technology: Toward a unified view," *MIS Q. Manag. Inf. Syst.*, vol. 27, no. 3, pp. 425–478, 2003, doi: 10.2307/30036540.

[43] F. D. Davis, "Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology," *Comput. Inf. Syst. Comput. Inf. Syst. Comput. Inf. Syst. Grad. Sch. Grad. Sch. Bus. Bus. Adm.*, vol. 13, no. 3, pp. 319–340, 1984, doi: 10.2307/249008.

[44] E. M. Rogers, "Elements of diffusion," *Diffus. Innov.*, vol. 5, pp. 1–38, 2003.

[45] A. Parasuraman, V. A. Zeithaml, and L. L. Berry, "A Conceptual Model of Service Quality and Its Implications for Future Research," *J. Mark.*, vol. 49, no. 4, p. 41, 1985, doi: 10.2307/1251430.

[46] I. Ajzen, "Theory of planned behaviour," *Disabil. CBR Incl. Dev.*, vol. 50, no. 1, pp. 179-, May 1991, doi: 10.47985/dcidj.475.

[47] A. Bandura, "Social cognitive theory of self-regulation," *Organ. Behav. Hum. Decis. Process.*, vol. 50, no. 2, pp. 248–287, 1991, doi: 10.1016/0749-5978(91)90022-L.

[48] M. Fishbein, "Reasoned Action, Theory of," *Int. Encycl. Commun.*, pp. 1–4, 2008, doi: 10.1002/9781405186407.wbiecr017.

[49] J. C. Azamela, Z. Tang, O. Ackah, and S. Awozum, "Assessing the Antecedents of E-Government Adoption: A Case of the Ghanaian Public Sector," *SAGE Open*, vol. 12, no. 2, Apr. 2022, doi: 10.1177/21582440221101040.

ISI Journal of Information Systems and Informatics
Published By Asosiasi Doktor Sistem Informasi Indonesia

[50] I. Alhadid, E. Abu-taieh, R. S. Alkhawaldeh, and S. Khwaldeh, "Predictors for E-Government Adoption of SANAD App Services," *Int. J. Environ. Res. Public Health*, vol. 19, pp. 1–26, 2022.

[51] T. D. Susanto, M. M. Diani, and I. Hafidz, "User Acceptance of e-Government Citizen Report System (a Case Study of City113 App)," *Procedia Comput. Sci.*, vol. 124, pp. 560–568, 2017, doi: 10.1016/j.procs.2017.12.190.

[52] M. Samuel, G. Doctor, P. Christian, and M. Baradi, "Drivers and barriers to e-government adoption in Indian cities," *J. Urban Manag.*, vol. 9, no. 4, pp. 408–417, 2020, doi: 10.1016/j.jum.2020.05.002.

[53] A. Jeilani, S. A. Ahmed, and A. Arabow, "Understanding e-government adoption among government employees: the mediating role of perceived attitude across key predictors," *Discov. Sustain.*, vol. 6, no. 1, pp. 1–21, 2025, doi: 10.1007/s43621-025-01592-0.

[54] I. K. Mensah, G. Zeng, and C. Luo, "E-Government Services Adoption: An Extension of the Unified Model of Electronic Government Adoption," *SAGE Open*, vol. 10, no. 2, 2020, doi: 10.1177/2158244020933593.

[55] S. F. Verkijika and L. De Wet, "E-government adoption in sub-Saharan Africa," *Electron. Commer. Res. Appl.*, vol. 30, no. February, pp. 83–93, 2018, doi: 10.1016/j.elerap.2018.05.012.

[56] E. Garcia-Rio, P. R. Palos-Sanchez, P. Baena-Luna, and M. Aguayo-Camacho, "Different approaches to analyzing e-government adoption during the Covid-19 pandemic," *Gov. Inf. Q.*, vol. 40, no. 4, p. 101866, 2023, doi: 10.1016/j.giq.2023.101866.

[57] B. Benosa, C. Omorog, and C. D. Ramos, "Exploring the Influencing Factors of e-Government Adoption in Rural Municipalities," *2023 IEEE 15th Int. Conf. Humanoid, Nanotechnology, Inf. Technol. Commun. Control. Environ. Manag. HNICEM 2023*, 2023, doi: 10.1109/HNICEM60674.2023.10589182.

[58] M. MIAH, I. S.-J. of C. I. in Business, and U. 2021, "E-Government Adoption By Public Sector Employees In Dhaka.," *J. Contemp. Issues Buisiness Gov.*, vol. 27, no. 3, p. 2021, 2021, doi: 10.47750/cibg.2021.27.03.353.

[59] M. K. Mohammadi, "Factors influencing the adoption of e-government websites in Afghanistan from the citizens' perspective," *Electron. J. Inf. Syst. Dev. Ctries.*, vol. 88, no. 5, pp. 1–20, 2022, doi: 10.1002/isd2.12216.

ISI Journal of Information Systems and Informatics
Published By Asosiasi Doktor Sistem Informasi Indonesia

[60] R. Jumardi, L. Farokhah, and M. Maghfirah, "The effect of information quality on the unified model of electronic government adoption (UMEGA) in E-government success in Indonesia," *AIP Conf. Proc.*, vol. 3026, no. 1, 2024, doi: 10.1063/5.0204702.

[61] R. A. Saleh, R. N. H. Nor, M. T. Islam, Y. Y. Jusoh, and S. Abdullah, "The Unified Model of Electronic Government Adoption (UMEGA): A Systematic Literature Review with Meta-Analysis," *Pertanika J. Sci. Technol.*, vol. 31, no. 5, pp. 2531–2557, 2023, doi: 10.47836/pjst.31.5.26.

[62] Y. Arslan and M. D. Gurer, "Citizens' Adoption of E-Government in Türkiye: Extending the UMEGA," *Electron. J. Inf. Syst. Dev. Ctries.*, vol. 91, no. 5, 2025, doi: 10.1002/isd2.70031.

[63] M. A. Almaiah, A. Al-Khasawneh, A. Althunibat, and S. Khawatreh, "Mobile Government Adoption Model Based on Combining GAM and UTAUT to Explain Factors According to Adoption of Mobile Government Services," *Int. J. Interact. Mob. Technol.*, vol. 14, no. 3, pp. 199–225, 2020, doi: 10.3991/ijim.v14i03.11264.

[64] M. A. Shareef, V. Kumar, U. Kumar, and Y. K. Dwivedi, "E-Government Adoption Model (GAM): Differing service maturity levels," *Gov. Inf. Q.*, vol. 28, no. 1, pp. 17–35, 2011, doi: 10.1016/j.giq.2010.05.006.

[65] M. A. Shareef, V. Kumar, U. Kumar, and Y. Dwivedi, "Factors affecting citizen adoption of transactional electronic government," *J. Enterp. Inf. Manag.*, vol. 27, no. 4, pp. 385–401, 2014, doi: 10.1108/JEIM-12-2012-0084.

[66] A. K. AbdulKareem and K. A. Oladimeji, "Cultivating the digital citizen: trust, digital literacy and e-government adoption," *Transform. Gov. People, Process Policy*, vol. 18, no. 2, pp. 270–286, 2024, doi: 10.1108/TG-11-2023-0196.

[67] K. Aswar, W. Julianto, M. Sumardjo, I. Panjaitan, and A. Nasir, "An investigation of the factors affecting citizens' adoption of e-government in Indonesia," *Probl. Perspect. Manag.*, vol. 21, no. 2, pp. 187–197, 2023, doi: 10.21511/ppm.21(2).2023.21.

[68] Y. Amanbek, I. Balgayev, K. Batyrkhanov, and M. Tan, "Adoption of e-Government in the Republic of Kazakhstan," *J. Open Innov. Technol. Mark. Complex.*, vol. 6, no. 3, p. 46, 2020, doi: 10.3390/joitmc6030046.

[69] H. M. B. P. Ranaweera, "Perspective of trust towards e-government initiatives in Sri Lanka," *Springerplus*, vol. 5, no. 1, pp. 1–11, 2016, doi: 10.1186/s40064-015-1650-y.

[70] I. K. Mensah, "Citizens' Readiness to Adopt and Use E-government Services in the City of Harbin, China," *Int. J. Public Adm.*, vol. 41, no. 4, pp. 297–307, 2018, doi: 10.1080/01900692.2016.1263658.

[71] D. Almasabe, S. Ludi, and M. Aborokbah, "A Model of Factors Influencing the Adoption and Utilization of E-Government Services in KSA (MFIAUEGS)," *2023 3rd Int. Conf. Comput. Inf. Technol. ICCIT 2023*, pp. 36–42, 2023, doi: 10.1109/ICCIT58132.2023.10273926.

[72] S. S. Mishra and A. T. Geleta, "Can an E-Government System Ensure Citizens' Satisfaction without Service Delivery?," *Int. J. Public Adm.*, vol. 43, no. 3, pp. 242–252, 2020, doi: 10.1080/01900692.2019.1628053.

[73] S. Lee-Geiller, "The moderating effect of digital literacy on the link between e-government effectiveness and trust in government," *J. Policy Stud.*, vol. 39, no. 4, pp. 77–101, 2024, doi: 10.52372/jps.e672.

[74] W. Li and L. Xue, "Analyzing the critical factors influencing post-use trust and its impact on Citizens' continuous-use intention of E-Government: Evidence from Chinese municipalities," *Sustain.*, vol. 13, no. 14, 2021, doi: 10.3390/su13147698.

[75] M. B. Abdala, C. Plescia, M. M. Boyer, and A. L. Brunetti, "Trust in Government or in Technology? What Really Drives Internet Voting," *Polit. Res. Q.*, vol. 78, no. 2, pp. 783–796, 2025, doi: 10.1177/10659129251321424.

[76] B. K. Nyadzi and J. C. Morris, "E-Government and Public Trust in Developing Countries: A Systematic Review and Research Agenda," *Int. J. Public Adm.*, vol. 49, no. 3, pp. 178–202, 2026, doi: 10.1080/01900692.2025.2597453.

[77] S. M. Jasimuddin, N. Mishra, and N. A. Saif Almuraqab, "Modelling the factors that influence the acceptance of digital technologies in e-government services in the UAE: a PLS-SEM Approach," *Prod. Plan. Control*, vol. 28, no. 16, pp. 1307–1317, 2017, doi: 10.1080/09537287.2017.1375144.

[78] A. K. Abdulkareem and R. Mohd Ramli, "Does trust in e-government influence the performance of e-government? An integration of information system success model and public value theory," *Transform. Gov. People, Process Policy*, vol. 16, no. 1, pp. 1–17, 2022, doi: 10.1108/TG-01-2021-0001.

[79] L. Alzahrani, W. Al-Karaghouli, and V. Weerakkody, "Investigating the impact of citizens' trust toward the successful adoption of e-government: A multigroup analysis of gender, age, and internet experience," *Inf. Syst. Manag.*, vol. 35, no. 2, pp. 124–146, 2018, doi: 10.1080/10580530.2018.1440730.

[80] D. Van Hoang and L. Thanh Tung, "Integrating trust in e-government as a moderator into the technology acceptance model: evidence from Vietnam," *Transform. Gov. People, Process Policy*, pp. 1–13, 2025, doi: 10.1108/TG-10-2025-0321.

ISI Journal of Information Systems and Informatics
Published By Asosiasi Doktor Sistem Informasi Indonesia

[81] M. A. Alkateeb and R. A. Abdalla, "Antecedents of trust in E-Government: Palestinian citizens' perspective," *Estud. Econ. Apl.*, vol. 39, no. 7, 2021, doi: 10.25115/eea.v39i7.4871.

[82] L. Alzahrani, W. Al-Karaghouli, and V. Weerakkody, "Analysing the critical factors influencing trust in e-government adoption from citizens' perspective: A systematic review and a conceptual framework," *Int. Bus. Rev.*, vol. 26, no. 1, pp. 164–175, 2017, doi: 10.1016/j.ibusrev.2016.06.004.

[83] S. Nawafleh and A. Khasawneh, "Drivers of citizens E- loyalty in E-government services: E-service quality mediated by E-trust based on moderation role by system anxiety," *Transform. Gov. People, Process Policy*, vol. 18, no. 2, pp. 217–240, 2024, doi: 10.1108/TG-04-2023-0053.

[84] N. H. Setyawan, S. Sulistyo, and R. Hartanto, "A Review E-Government Implementation: Its Impact on Public Value Creation and Citizen Perspectives," *2024 Int. Conf. Smart Comput. IoT Mach. Learn. SIML 2024*, pp. 137–144, 2024, doi: 10.1109/SIML61815.2024.10578171.

[85] K. A. Al Mansoori, J. Sarabdeen, and A. L. Tchantchane, "Investigating Emirati citizens' adoption of e-government services in Abu Dhabi using modified UTAUT model," *Inf. Technol. People*, vol. 31, no. 2, pp. 455–481, 2018, doi: 10.1108/ITP-12-2016-0290.

[86] M. Rehman, V. Esichaikul, and M. Kamal, "Factors influencing e-government adoption in Pakistan," *Transform. Gov. People, Process Policy*, vol. 6, no. 3, pp. 258–282, 2012, doi: 10.1108/17506161211251263.

[87] F. Bélanger and L. Carter, "Trust and risk in e-government adoption," *J. Strateg. Inf. Syst.*, vol. 17, no. 2, pp. 165–176, 2008, doi: 10.1016/j.jsis.2007.12.002.

[88] L. Carter, V. Weerakkody, B. Phillips, and Y. K. Dwivedi, "Citizen Adoption of E-Government Services: Exploring Citizen Perceptions of Online Services in the United States and United Kingdom," *Inf. Syst. Manag.*, vol. 33, no. 2, pp. 124–140, 2016, doi: 10.1080/10580530.2016.1155948.

[89] I. K. Mensah, "Predictors of Electronic Government Services Adoption: The African Students' Perspective in China," *Int. J. Public Adm.*, vol. 42, no. 12, pp. 997–1009, 2019, doi: 10.1080/01900692.2019.1572621.

[90] M. O. Ahmad, I. Ahmed, O. Al-Baik, A. H. Hussein, M. A. Abu Alhaija, and A. Albizri, "Unlocking citizen confidence: examining trust and continuance intentions in digital services," *J. Asia Bus. Stud.*, vol. 19, no. 4, pp. 1104–1128, 2025, doi: 10.1108/JABS-08-2024-0424.

[91] A. L. T. Khaled Ahmed Al Mansoori Jawahitha Sarabdeen, K. A. Al Mansoori, J. Sarabdeen, and A. L. Tchantchane, "Investigating Emirati citizens' adoption of e-government services in Abu Dhabi using modified UTAUT model," *Inf. Technol. People*, vol. 31, no. 2, pp. 455–481, 2018, doi: 10.1108/ITP-12-2016-0290.

[92] M. K. O. Lee and E. Turban, "A trust model for consumer internet shopping," *Int. J. Electron. Commer.*, vol. 6, no. 1, pp. 75–91, 2001, doi: 10.1080/10864415.2001.11044227.

[93] S. F. Verkijika and L. De Wet, "E-government adoption in sub-Saharan Africa," *Electron. Commer. Res. Appl.*, vol. 30, no. February, pp. 83–93, 2018, doi: 10.1016/j.elerap.2018.05.012.

[94] M. Kurfalı, A. Arifoğlu, G. Tokdemir, and Y. Paçin, "Adoption of e-government services in Turkey," *Comput. Human Behav.*, vol. 66, pp. 168–178, 2017, doi: 10.1016/j.chb.2016.09.041.

[95] E. Batara, A. Nurmandi, T. Warsito, and U. Pribadi, "Are government employees adopting local e-government transformation?: The need for having the right attitude, facilitating conditions and performance expectations," *Transform. Gov. People, Process Policy*, vol. 11, no. 4, pp. 612–638, Oct. 2017, doi: 10.1108/TG-09-2017-0056.

[96] M. N. Alraja, S. Hammami, B. Chikhi, and S. Fekir, "International Review of Management and Marketing The Influence of Effort and Performance Expectancy on Employees to Adopt E-government: Evidence from Oman," *Int. Rev. Manag. Mark.*, vol. 6, no. 4, pp. 930–934, 2016, [Online]. Available: http:www.econjournals.com

[97] P. Afieroho, R. Perkins, X. (Thomas) Zhou, B. Hoanca, and G. Protasel, "Adopting e-government to monitor public infrastructure projects execution in Nigeria: The public perspective," *Heliyon*, vol. 9, no. 8, p. e18552, 2023, doi: 10.1016/j.heliyon.2023.e18552.

[98] N. P. Rana, Y. K. Dwivedi, and M. D. Williams, "Evaluating alternative theoretical models for examining citizen centric adoption of e-government," *Transform. Gov. People, Process Policy*, vol. 7, no. 1, pp. 27–49, 2013, doi: 10.1108/17506161311308151.

[99] N. S. Abdul Wahi and L. Berényi, "Validating UTAUT model for e-government adoption among employees: a pilot study," *Gradus*, vol. 10, no. 2, 2023, doi: 10.47833/2023.2.eco.009.

[100] M. O. Ahmad, J. Markkula, and M. Oivo, "Factors affecting e-government adoption in Pakistan: A citizen's perspective," *Transform. Gov. People, Process Policy*, vol. 7, no. 2, pp. 225–239, 2013, doi: 10.1108/17506161311325378.

ISI Journal of Information Systems and Informatics
Published By Asosiasi Doktor Sistem Informasi Indonesia

[101] W. Bhuasiri, H. Zo, H. Lee, and A. P. Ciganek, "User Acceptance of e-government Services: Examining an e-tax Filing and Payment System in Thailand," *Inf. Technol. Dev.*, vol. 22, no. 4, pp. 672–695, 2016, doi: 10.1080/02681102.2016.1173001.

[102] V. Weerakkody, R. El-Haddadeh, F. Al-Sobhi, M. A. Shareef, and Y. K. Dwivedi, "Examining the influence of intermediaries in facilitating e-government adoption: An empirical investigation," *Int. J. Inf. Manage.*, vol. 33, no. 5, pp. 716–725, 2013, doi: 10.1016/j.ijinfomgt.2013.05.001.

[103] A. Sabani, "Investigating the influence of transparency on the adoption of e-Government in Indonesia," *J. Sci. Technol. Policy Manag.*, vol. 12, no. 2, pp. 236–255, 2020, doi: 10.1108/JSTPM-03-2020-0046.

[104] M. Horst, M. Kuttschreuter, and J. M. Gutteling, "Perceived usefulness, personal experiences, risk perception and trust as determinants of adoption of e-government services in The Netherlands," *Comput. Human Behav.*, vol. 23, no. 4, pp. 1838–1852, 2007, doi: 10.1016/j.chb.2005.11.003.

[105] H. Li, B. H. Detenber, W. P. Lee, and S. Chia, "E-Government in Singapore: Demographics, usage patterns, and perceptions," *J. E-Government*, vol. 1, no. 3, pp. 29–54, Apr. 2005, doi: 10.1300/J399v01n03_03.

[106] N. Ahmad, M. Waqas, and X. Zhang, "Public Sector Employee Perspective towards Adoption of E-Government in Pakistan: A Proposed Research Agenda," *Data Inf. Manag.*, vol. 5, no. 1, pp. 119–124, 2021, doi: 10.2478/dim-2020-0029.

[107] L. Chen, A. K. Aklikokou, A. K. A. Lijun Chen, L. Chen, and A. K. Aklikokou, "Determinants of E-government Adoption: Testing the Mediating Effects of Perceived Usefulness and Perceived Ease of Use," *Int. J. Public Adm.*, vol. 43, no. 10, pp. 850–865, 2020, doi: 10.1080/01900692.2019.1660989.

[108] P. A. Rodríguez-Correa *et al.*, "Factors influencing the adoption of e-government by female university students," *PLoS One*, vol. 20, no. 1 January, 2025, doi: 10.1371/journal.pone.0317685.

[109] O. Al Hujran, A. Aloudat, and I. Altarawneh, "Factors influencing citizen adoption of e-government in developing countries: The case of jordan," *Int. J. Technol. Hum. Interact.*, vol. 9, no. 2, pp. 1–19, 2013, doi: 10.4018/jthi.2013040101.

[110] I. K. Mensah, S. Adams, J. K. Adjei, and D. S. Mwakapesa, "Drivers of egovernment adoption amidst COVID-19 pandemic: The Information Adoption Model (IAM) approach," *Inf. Dev.*, vol. 38, no. 4, pp. 494–509, 2022, doi: 10.1177/02666669211010872.

ISI Journal of Information Systems and Informatics
Published By Asosiasi Doktor Sistem Informasi Indonesia

[111] L. Carter, "E-government diffusion: A comparison of adoption constructs," *Transform. Gov. People, Process Policy*, vol. 2, no. 3, pp. 147–161, 2008, doi: 10.1108/17506160810902167.

[112] Lavanya, S. Sarkar, S. Khurana, L. Swarup, Vinoth, and S. Sangwan, "Research on political trust and technology acceptance in the implementation of e-government services," *Multidiscip. Sci. J.*, vol. 7, no. Supplementary Issue, 2025, doi: 10.31893/multiscience.2025ss0326.

[113] T. Thi Uyen Nguyen, P. Van Nguyen, H. Thi Ngoc Huynh, G. Q. Truong, and L. Do, "Unlocking e-government adoption: Exploring the role of perceived usefulness, ease of use, trust, and social media engagement in Vietnam," *J. Open Innov. Technol. Mark. Complex.*, vol. 10, no. 2, p. 100291, 2024, doi: 10.1016/j.joitmc.2024.100291.

[114] N. P. Rana and Y. K. Dwivedi, "Citizen's adoption of an e-government system: Validating extended social cognitive theory (SCT)," *Gov. Inf. Q.*, vol. 32, no. 2, pp. 172–181, 2015, doi: 10.1016/j.giq.2015.02.002.

[115] N. S. Abdul Wahi and L. Berényi, "Examining the Effect of Social Influence and Facilitating Conditions on E-government Adoption by Employees in Mandatory Condition," in *ACM International Conference Proceeding Series*, New York, NY, USA: ACM, Sep. 2024, pp. 104–110. doi: 10.1145/3670243.3670244.

[116] S. Balaskas, A. Panagiotarou, and M. Rigou, "The Influence of Trustworthiness and Technology Acceptance Factors on the Usage of e-Government Services during COVID-19: A Case Study of Post COVID-19 Greece," *Adm. Sci.*, vol. 12, no. 4, 2022, doi: 10.3390/admsci12040129.

[117] A. Sabani, "Investigating the influence of transparency on the adoption of e-Government in Indonesia," *J. Sci. Technol. Policy Manag.*, vol. 12, no. 2, pp. 236–255, 2020, doi: 10.1108/JSTPM-03-2020-0046.

[118] U. P. A. Withanage, L. Gunawardene, and D. M. Endagamage, "Why the Utilization of E-Government Services is Poor? – A study with the Citizens in Colombo Municipal Council Area in Sri Lanka," *Integr. J. Res. Arts Humanit.*, vol. 2, no. 4, pp. 7–13, 2022, doi: 10.55544/ijrah.2.4.35.

[119] S. K. Sharma, "Adoption of e-government services: The role of service quality dimensions and demographic variables," *Transform. Gov. People, Process Policy*, vol. 9, no. 2, pp. 207–222, 2015, doi: 10.1108/TG-10-2014-0046.

ISI Journal of Information Systems and Informatics
Published By Asosiasi Doktor Sistem Informasi Indonesia

[120] B. K. Nyadzi and J. C. Morris, "E-Government and Public Trust in Developing Countries: A Systematic Review and Research Agenda," *Int. J. Public Adm.*, vol. 49, no. 3, pp. 178–202, 2026, doi: 10.1080/01900692.2025.2597453.

[121] T. D. Susanto, M. M. Diani, and I. Hafidz, "User Acceptance of e-Government Citizen Report System (a Case Study of City113 App)," *Procedia Comput. Sci.*, vol. 124, pp. 560–568, 2017, doi: 10.1016/j.procs.2017.12.190.

[122] R. Sharma and R. Mishra, "Investigating the role of intermediaries in adoption of public access outlets for delivery of e-Government services in developing countries: An empirical study," *Gov. Inf. Q.*, vol. 34, no. 4, pp. 658–679, 2017, doi: 10.1016/j.giq.2017.10.001.

[123] A. Alshaher, "IT capabilities as a fundamental of electronic government system success in developing countries from users perspectives," *Transform. Gov. People, Process Policy*, vol. 15, no. 1, pp. 129–149, 2021, doi: 10.1108/TG-05-2020-0080.

[124] A. Safiah Maznorbalia and M. Aiman Awalluddin, "Users Acceptance of E-Government System in Sintok, Malaysia: Applying the UTAUT Model," *Policy Gov. Rev.*, vol. 5, no. 1, p. 66, 2021, doi: 10.30589/pgr.v5i1.348.

[125] T. Chee-Wee, I. Benbasat, and R. T. Cenfetelli, "Building citizen trust towards e-government services: Do high quality websites matter?," *Proc. Annu. Hawaii Int. Conf. Syst. Sci.*, 2008, doi: 10.1109/HICSS.2008.80.

[126] D. M. Aritonang, "The Impact of E-Government System on Public Service Quality in Indonesia," *Eur. Sci. Journal, ESJ*, vol. 13, no. 35, p. 99, 2017, doi: 10.19044/esj.2017.v13n35p99.

[127] T. Hariguna, U. Rahardja, and Q. Aini, "The antecedent e-government quality for public behaviour intention, and extended expectation-confirmation theory," *Comput. Sci. Inf. Technol.*, vol. 4, no. 1, pp. 33–42, 2023, doi: 10.11591/csit.v4i1.pp33-42.

[128] Gideon Mutayi Wandabwa, "Effects of e-Government Adoption on Public Service Organization Performance in Developing Countries. A Case of Kenyan Public Service," *Int. J. Latest Technol. Eng. Manag. Appl. Sci.*, vol. 14, no. 3, pp. 508–525, 2025, doi: 10.51583/ijltemas.2025.140300055.

[129] L. Carter and F. Bélanger, "The utilization of e-government services: Citizen trust, innovation and acceptance factors," *Inf. Syst. J.*, vol. 15, no. 1, pp. 5–25, Jan. 2005, doi: 10.1111/j.1365-2575.2005.00183.x.

[130] A. F. Radwan, T. Snoussi, S. A. Mousa, and M. Abdulzaher, "Using Smart Applications in Delivering Government Services in the UAE: Factors of Adoption and Satisfaction," *Int. J. Serv. Sci. Manag. Eng. Technol.*, vol. 14, no. 1, 2023, doi: 10.4018/IJSSMET.326520.

[131] F. K. Y. Chan, J. Y. L. Thong, V. Venkatesh, S. A. Brown, P. J. H. Hu, and K. Y. Tam, "Modeling citizen satisfaction with mandatory adoption of an E-Government technology," *J. Assoc. Inf. Syst.*, vol. 11, no. 10, pp. 519–549, 2010, doi: 10.17705/1jais.00239.

[132] O. A. Ibrahim and N. H. Zakaria, "E-government services in developing countries: A success adoption model from employees perspective," *J. Theor. Appl. Inf. Technol.*, vol. 94, no. 2, pp. 383–396, 2016.

[133] A. Alshaher, "IT capabilities as a fundamental of electronic government system success in developing countries from users perspectives," *Transform. Gov. People, Process Policy*, vol. 15, no. 1, pp. 129–149, 2021, doi: 10.1108/TG-05-2020-0080.

[134] I. Alhadid *et al.*, "Predictors for E-Government Adoption of SANAD App Services Integrating UTAUT, TPB, TAM, Trust, and Perceived Risk," *Int. J. Environ. Res. Public Health*, vol. 19, no. 14, 2022, doi: 10.3390/ijerph19148281.

[135] S. R. Chohan and G. Hu, "Strengthening digital inclusion through e-government: cohesive ICT training programs to intensify digital competency," *Inf. Technol. Dev.*, vol. 28, no. 1, pp. 16–38, 2022, doi: 10.1080/02681102.2020.1841713.

[136] M. Elayah, "Transformative Pathways in Qatar's E-Government: Integrating Societal Engagement and NGO Partnerships for Sustainable Digital Governance," *Public Adm. Dev.*, vol. 45, no. 3, pp. 228–241, 2025, doi: 10.1002/pad.2102.

[137] A. K. AbdulKareem and K. A. Oladimeji, "Cultivating the digital citizen: trust, digital literacy and e-government adoption," *Transform. Gov. People, Process Policy*, vol. 18, no. 2, pp. 270–286, 2024, doi: 10.1108/TG-11-2023-0196.

[138] G. H. Djatmiko, O. Sinaga, S. Pawirosumarto, and S. P. Gatot Herry Djatmiko O. Sinaga, "Digital Transformation and Social Inclusion in Public Services: A Qualitative Analysis of E-Government Adoption for Marginalized Communities in Sustainable Governance," *Sustainability*, vol. 17, no. 7, pp. 1–28, 2025, doi: 10.3390/su17072908.

[139] Y. Duan and X. Dong, "Does Digital Literacy Matter for E-Government Usage Behavior? An Empirical Analysis Based on Data from Rural Women in China," *SAGE Open*, vol. 15, no. 3, pp. 1–20, 2025, doi: 10.1177/21582440251376118.

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[140] Isabella, E. Agustian, T. Baharuddin, and A. H. H. Ibrahim, "Bridging E-Government With Digital Literacy: a Literature Review," *J. Gov. Regul.*, vol. 14, no. 1 (special issue), pp. 361–371, 2025, doi: 10.22495/jgrv14i1siart12.

[141] V. Weerakkody, R. El-Haddadeh, F. Al-Sobhi, M. A. Shareef, and Y. K. Dwivedi, "Examining the influence of intermediaries in facilitating e-government adoption: An empirical investigation," *Int. J. Inf. Manage.*, vol. 33, no. 5, pp. 716–725, 2013, doi: 10.1016/j.ijinfomgt.2013.05.001.

[142] W. Munyoka, "Electronic government adoption in voluntary environments – a case study of Zimbabwe," *Inf. Dev.*, vol. 36, no. 3, pp. 414–437, 2020, doi: 10.1177/0266666919864713.

[143] M. Z. I. Lallmahomed, N. Lallmahomed, and G. M. Lallmahomed, "Factors influencing the adoption of e-Government services in Mauritius," *Telemat. Informatics*, vol. 34, no. 4, pp. 57–72, 2017, doi: 10.1016/j.tele.2017.01.003.

[144] S. Oni, K. Araife Berepubo, A. Atinuke Oni, and S. Joshua, "E-government and the challenge of cybercrime in Nigeria," *2019 6th Int. Conf. eDemocracy eGovernment, ICEDEG 2019*, pp. 137–142, 2019, doi: 10.1109/ICEDEG.2019.8734329.

[145] M. D'Auray, "Canada: The dual challenge of integration and inclusion: Canada's experience with government online," *The World of E-Government*, vol. 7857, no. June, pp. 31–50, 2013, doi: 10.1300/J199v02n03_03.

[146] H. Li, B. H. Detenber, W. P. Lee, and S. Chia, "E-Government in Singapore: Demographics, usage patterns, and perceptions," *J. E-Government*, vol. 1, no. 3, pp. 29–54, Apr. 2005, doi: 10.1300/J399v01n03_03.

[147] J. Cano, "Security and interoperability in e-Government principles, challenges and experiences," *2016 Third Int. Conf. eDemocracy eGovernment*, pp. 11–11, 2024, doi: 10.1109/icedeg.2016.7461469.

[148] G. Karokola and L. Yngström, "Discussing E-Government Maturity Models for Developing World - Security View," *Inf. Secur. South Africa*, pp. 81–98, 2009, [Online]. Available: http://icsa.cs.up.ac.za/issa/2009/Proceedings/Full/30_Paper.pdf

[149] A. Mazhar, F. Iradat, N. Taşkın, and B. Metin, "Digital trust and the adoption of e-government services in Pakistan: a systematic literature review," *Secur. J.*, vol. 38, no. 1, pp. 1–29, 2025, doi: 10.1057/s41284-025-00506-z.

[150] S. Oni, K. Araife Berepubo, A. Atinuke Oni, and S. Joshua, "E-government and the challenge of cybercrime in Nigeria," *2019 6th Int. Conf. eDemocracy eGovernment, ICEDEG 2019*, pp. 137–142, 2019, doi: 10.1109/ICEDEG.2019.8734329.

[151] V. I. Espinosa and A. Pino, "E-Government as a Development Strategy: The Case of Estonia," *Int. J. Public Adm.*, vol. 48, no. 2, pp. 86–99, 2025, doi: 10.1080/01900692.2024.2316128.

[152] I. K. Mensah and J. Mi, "Computer Self-Efficacy and e-Government Service Adoption: The Moderating Role of Age as a Demographic Factor," *Int. J. Public Adm.*, vol. 42, no. 2, pp. 158–167, 2019, doi: 10.1080/01900692.2017.1405980.

[153] R. Kumar, A. Sachan, and A. Mukherjee, "Adoption of e-government services at different maturity levels: a qualitative study in India," *Digit. Policy, Regul. Gov.* , vol. 25, no. 1, pp. 15–39, Jan. 2023, doi: 10.1108/DPRG-09-2021-0116.

[154] A. Stamate, M. D. Marzan, M. Velciu, C. Paul, and L. Spiru, "Advancing user-centric design and technology adoption for aging populations: a multifaceted approach," *Front. Public Heal.*, vol. 12, 2024, doi: 10.3389/fpubh.2024.1469815.

[155] V. Indama, "Digital Governance: Citizen Perceptions and Expectations of Online Public Services," *Interdiscip. Stud. Soc. Law, Polit.*, vol. 1, no. 2, pp. 12–18, 2022, doi: 10.61838/kman.isslp.1.2.3.

[156] M. S. Akram and A. Malik, "Evaluating citizens' readiness to embrace e-government services," *ACM Int. Conf. Proceeding Ser.*, pp. 58–67, 2012, doi: 10.1145/2307729.2307740.

[157] N. Alharbi, M. Papadaki, and P. Dowland, "The impact of security and its antecedents in behaviour intention of using e-government services," *Behav. Inf. Technol.*, vol. 36, no. 6, pp. 620–636, 2017, doi: 10.1080/0144929X.2016.1269198.

[158] N. F. Abdul Rahim, G. A. Abbasi, M. Iranmanesh, N. Christopher, and A. Amran, "Determinants of continuous intention to use e-government services: an extension of technology continuance theory," *J. Syst. Inf. Technol.*, vol. 25, no. 3, pp. 245–267, 2023, doi: 10.1108/JSIT-09-2020-0166.

[159] W. Nasri, "Citizens' acceptance and use of e-government services in Tunisia: a UTAUT2-based approach," *Manag. Sustain.*, 2025, doi: 10.1108/MSAR-03-2024-0014.

[160] S. Nawafleh and A. Khasawneh, "Drivers of citizens E- loyalty in E-government services: E-service quality mediated by E-trust based on moderation role by system anxiety," *Transform. Gov. People, Process Policy*, vol. 18, no. 2, pp. 217–240, 2024, doi: 10.1108/TG-04-2023-0053.

[161] P. S. A. Chandan Bhagat Ajay K. Mishra, "Model for Implementation of e-Government Services in Developing Countries like Nepal," *Int. J. case Stud. business, IT, Educ.*, 2022, doi: 10.47992/ijcsbe.2581.6942.0199.

ISI Journal of Information Systems and Informatics
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[162] K. Aswar, E. Ermawati, W. Juliyanto, A. Andreas, and M. Wiguna, "Adoption of E-Government By Indonesian State Universities: an Application of Technology Acceptance Model," *Probl. Perspect. Manag.*, vol. 20, no. 1, pp. 396–406, 2022, doi: 10.21511/ppm.20(1).2022.32.

[163] R. Putra, K. M. Sobri, Azhar, and A. D. Santoso, "Antecedents of e-government perceived net benefits: a study of e-filing in Indonesia," *Telkomnika (Telecommunication Comput. Electron. Control.*, vol. 20, no. 5, pp. 1016–1025, 2022, doi: 10.12928/TELKOMNIKA.v20i5.22560.

[164] Y. Chen and Q. Li, "The Impact of E-Government on the New Generation Productive Capacities: Evidence from Cross-Country Data," *Sustain.* , vol. 16, no. 8, 2024, doi: 10.3390/su16083233.

[165] S. Syafarudin and Abd Haris, "Digital Transformation in Public Services," *Int. J. Law Soc.*, vol. 2, no. 4, pp. 169–179, 2025, doi: 10.62951/ijls.v2i4.797.

[166] L. Alzahrani, W. Al-Karaghouli, and V. Weerakkody, "Investigating the impact of citizens' trust toward the successful adoption of e-government: A multigroup analysis of gender, age, and internet experience," *Inf. Syst. Manag.*, vol. 35, no. 2, pp. 124–146, 2018, doi: 10.1080/10580530.2018.1440730.

[167] I. K. Mensah, S. Adams, J. K. Adjei, and D. S. Mwakapesa, "Drivers of egovernment adoption amidst COVID-19 pandemic: The Information Adoption Model (IAM) approach," *Inf. Dev.*, vol. 38, no. 4, pp. 494–509, 2022, doi: 10.1177/02666669211010872.

[168] K. Y. Iong and J. O. L. Phillips, "The transformation of government employees' behavioural intention towards the adoption of E-government services: An empirical study," *Soc. Sci. Humanit. Open*, vol. 7, no. 1, p. 100485, 2023, doi: 10.1016/j.ssaho.2023.100485.

[169] Q. Xie *et al.*, "Predictors for e-government adoption: Integrating TAM, TPB, trust and perceived risk," *Electron. Libr.*, vol. 35, no. 1, pp. 2–20, 2017, doi: 10.1108/EL-08-2015-0141.

[170] T. Muparadzi, H. Wissink, and B. McArthur, "Towards a Framework for Accelerating E-Government Readiness for Public Service Delivery Improvement in Zimbabwe," *Adm. Publica*, vol. 32, no. 2, pp. 96–119, 2024, doi: 10.61967/adminpub/2024.32.2.7.

[171] F. K. Y. Chan, J. Y. L. Thong, V. Venkatesh, S. A. Brown, P. J. H. Hu, and K. Y. Tam, "Modeling citizen satisfaction with mandatory adoption of an E-Government technology," *J. Assoc. Inf. Syst.*, vol. 11, no. 10, pp. 519–549, 2010, doi: 10.17705/1jais.00239.

[172] F. Tejedo-Romero and J. F. F. E. Araujo, "E-government-enabled transparency: The effect of electoral aspects and citizen's access to Internet on information disclosure," *J. Inf. Technol. Polit.*, vol. 17, no. 3, pp. 268–290, 2020, doi: 10.1080/19331681.2020.1713958.

[173] O. Al-Hujran, M. M. Al-Debei, A. Chatfield, and M. Migdadi, "The imperative of influencing citizen attitude toward e-government adoption and use," *Comput. Human Behav.*, vol. 53, pp. 189–203, 2015, doi: 10.1016/j.chb.2015.06.025.

[174] N. P. Rana, Y. K. Dwivedi, and M. D. Williams, "A meta-analysis of existing research on citizen adoption of e-government," *Inf. Syst. Front.*, vol. 17, no. 3, pp. 547–563, 2015, doi: 10.1007/s10796-013-9431-z.

[175] Q. Xie, W. Song, X. Peng, and M. Shabbir, "Predictors for e-government adoption: Integrating TAM, TPB, trust and perceived risk," *Electron. Libr.*, vol. 35, no. 1, pp. 2–20, 2017, doi: 10.1108/EL-08-2015-0141.

[176] I. Alhadid *et al.*, "Predictors for E-Government Adoption of SANAD App Services Integrating UTAUT, TPB, TAM, Trust, and Perceived Risk," *Int. J. Environ. Res. Public Health*, vol. 19, no. 14, 2022, doi: 10.3390/ijerph19148281.

[177] W. M. Al-Rahmi *et al.*, "Validation of an Integrated IS Success Model in the Study of E-Government," *Mob. Inf. Syst.*, vol. 2022, 2022, doi: 10.1155/2022/8909724.

[178] I. K. Mensah and J. Mi, "Computer Self-Efficacy and e-Government Service Adoption: The Moderating Role of Age as a Demographic Factor," *Int. J. Public Adm.*, vol. 42, no. 2, pp. 158–167, 2019, doi: 10.1080/01900692.2017.1405980.

[179] R. Hussein, N. Mohamed, A. R. Ahlan, and M. Mahmud, "E-government application: An integrated model on G2C adoption of online tax," *Transform. Gov. People, Process Policy*, vol. 5, no. 3, pp. 225–248, 2011, doi: 10.1108/17506161111155388.

[180] T. Thi Uyen Nguyen, P. Van Nguyen, H. Thi Ngoc Huynh, G. Q. Truong, and L. Do, "Unlocking e-government adoption: Exploring the role of perceived usefulness, ease of use, trust, and social media engagement in Vietnam," *J. Open Innov. Technol. Mark. Complex.*, vol. 10, no. 2, p. 100291, 2024, doi: 10.1016/j.joitmc.2024.100291.

[181] Y. Xia *et al.*, "Sustainable service quality assessment of Chinese healthcare e-government: a multi-criteria decision framework based on SERVQUAL model and entropy-weight TOPSIS method," *Front. Digit. Heal.*, vol. 7, 2025, doi: 10.3389/fdgth.2025.1611979.

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[182] H. Nguyen Trong, T. V. Dang, V. Nguyen, and T. T. Nguyen, "Determinants of e-government service adoption: an empirical study for business registration in Southeast Vietnam," *J. Asian Public Policy*, vol. 15, no. 3, pp. 453–468, 2022, doi: 10.1080/17516234.2020.1805396.

[183] Gideon Mutayi Wandabwa, "Effects of e-Government Adoption on Public Service Organization Performance in Developing Countries. A Case of Kenyan Public Service," *Int. J. Latest Technol. Eng. Manag. Appl. Sci.*, vol. 14, no. 3, pp. 508–525, 2025, doi: 10.51583/ijltemas.2025.140300055.

[184] T. Chee-Wee, I. Benbasat, and R. T. Cenfetelli, "Building citizen trust towards e-government services: Do high quality websites matter?," *Proc. Annu. Hawaii Int. Conf. Syst. Sci.*, 2008, doi: 10.1109/HICSS.2008.80.

[185] S. W. Liang and H. P. Lu, "Adoption of e-government services: An empirical study of the online tax filing system in Taiwan," *Online Inf. Rev.*, vol. 37, no. 3, pp. 424–442, 2013, doi: 10.1108/OIR-01-2012-0004.

[186] M. Alruwaie, R. El-Haddadeh, and V. Weerakkody, "A framework for evaluating citizens' expectations and satisfaction toward continued intention to use e-government services," *Lect. Notes Comput. Sci. (including Subser. Lect. Notes Artif. Intell. Lect. Notes Bioinformatics)*, vol. 7443 LNCS, pp. 273–286, 2012, doi: 10.1007/978-3-642-33489-4_23.

[187] S. M. Jasimuddin, N. Mishra, and N. A. Saif Almuraqab, "Modelling the factors that influence the acceptance of digital technologies in e-government services in the UAE: a PLS-SEM Approach," *Prod. Plan. Control*, vol. 28, no. 16, pp. 1307–1317, 2017, doi: 10.1080/09537287.2017.1375144.

[188] D. Napitupulu *et al.*, "Understanding the key driver of e-government services continuance usage intention: An integrated model of Expectation Confirmation Model and Technology Acceptance Model," *J. Infrastructure, Policy Dev.*, vol. 8, no. 12, pp. 1–18, 2024, doi: 10.24294/jipd.v8i12.7957.