IS Expeditions in Democratic Avenues — A Systematic Literature Review of Democracy-Related IS Research

Sampo Noponen[1,*] and Markus Salo[1]

[1] University of Jyvaskyla, Faculty of Information Technology, PO Box 35, FI-40014 Jyvaskyla, Finland

Abstract

Due to the lack of a consolidated understanding of existing democracy-related IS research, we conducted a systematic literature review incorporating 23 high-ranking IS journals. Following a pre-specified protocol and established guidelines, we searched Scopus and Web of Science on 7 April 2026 for IS articles that empirically investigate implications of IT use for democratic entities. Screening 158 articles ultimately resulted in a final sample of 67 articles. Drawing on the concept of digital democracy, we developed an integrative classification of themes, concepts, and topics, which can be organized into three clusters: informal public sphere, institutional democracies, and democratic collectives. Moreover, from the literature, we identified different ways in which IT use influences various democratic entities. Based on these findings, we outline four avenues for future research. As a contribution, our work provides a robust foundation for advancing future IS research on digital democracy. As digital technologies become increasingly entangled with democratic forms of collective life, we argue that IS scholars—given their expertise in sociotechnical systems—are well positioned to advance research in digital democracy.

Keywords

Digital democracy, Citizen, Public Sphere, E-participation, E-government

1. Introduction

Multidisciplinary research efforts related to the concept of digital democracy (also referred to as e-democracy) focus on how the use of information technology (IT) enables implementing processes of direct democracy within representative democracies [1]. Digital democracy is defined as a sociotechnical system that incorporates digital technologies to enhance democratic practices and forms of governance [2]. Although digital democracy research, by definition, strives for positive change, this does not imply that embedding IT into democratic forms of life leads exclusively to positive outcomes. Unsurprisingly, research has identified technology use as yielding both beneficial (e.g., increased political participation and information consumption) and detrimental (e.g., declining political trust, increased hate and polarization) impacts on democracy [3].

Weinhardt et al. [4] argue that researchers in the Information Systems (IS) discipline should increase their contributions to digital democracy research, as they are particularly well

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* Corresponding author.

sampo.noponen@jyu.fi (S. Noponen); markus.t.salo@jyu.fi (M. Salo);

0009-0009-3298-9179 (S. Noponen); 0000-0001-5229-0300 (M. Salo)

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positioned to address critical questions related to strengthening democratic societies. With its process-oriented and multidisciplinary tradition, the IS discipline not only has great potential to contribute to our understanding of how employing IT influences politics, but also has the potential to directly influence society and the public sphere [5]. Acknowledging the inherently sociotechnical nature of digital democracy, IS, as a fundamentally sociotechnical discipline [6], is well equipped to investigate not only the positive aspects but also the full range of effects that IT use may have on democracies.

We motivate this study for two reasons. First, democracy-related IS research remains fragmented, and the field lacks an integrative framework that synthesizes how digital democracy has been examined in IS. Second, existing work [e.g., 7] predates contemporary technologies (e.g., social media and generative AI), leaving IS without an up-to-date, consolidated understanding of how newer technologies reshape democracy and democratic practices. For digital democracy to emerge as a significant research topic in the field of IS, it is important to compile and synthesize the current body of knowledge and define directions for future research.

This study aims to address these gaps by investigating the extent and nature of existing democracy-related IS research through a systematic literature review. The chosen method provides an opportunity to develop an integrated view of what IS literature reveals about the different ways in which the use of IT can influence democratic activities. Rather than viewing digital technology as an isolated artifact, we ground this study in the understanding that information systems are fundamentally social processes that support purposeful human action and meaning-making [8]. While including other perspectives, such as those of government and public administration, this study especially targets the citizens' point of view, focusing on how sociotechnical democratic phenomena are perceived and interpreted by citizens. Within the scope of this study, we include empirical IS research that is explicitly related to democracy and published in prominent IS journals.

The purpose of this study is threefold: (1) to develop a classification of democracy-related concepts, themes, and phenomena addressed by the IS community; (2) to understand the ways in which IT use can influence democratic entities; and (3) to propose a research agenda comprising four avenues identified by examining underexplored yet important research topics suitable for IS scholars. To address these aims, we propose the following research questions:

RQ1: What democracy-related themes, topics and concepts has IS research addressed?
RQ2: Based on IS literature, in what ways does IT use influence the structures and processes of democratically organized entities?

Drawing on an analysis of 67 articles, we provide the following contributions. First, we organize and structure prior democracy-related IS research into a coherent classification system that includes 11 themes divided into three clusters. Second, we identify topics and concepts that have been examined in each theme. Third, we illustrate the different ways in which IT influences democratic outcomes. Finally, we use the synthesized knowledge to propose a research agenda for future work.

2. Conceptual background: digital democracy

In its essence, democracy can be understood as a method of collective decision-making [9]. From a normative perspective, democratic decision-making processes are expected to be egalitarian and inclusive, implying that all those affected by collective decisions should have equal rights to participate in shaping them [10]. The definition of democracy is not limited to nation-states, as a wide variety of entities—such as national regions, cities, municipalities, organizations, communities, movements, and even families—can be governed according to democratic principles [9]. Furthermore, democracy extends beyond a formal system of governance and can be understood more broadly as "a mode of associated living" [11]. Thus, this study considers both institutional and non-institutional democratic forms of life at national, regional, local, and communal levels.

This broad definition permits diverse political arrangements. At the national level, however, representative democracy remains the dominant form. In representative democracies, citizens delegate decision-making authority to elected representatives, who make binding decisions on behalf of the public [7]. Citizens' roles are typically limited to voting, serving as representatives, and participating in public discussions [7]. From a deliberative perspective, Habermas [10] identifies two key conditions for the functioning of liberal democracy under a capitalist paradigm: (1) the inclusion of all citizens in the formation of public opinion, and (2) the deliberative quality of public discussions, which enables the emergence of competing public opinions. Both conditions emphasize the critical role of the public sphere, understood as a virtual or physical space in which citizens engage in discourse and form public opinion [12, 13].

Over time, scholars have sought solutions to overcome the limitations of contemporary representative democracies through the use of IT [1]. These efforts have coalesced under the concept of digital democracy, which can be understood as both a normative concept and an analytical approach [1]. As an analytical approach, digital democracy examines how the use of IT shapes the conditions and practices of democratic governance [1]. Its normative dimension entails a continuous quest to consider how democracies should be arranged in combination with technology [1]. Berg and Hofmann [1] distinguish three periods in the evolution of digital democracy: electronic democracy in the 1980s, virtual democracy in the early 1990s, and finally web 2.0/networked democracy that emerged during the 2000s. Following the Web 2.0 era, we suggest the emergence of a fourth period in the 2010s and 2020s: algorithmic democracy, characterized by automated content moderation, predictive analytics, and generative AI models that reshape the cognitive and epistemic architectures of the public sphere. A common denominator across the first three periods is the aspiration to incorporate elements of direct democracy into representative democracy [1]. Whereas representative democracy relies on indirect participation through elected officials, direct democracy refers to decision-making processes in which citizens participate directly [7].

Berg and Hofmann [1] identify four domains through which digital technologies shape democratic institutions and practices. In the first domain, the roles of government and citizens, IT expands opportunities for citizen participation in consultation and decision-making and enables governments to become more responsive and transparent. In the second domain, the public sphere, digital media fundamentally reconfigure the formation of public opinion. Whereas traditional media acted as gatekeepers, social media infrastructures enable a wide range of actors to produce and disseminate content, thereby reshaping public discourse. The

third domain, the relationship between participation and representation, captures the space between institutionalized and non-institutionalized forms of political action, where new forms of campaigning, activism, and participatory experimentation emerge. Finally, the fourth domain, issues of domination and rights, relates to how digital technologies reshape power dynamics within democratic systems and the evolving relationship between governments and major digital platforms. Taken together, these domains highlight a central tension between IT and democracy: while digital technologies expand opportunities for participation and inclusion, they simultaneously introduce new forms of control, fragmentation, and power asymmetries [1].

This study adopts the definition of Fischli and Muldoon [2], viewing digital democracy as a sociotechnical system that encompasses democratic processes and forms of governance. In addition, this study utilizes a sociotechnical perspective [6], conceptualizing digital democracy as emerging from the interaction among technological affordances, institutional arrangements, and human agency. This aligns with foundational sociotechnical traditions—such as Mumford's ETHICS approach—which argue that IS implementations must satisfy human social needs alongside technical requirements to be truly effective [14]. Importantly, this perspective rejects the assumption of technological neutrality [2]. Instead, consistent with Winner's [15] foundational theorization of the politics of artifacts, we do not view algorithms as neutral protocols, but as sociomaterial configurations that embed institutional values, and may systematically privilege specific forms of human agency over others.

3. Methodology

This study aimed to identify and investigate explicitly democracy-related research in IS by means of a systematic literature review. To achieve this aim, we followed the main guidelines for systematic literature reviews by Okoli [16]. Accordingly, our review process consisted of four main stages: planning, selection, data extraction, and execution. The planning stage involved defining the review purpose and developing the review protocol. The selection stage included defining screening criteria, conducting the literature search, and applying inclusion and exclusion criteria. The extraction stage involved systematically extracting and quality-appraising data from the selected studies. Finally, the execution stage focused on synthesizing the findings and reporting the results. Given the iterative nature of the research process, we allowed for revisiting earlier stages when necessary. In addition, the review was informed by the guidance of Webster and Watson [17] (e.g., selecting journals, utilizing concept matrix, and structuring and writing the article). We chose to follow Okoli (2015) because the guidelines are aimed at IS research and provide instructions on how to conduct a review, whereas PRISMA focuses on reporting a review from a health sciences perspective [16].

Planning. Due to the fragmented nature of democracy research in IS and the absence of recent literature reviews on the topic, we defined the purpose of this article as developing an understanding of digital democracy research in IS and identifying directions for future research. Following Okoli [16], we drafted a review protocol and maintained it as a living document that was continually refined throughout the process.

Selection. Prior to conducting the literature search, we defined the practical screen. The screening criteria were continuously updated throughout the review process. The practical screen consists of the following inclusion and exclusion criteria:

1. The review is restricted to IS articles that explicitly examine phenomena related to democracy in one or both of the following ways. (1) IT-mediated citizen *participation* for self-governance at different levels (e.g., supranational, national, municipal and communal) involving a variety of processes (e.g. acquiring political knowledge, discussion, decision-making, and voting). (2) The impact of IT use on the nature or quality of some aspect of democracy (e.g. government, administration, public sphere, media)
2. The Review is restricted to a civic context involving citizens rather than consumers or professionals. Thus, articles with a predominantly business-oriented [e.g., 19] or academic [e.g., 20] focus are excluded. However, studies examining how private-sector actors or scientific communities influence democracy are included.
3. Only empirical articles are included (i.e., articles with a separate section for methods that describes data collection/sources and analysis) are included. Standalone literature reviews, conceptual/theoretical papers, editorials, and opinion/commentary articles are excluded.
4. Only articles written in English are included.

To capture relevant IS research, we followed Webster and Watson [17] by reviewing the discipline's prominent journals. As such, we searched for articles from the AIS Senior Scholars' list of 11 Premier Journals, which includes established outlets that have repeatedly been used for literature reviews (e.g., MIS Quarterly and Information Systems Research). To complement the 11 top journals, we included other IS-related journals with scopes that allows studies on democracy in civic contexts. While not exhaustive (e.g., we excluded conferences), we estimate that our selection of 23 journals provides extensive coverage of relevant IS research and represents the outlets in which the discipline's current state is represented and major contributions are likely to be published. While acknowledging the value of conference proceedings, this review intentionally restricts its scope to journals to ensure the sample comprises research recognized within the IS community as providing established theoretical and empirical foundations. All journals selected for the study can be found in Table 3.

We utilized a string "democra*" for the titles, abstracts, and keywords to catch all articles potentially relevant to democracy. An asterisk (*) is included in the query to avoid limiting our results to a single form of the term and to cover its various forms (e.g. democracy, democratic, democracies). Since, in principle, research in the IS discipline contains an IT artifact [21], this study presumes that all democracy-related IS articles are also related to digital democracy. No time range for the publication year was set. To ensure that the literature search covered relevant articles, we used two major bibliographic databases, Scopus and Web of Science, to execute the literature search. The final search, which was executed in April 2026 and captured all available records up to that date, produced 293 results. The full search query utilized in Scopus was as follows (similar query used in Web of Science): "TITLE-ABS-KEY (democra*) AND (SOURCE-ID (15074) OR SOURCE-ID (12321) OR SOURCE-ID (15574) OR SOURCE-ID (13300154706) OR SOURCE-ID (12815) OR SOURCE-ID (15700) OR SOURCE-ID (12396) OR SOURCE-ID (12402) OR SOURCE-ID (21933) OR SOURCE-ID (12303) OR SOURCE-ID (15572) OR SOURCE-ID (29745) OR SOURCE-ID (130132) OR SOURCE-ID (4900152206) OR SOURCE-ID (15631) OR SOURCE-ID (15688) OR SOURCE-ID (21100204505) OR SOURCE-ID (19419) OR SOURCE-ID (14490) OR SOURCE-ID (21100199731) OR SOURCE-ID (12125) OR SOURCE-ID (19800188032) OR SOURCE-ID (19300156904)) AND (LIMIT-TO (DOCTYPE , "ar"))."

After removing duplicate articles, 158 articles remained. We then screened the articles using exclusion and inclusion criteria as follows. First, we read the titles, abstracts, and keywords of each article to exclude out-of-focus articles. This resulted in a set of 105 articles. Second, we identified 19 borderline cases, [e.g., 22] which were carefully evaluated on a case-by-case basis; ultimately, none were included. Third, we conducted a full-text screening to identify additional articles for exclusion. Finally, we refined the criteria to exclude non-empirical articles, [e.g., 23, 24]. The process resulted in a final set of 67 articles. Figure 1 illustrates our literature selection process.

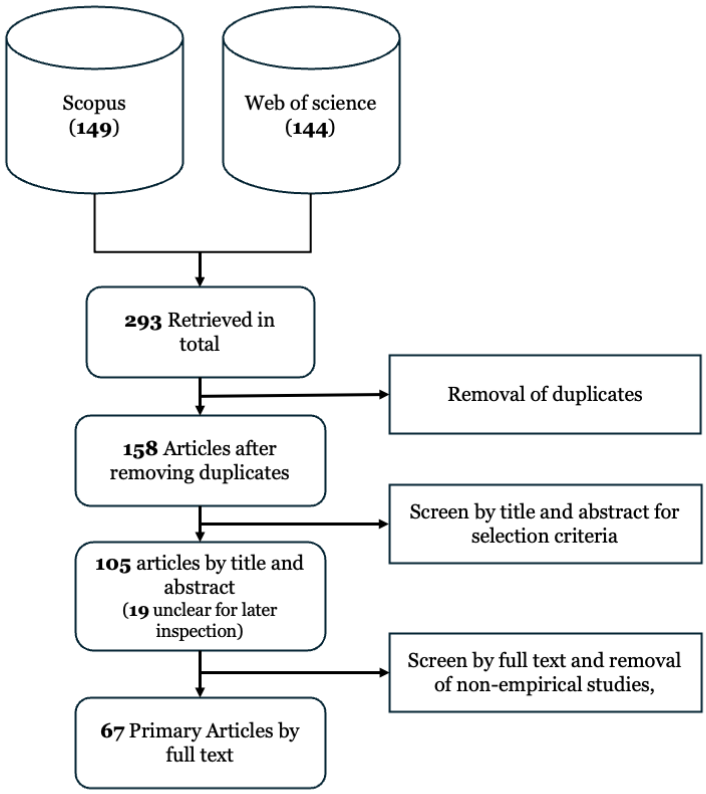


Figure 1: Study selection procedure.

Extraction. We developed a data extraction form to systematically extract data from each selected article. The form was designed to capture aspects of the corpus deemed essential or potentially useful for addressing the objectives of this study. As with other tools and processes in this study, the form evolved iteratively and was refined throughout the extraction process. It was created as a spreadsheet and included fields for capturing basic descriptive information (e.g., authors, year, title, journal, number of citations), as well as fields for capturing the themes and main aspects of each article (e.g., research focus, key concepts, main findings, type of democracy studied, IT artifact). In addition, supplementary fields were included to support a more granular understanding of the studies (e.g., study location, type of democratic entity), along with fields related to the nature of the research (e.g., methodology, position on the sociotechnical continuum). Given the objectives of this study, fields capturing themes and main aspects were considered the most essential. Quality appraisal was inherently integrated into

our protocol by limiting our review to selected reputable outlets, consisting of the AIS Senior Scholars' Basket of 11 Premier Journals and other outlets relevant to IS research.

Execution. We employed a hybrid approach to thematic analysis by mainly following the six-phase guidelines of Braun and Clarke [25]. In essence, we utilized data-driven inductive approaches to create and review clustered themes to ensure internal coherence and deductive approaches to review the created themes against established domains of digital democracy theory to ensure conceptual coherence. Next, we describe how the six-phase process was adapted to the current study. First, *familiarizing yourself with data* consisted of reading and revisiting all articles during the data extraction and the analysis process. Second, *generating initial codes* corresponded to the process in which data from each article was extracted into a spreadsheet file during data extraction. Third, *searching for themes* was conducted through a card sorting process in the Figma design application, in which themes and clusters were actively and inductively created by identifying common patterns among cards that represented coded articles. Embracing a concept-centric approach, as recommended by Webster and Watson [17], we allowed each article to be sorted into multiple themes. Fourth, *reviewing themes* involved reviewing clustered themes against digital democracy theory, and examining individual clusters and themes in relation to other clusters and themes for validating each theme and the classification as a whole. The cyclical process of creating, reviewing, and refining continued for five iterations of card sorting until we arrived at a satisfactory arrangement of clusters and themes. The fifth and sixth phases, *defining and naming each theme* and *producing the report*, were conducted during the process of writing the article, during which we strove to define and capture the essence of each cluster and theme. Additionally, we extended thematic analysis by identifying the main concepts and topics within each theme using a concept matrix, as suggested by Webster and Watson [15]. As a final remark, we sought to minimize biases in secondary research and avoid misrepresenting the work of other researchers by carefully reviewing and contrasting studies to incorporate multiple perspectives.

4. Results

Our analysis resulted in an integrative classification of eleven themes organized into three clusters. We find that the literature examines democracy-related phenomena across three distinct forms of social life. First, we observe research focusing on the informal activities of citizens, mediated by online and social media platforms in a manner that corresponds with the concept of the public sphere. Second, we identify a stream of research that considers IT-enabled democratic activities within the context of institutional democracies, particularly examining the relationship between citizens and government. Third, we distinguish studies that focus on democratic activities within democratically organized collectives, such as communities and social movements. Based on these observations, we group the themes into three clusters: (1) the informal public sphere, (2) institutional democracy, and (3) democratic collectives. In terms of the number of articles, Cluster 3 is considerably smaller than the other two clusters. Table 1 presents the integrative classification and summarizes the results of the study.

Regarding Cluster 1, IS studies of the informal public sphere investigate phenomena related to the consumption of political content, the acquisition of political knowledge, and the discussion of political issues in online spaces, particularly on social media platforms. A small number of studies also examine experiments with digital democracy practices using digital

tools. The literature in this cluster suggests that engaging with internet-based public spaces (e.g., social media and online news) can facilitate political learning, participation, and diverse public discourse, but may also foster enmity and societal division. In addition, scholars have examined challenges arising from the creation and spread of misinformation, which affect the perceived trustworthiness of content within the digital public sphere.

The literature within Cluster 2 focuses on the provision and adoption of digital public services, e-participation initiatives, issues related to government legitimacy (e.g., public trust, privacy, and corruption), and the use of digital solutions in electoral processes. This body of research examines institutional democracies across multiple levels, including national, regional, and municipal contexts. The findings indicate that IT enables communication and cooperation between citizens and their representative governments. However, economic, institutional, and sociotechnical factors may create tensions that complicate these interactions.

The literature pertaining to Cluster 3 centers on IT-enabled democratic collective action, ranging from the self-governance of communities to the digital activism of social movements. While these forms of democratic action often appear in the public sphere, Clusters 1 and 3 fundamentally differ from each other in the sense that the former examines unstructured citizen interactions within open online spaces, whereas the latter focuses on bounded, goal-oriented collectives utilizing technology for self-governance or collective mobilization. This stream of research demonstrates that social media enables citizens living abroad to participate in social movements in their home countries and that technological innovations, such as blockchain, facilitate the emergence of new forms of collective organizing.

Table 1
Themes, topics, and roles of IT in democracy-related IS research

Theme	**Concepts and Topics**	**Examples of IT role in democracy**
Cluster 1: Informal public sphere		
Information consumption	Political news consumption [26–36]; Social media news consumption [27, 30, 31, 33, 34, 37]; Mobile news consumption [32]; Incidental news exposure [29, 35]; Information overload [29, 31, 35]; Sharing political content [27, 38]; News avoidance [31]; Fact-checking [34]; Lateral reading [36]; Distraction effect [37]	Mobile news consumption narrows the knowledge gap between people of high and low socioeconomic status [32]; Social media news consumption increases the chances of drifting into an uncivil political discussion, which can negatively affect an individual's social relations online [30]
Literacy & knowledge	Illusion of knowing [33]; Political awareness [39]; Knowledge gap [32]; Digital/media/information literacy [31, 36, 39]; Political knowledge [27, 29, 32, 33, 35, 37]; Information overload [31]	Online news consumption tends to increase factual political knowledge, whereas sharing news online is related to an increase in structural knowledge [27]; Heavy social media news consumption increases the risk of overestimating one's own political knowledge [33]

Information trustworthiness	Misinformation [26, 40–42]; Disinformation [43, 44]; Deepfakes [43, 44]; Fake news [26, 40]; Social media influencer [42]; Gatekeeping [41]; Social media skepticism [45]; Conspiracy theory [46];	Social media can be exploited for modifying the unconscious behavior of others with fake news [40]; AI can be harnessed for correcting misinformation on social media [42]
Public discourse	Social media discourse [26, 34, 46–51]; Social media visual discourse [41]; Media discourse [52]; Online forum discussion [53, 54]; Online deliberation [49, 54–56]; Cross-cutting discussion [34, 50]; Viewpoint diversity [47]; Uncivil political discussion [30, 57]; Flaming [53]; Diversity [47]; Knowledge diffusion [58];	In the Middle East and North Africa, social media has the potential to be "a platform through which silenced and marginalized groups can have their voices heard" [51]; In Turkey, minorities cannot reach a large percentage of social media users [47]
Fragmentation of the public sphere	Polarization [28, 42, 47, 48] Echo chamber [28, 41]; Filter bubble [47]; External threats [48]; Radicalisation [41]; Selective exposure [28]	AI-generated influencers can reduce misperceptions related to a polarizing topic [42]; Social media affordances can enable subforum gatekeepers to produce echo chambers [41]
Cluster 2: Institutional democracy and relationship of citizens & government		
Public service delivery and adoption	E-government usability [59]; E-government adoption [60–62]; E-government maturity [63]; Citizen autonomy [64]; Internet voting [62]; Information management [65]; Sensemaking of AI benefits [66]; Technology adoption and national culture [67]; ICT investments [68]	Lack of resources (e.g., skilled workers, funding, infrastructure, information management, and knowledge) impairs democracy [65], while wealth and resources are major factors in the promotion of citizen engagement and e-government maturity [63, 68]
E-participation	Community engagement [69]; Middleman paradox [70]; Participatory budgeting [71]; Recommendation and use intention [71]; Satisfaction with democracy [72]; Perceived citizen empowerment [71]; Dialectic tensions [69]; Open government [69]; Open data [74]; Decision-making [73]; Role of power [74]; Social media, corruption and E-participation [75]	Fear of losing power leads politicians to oppose democratic reforms that would allow new digital forms of democratic citizen participation [70]; E-democracy tools allow open interaction between government and citizen, yet the informal activities that these tools enable, create tensions between the practices of community and the formal practices of the local government [69

Issues of democratic legitimacy: trust, privacy and corruption	Trust in e-voting [76, 77]; Trust in government [60, 78, 79]; Privacy [78, 79]; Trust in media [45]; Corruption [75, 80]; Government surveillance [78]	The digital transformation of media causes print media closures, which in turn increase federal corruption [80]; Social media diffusion indirectly reduces corruption by mediating the influence of e-participation [75]
Elections	E-voting [62, 76, 77]; Elections [5, 81]	IT use can change the nature of political competition [5]; By enabling connections between geographically distant citizens, social media can lower differences among citizens within a nation [82]
Cluster 3: Democratic collectives		
Social movements	Mental health in movement [83]; Social media in movement participation [84]; Protest communication [85]; Digital activism [55]; Analogy of conspiracy theory and social movement [46]	Social media can be used as a mirror of real-world events, e.g., the temporal continuation of protest movement [85]; Social media allows citizens abroad to contribute to collective action by expressing their opinions [84]
Community governance	Blockchain [86, 87]; Decentralized autonomous organizations [86, 87]; Decentralized governance [87]; Uses of CMC services in NGOs [88]; Community engagement [69]; Institutional logics [86]	Blockchain-based information systems can foster decentralized collective governance when combined with the principles of deliberative democracy [87]; IT-mediated virtual communities may be too narrowly focused and disconnected to strengthen civil society [88]

4.1. Role of IT in democratically organized entities

The findings suggest that IT use can influence democratic entities in myriad ways, both positively and negatively. Furthermore, in many cases, it is difficult to determine whether the influence of IT use is beneficial or detrimental. In this subsection, we outline how IT use influences democracy across the identified themes.

4.1.1. Cluster 1: Informal public sphere

Information consumption. The reviewed literature related to this theme investigates the acquisition and consumption of political content online by citizens. The articles reflect the transformation that the emergence of the internet and social media has brought to the media landscape. Increasingly, citizens consume their news from online media instead of printed newspapers. The literature shows that reading news on social media can increase the

probability of citizen participation in political discussions with individuals holding opposing views, which helps citizens understand opposing perspectives [34]. On the other hand, reading news online using system-driven or user-driven customization technologies, due to their automatic and unobtrusive operation, can undermine the foundations of deliberative democracy by minimizing exposure to counter-attitudinal content [28]. Internet presents many opportunities for citizens to accidentally encounter political information; however, this does not always translate into learning and improved political knowledge [29, 35]. Merely scanning content on digital devices does not lead to political learning, but incidental exposure that results in effortful processing of information may yield positive democratic outcomes by increasing participation, political expression, and information seeking [35]. Using social media for news consumption increases the likelihood of engaging in uncivil political discussion, which can affect individuals' social relations, for example, by increasing the probability of social media unfriending [30]. Smartphones can be a democratizing factor in that mobile news consumption narrows the knowledge gap between citizens of high and low socioeconomic status [32].

Literacy and knowledge. While the previous theme refers to the act of consuming and processing political information, this theme emphasizes its accumulation — knowing; it reflects beliefs, assumptions, and knowledge that citizens already possess. The literature in this stream explores how political knowledge and various forms of literacy affect democratic outcomes in sociotechnical contexts. Political knowledge can be divided into two dimensions: factual and structural knowledge [27]. While factual knowledge refers to a citizen's ability to correctly identify pieces of information, structural knowledge refers to the ability to recognize connections between related concepts [27]. IS scholars find that online news consumption tends to increase factual but not structural political knowledge [27], and that heavy social media news consumers tend to overestimate their political knowledge [33]. A concept related to knowledge, literacy, refers to the ability to access, critically evaluate, and effectively use information [39]. In addition to identifying evidence of a positive association between social media use and social media literacy, Heiss et al. [31] find indications that social media information literacy produces positive democratic outcomes such as fostering democratic resilience and reducing information overload. A cross-national study shows that the role of digital literacy in society is dependent on the national context: digital literacy moderates the relationship between political awareness and participation in Mongolia, but not in China [39].

Information trustworthiness. Research in this theme investigates the various impacts of misinformation on the public sphere and democratic societies. The widespread availability of false information on online platforms has hampered citizens' ability to ensure the trustworthiness of the content they consume. IS research has found that social media can be exploited to modify the unconscious behavior of others through fake news [40]. Au et al. [26] demonstrate how misinformation can lead to ideological polarization through a multi-stage process: misleading content enters social media without verification, gains visibility, attracts mainstream media attention, and ultimately intensifies societal divisions. Through its affordances (e.g., information validation and perpetual updating) social media can also facilitate the emergence of conspiracy theories [46]. At the same time, technologies used to create and spread misinformation—such as AI and social media—can also be leveraged to correct it [42]. The pervasive spread and presence of misinformation can lead to social media skepticism, which may have negative consequences for democracy by discouraging news consumption and political participation [45].

Public discourse. Public discourse refers to an open exchange of information regarding issues that affect the public [89]. The literature in this theme reflects the discursive conception of democracy by examining discussions, disagreements, debates, and deliberations held in online spaces. By far, the most common IT artifact is the social media platform, but online forums, mobile messaging applications, and even traditional media are also included [52]. Bae et al. [90] examined the transition of political discussion from face-to-face venues to online environments, and find that those who frequently discuss politics face-to-face are also likely to do so on the internet. Additionally, hierarchical structures and gender inequalities present in face-to-face venues are also prevalent in online forums, thereby compromising the democratic quality of discussions [53]. In repressed countries of the MENA region (Middle East and North Africa), social media and blogs provide a means for citizens to participate in democratic discourse, which can lead to social action and civil resistance [51]. This action can be intensified if authorities fail to respond to citizens' demands [51]. Two studies examine whether online spaces can foster democratic deliberation [49, 54]. Findings suggest that an online forum can facilitate political discussion that meets the preconditions of deliberation [54], but, although providing space for political participation, social media platforms are not an ideal option for in-depth political debate [49]. Instead, favorable results suggest that a purpose-built online deliberation platform might provide more positive results [56]. Au and Ho [55] provide a four-stage model to guide the organization of successful online deliberation. Social media can increase exposure to cross-cutting viewpoints through political discussions [50], which may yield beneficial outcomes by helping individuals better understand opposing perspectives and opinions [34]. In addition to political disagreements, social media use exposes citizens to uncivil discussions, which can be fueled by negative campaign advertising [57] and may negatively affect their social relations [30].

Fragmentation of the public sphere. Fragmentation of the public sphere refers to the erosion of cohesion in democratic society through the disintegration of the public sphere into multiple semi-public spheres. For instance, fragmentation can occur through the process of polarization, where a certain issue polarizes society into opposing groups [26], or when citizens are segregated into separate echo chambers [28]. Findings of Dylko et al. [26] suggest that rather than acting as neutral conduits, the architectural designs of customizability technologies, especially system-driven curation models, afford selective exposure, driving the segregation of the public sphere into echo chambers. A lack of moderation on social media can enable subforum audience gatekeepers to produce visual echo chambers in which prevailing perceptions of social reality are perpetuated with visual content [41]. The literature identifies additional detrimental effects. Social media can sustain political segregation by limiting minorities' ability to reach broader audiences [47]. Fake news on social media can lead to ideological polarization [26]. On the positive side, the literature demonstrates that AI can be utilized to reduce misperceptions of a polarizing issue, such as climate change [42].

4.1.2. Cluster 2: Relationship of citizens and government

Public service delivery and adoption. This theme refers to the provision and adoption of digital public services, such as government websites. In particular, the concept of e-government is evident in the literature pertaining to this theme, encompassing the relationship between administration and citizens, as well as the re-engineering of administrative activities using IT [91]. Digital transformation of governmental and administrative activities is undertaken with

the aim of increasing organizational effectiveness, improving the quality of public services, enhancing transparency and public trust [59], and boosting opportunities for economic development [91]. The literature shows that a lack of resources (e.g., skilled workers, funding, infrastructure, information management, and knowledge) can impair democratic outcomes [65], while wealth and resource availability are key factors of e-government maturity and the promotion of citizen engagement [63, 68]. Deficiencies in IT infrastructure and information management pose a challenge to governments of developing countries, such as those in southern and eastern Africa [65]. Bratteteig and Verne [64] argue that an important role for IT in democratic society lies in providing public services for maintaining and enhancing citizen autonomy. However, they find that the sociomaterial entanglement of different elements (e.g., social, technical, formal, and organizational) in the context of using public services can create challenges to citizen autonomy. In such a challenging situation, it is useful to disentangle the entanglement into constituents to open space for autonomy [64].

E-participation. E-participation refers to IT-mediated citizen engagement in formal governmental processes, such as consultation, decision-making, and policy-making with the aim of making governance more inclusive, efficient, and deliberative [71, 75]. In e-participation, the initiative for engaging citizens lies in the hands of the government rather than the citizens themselves. For instance, the city of Madrid has enabled citizens to participate in various city management processes, such as debates, proposals, polls, and participatory budgeting through the e-participation platform Consul [92]. In theory, by providing means to involve all affected parties to participate in decision-making, e-participation platforms offer profound potential in promoting core aspects of democracy. However, in practice, the successful implementation of e-participation platforms is far from straightforward [71]. The literature reveals a distinct sociomaterial friction: while the technological affordances of the platforms enable open interaction between government and citizen, the prevailing institutional structures and power dynamics create systemic resistance to democratic reforms [69, 70]. For example, fear of losing power can lead politicians to oppose e-participation implementations that would allow increased citizen participation [68], and the informal activities of e-democracy tools create tensions between the communal practices of the community and the bureaucratic formal practices of the local government [69]. Additionally, it is challenging to include all stakeholders in e-participation, as women and younger people are more willing to engage in e-participation than men and older individuals [71]. In computer-mediated participation processes, powerful actors tend to dominate, while less powerful actors are often excluded [74]. By examining the potential of open data for civic engagement in Kazakhstan, Kassen [93] finds that open data initiatives, such as a kindergarten finder application, can promote citizen engagement, but do not fundamentally transform or advance democratic institutions. Finally, a case study of a subsidiary e-participation system shows the promise of developing participatory practices at the local level, but not of scaling those practices to the global level [73]. This suggests that the benefits of IT-enabled citizen engagement are more easily realized at the local, communal, and municipal levels than in national or supranational contexts.

Issues of democratic legitimacy. The literature within this theme considers citizens' ethical perceptions of government legitimacy, especially in relation to trust, privacy, and corruption. Here, we define democratic legitimacy as the degree to which the conduct of a democratic institution is perceived as acceptable by citizens [10]. Trust, an essential element in social interactions, is defined as "the willingness of a party to be vulnerable to the actions of

another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that party" [94]. Corruption can be understood as the misuse of citizen trust, wherein a trustee (i.e., a government representative) violates social or legal norms by diverting public commons to 'particularistic gain' [95]. The literature reveals that IT use has implications for the perceived legitimacy of government. The digital transformation of media contributes to the closures of print media, which in turn increase federal corruption [80]. The diffusion of social media within a nation may indirectly reduce corruption through the mediating influence of e-participation [75]. The use of technology to collect personal data provides effective means for government to solve societal problems, such as fighting against the spread of a virus. However, citizen acceptance of data collection requires democratic legitimization and high levels of public trust [79].

Elections. This theme consists of studies exploring the use of IT in electoral processes, such as voting and campaigning. IT enables the transformation of voting by shifting from traditional in-person voting with paper ballots to internet-based voting using digital ballots [62]. E-voting, or electronic voting, presents another option for election-related e-government initiatives. Unlike internet voting, in e-voting citizens still attend physical voting stations, where they cast their ballots using electronic voting machines [77]. Avgerou et al. [77] demonstrate that e-voting can be implemented at a massive scale, and enjoy high levels of trust among citizens. IT can change the nature of political competition in elections [5]. A case study of the 2008 presidential election in the U.S. shows that the internet provides a new environment for politicians to gain a competitive advantage over other candidates in a political campaign [5]. Since 2008, this role of IT has only increased, as political campaigning has increasingly shifted from traditional media to social media platforms, such as Instagram or X. A more recent study demonstrates that social media can homogenize election outcomes by enabling connections between geographically distant citizens [82]. Moreover, as voters can publicly share their issues, opinions, and views, politicians can use social media platforms as a tool to align their positions and voting behavior with citizens' preferences [96]. Additionally, Mousavi and Gu [96] find that the adoption of Twitter is associated with a shift in the voting orientations of U.S. representatives toward more conservative positions.

4.1.3. Cluster 3: democratic communities

Social movements. Social movement is a form of collective behavior that can be characterized as an entity involving (1) a surge of newly and independently founded protest organizations (2) a rapid increase of scheduled social events and (3) mass opinion [85]. Scholars propose that the emergence of social movements is linked to emotions, which are often prevalent in charged contexts where such movements typically occur [97]. The literature supports this proposition, as sentiment analysis of the Egyptian protest movement shows that both positive and negative emotions signaled the probability of participation in protests on Twitter [85]. Additionally, the same study concluded that social media can serve as a mirror of real-world events, for example by capturing the temporal continuation of a protest movement [85]. A study in Taiwan shows that social media enables citizens living abroad to contribute to collective action by opinion expression [84]. Findings of Chen et al. [84] highlight the importance of shared expressions in the public sphere and demonstrate that social media can provide a space for the formation of public opinion. Lau et al. [83] find that social relations in the digital sphere can be associated with mental health symptoms during social upheaval.

Community governance. The reviewed literature pertaining to this theme centers on phenomena related to collective organization and self-governance of democratic communities, such as local or online communities, blockchain-based communities, and non-governmental organizations (NGOs). Since the emergence of the internet, there have been aspirations that IT would empower groups of individuals to create new forms of decentralized, self-governing communities [87]. The literature demonstrates that such aspirations were already evident in Colombia in the 1990s, where NGO activists turned to the internet to form virtual communities driven by the longing for the collective dream of a new, more democratic society [88]. However, there was no evidence that computer-mediated communication within a virtual community strengthened democracy [88]. Blockchain represents a more recent technological innovation, that has been utilized to develop novel forms of sociotechnical systems of governance, such as tech-mediated communities [86] or decentralized autonomous organizations (DAOs) [87]. Blockchain-based information systems can foster decentralized collective governance of a DAO when the technology is combined with a governance model of deliberative democracy [87]. In a case of Ethereum, Pak et al. [86] demonstrated that a complex technology-mediated community can scale in terms of membership, asset base and reputational reach when democratic community logics are combined with the market logics of crypto finance.

5. Discussion

This study was motivated by the observation that IS research related to democracy is fragmented and lacks a consolidated understanding of how newer technologies reshape democratic practices. To address this gap, we set out to provide a comprehensive overview of empirical democracy-related IS research by utilizing the concept of digital democracy as an analytical lens. As an initial finding, our review suggests that the concept is not widely employed in empirical IS research. To our knowledge, among the 23 journals included in our review, only two articles explicitly mention the term digital democracy within their titles abstracts, or keywords. A related term, e-democracy, was identified in ten articles. Nevertheless, our review shows that beyond these terminological distinctions, a substantial body of IS research examines the implications of IT use for democracy. We identified 11 themes organized into three clusters that reflect different ways in which IT use influences democracies. In addition, we classified the main topics and concepts associated with each theme. Overall, the reviewed literature demonstrates that the use of IT can exert both beneficial and detrimental effects on democracies and that its role is often ambiguous, making it difficult to determine whether its impact is ultimately positive or negative.

Relating our findings to Berg and Hofmann's four domains of digital democracy [1], we observe that the majority of IS research falls within the first domain (the role of government and citizenship), and especially the second domain (the public sphere). Considerably less research addresses the third domain (the relationship between participation and representation), while the fourth domain (issues of domination and rights) is the least explored. In other words, social media discourse and citizen engagement with e-government are more prominent topics than participatory decision-making initiatives and the power dynamics between governments and digital platforms. Interestingly, echoing the digital democracy literature's observation that the non-institutional public sphere has gained relevance over the institutional sphere [1], our review finds that IS research is heavily concentrated on informal

forms of participation and discussion in the digital public sphere, particularly on social media platforms. This exposes a missing perspective in our literature: by focusing primarily on easily accessible data from public platforms, the IS community may have inadvertently overlooked deeper sociotechnical power structures, such as how algorithmic governance shapes institutional policy-making or how underlying non-neutral mechanisms of social media platforms influence the formation of public opinion. Nevertheless, these findings indicate that democracy-related IS research aligns well with the broader scope of digital democracy.

Sociotechnical environments in which democratic activities occur are in constant flux [1]. Accordingly, it is essential for IS scholars to continue investigating democratic forms of life, where the social and the technical are increasingly intertwined in complex ways. Nevertheless, empirical findings in the IS literature demonstrate that technology has considerable capacity to reshape both informal and formal modes of collective decision-making. In the following subsections, we outline the contributions of this study, propose a future research agenda, and discuss the limitations.

5.1. Contributions

Our study contributes to the literature in several ways. First, we organize and structure prior research into a coherent classification system, thereby enhancing the understanding of IS contributions to democracy. Second, we clarify the themes, topics, and concepts that have been examined in prior work. Third, this study extends the literature by providing a comprehensive account of how IT influences democracy across the public sphere, institutional contexts, and democratic collectives.

Furthermore, we contribute to IS research by proposing four avenues for future research. These avenues highlight areas where existing knowledge remains limited and where IS scholars have opportunities to make meaningful contributions. Together, the integrative classification and the proposed research agenda provide a strong foundation for advancing future work on digital democracy. Ultimately, these contributions support the development of digital democracy as a significant research domain within the IS field.

5.2. Research Agenda for digital democracy

Our synthesis indicates that a substantial body of IS research investigates sociotechnical phenomena that impact democracies, including social media discourse, misinformation, e-participation, and e-government. More importantly, the review enables the identification of several key areas within digital democracy where IS contributions remain limited. To address these gaps, we propose a research agenda to advance digital democracy research in IS. In their editorial, Weinhardt et al. (2024) outline a research agenda for resilient digital democracies. The insights generated by our literature review complement this work by identifying additional avenues and topics for future IS research. The agenda is summarized in Table 2.

Our review shows that the IS field has made significant contributions to understanding the effects of social media on democracy, particularly in areas such as online discourse, news consumption, and misinformation in the digital public sphere. In addition, prior research has generated valuable insights into the role of IT in institutional democracies, especially in relation to e-government, e-participation, trust, and voting. While communication between citizens is a

well-studied topic, comparatively limited research has examined how citizens engage in collective decision-making.

In terms of IT artifacts, social media and other informal online spaces are prominent in the literature, whereas purpose-built digital democracy platforms, such as online deliberation and participatory budgeting systems, have been examined in only a limited number of studies [56, 69, 71, 73, 74]. The proposed research agenda reflects these findings. Additionally, our review suggests a shortage of IS research examining how artificial intelligence influences democracy. The emergence of social media has reshaped democracies in myriad ways, and generative AI has the potential to introduce further transformations [98]. This makes it a timely priority for IS scholars to investigate both the opportunities and risks that generative AI presents across different forms of democracy.

Table 2
IS research agenda for future digital democracy research

Limited theme of digital democracy in IS research	**Exemplar concepts and topics**	**Examples of related future research questions**
RA1 Impact of AI and its agency on democracy	Agency, Policy recommendation, Power concentration, Public opinions, Misinformation	How do various stakeholders assign agency to AI in democratic processes, and how does this attributed agency shape decision-making across various levels? What sociotechnical mechanisms enable the effective prevention of AI-generated misinformation within society? In what ways can AI be utilized to enable decentralized democratic self-governance?
RA2 Digital democracy for addressing wicked problems	Wicked problems, Decision-making, Policy-making, Deliberation, Public trust, Polarization, Climate change, Dispute resolution	How can digital democracy platforms and their sociotechnical affordances be utilized to enhance collaboration in democratic practices addressing wicked problems (e.g., income equality, polarization, and climate change)? Can online deliberation practices be effectively utilized to resolve disputes and facilitate agreement among parties with conflicting interests in the context of wicked problems?
RA3 Big Tech's influence on democracy and the public sphere	Institutional logics, Power, Ethics	What are the mechanisms through which the corporate logics of Big Tech companies influence democratic outcomes? How are the implicit corporate logics of privately owned social media platforms associated with democratic activity on those platforms?

RA4 Institutionalizing and scaling validated formats and methods	Deliberation, E-participation, Democratic institutions, Deliberative mini-publics, Democratic innovations	What validated practices, methods, and formats of digital democracy exist? How can validated offline practices and formats be scaled to larger audiences through digital democracy platforms? What contextual factors affect the successful implementation and integration of validated practices and formats into democratic institutions? Which factors hinder the institutionalization of validated digital democracy practices?

RA1: Impact of AI on democracy. Occurrences of AI in more recent articles [42, 44] indicate that more AI-related digital democracy research is underway. Nevertheless, as "AI is arguably the most important technology of our times" [98], we propose that the impact of AI on democracy constitutes a critical research stream within the field of digital democracy. Prior research shows that AI does not act in a vacuum; rather, it interacts with citizens, their biases, and platform architectures [98]. This interaction may influence many of the themes identified in this study, including misinformation (through the generation of convincing but misleading content), online deliberation (through summarization and facilitation of consensus-building), polarization (through alignment with the views of the user), political decision-making (through the streamlining of governance mechanisms), and power concentration (as AI development is concentrated in a small number of private organizations) [98]. However, Summerfield et al. [98] argue that we lack knowledge about how AI systems are embedded in the sociotechnical systems of the real world, and how the complex entanglement of AI, human actors, and democratic institutions affect societies and individuals. In democratic societies and communities, it is also essential that citizens have a voice in shaping how AI affects their lives [99]. Thus, one potential topic is to explore the formation of public opinion and collective will regarding the role of AI. To extend existing IS research on decentralized governance [87], researchers can explore ways in which AI can empower the decentralization of democratic communities. Example research questions related to this avenue of research are presented in Table 2. Overall, potential topics for further research extend to nearly all aspects of digital democracy, making this a central area for future IS research.

RA2: Digital democracy for addressing wicked problems. IT-mediated large-scale collaborations offer a promising approach to address complex societal problems involving multiple stakeholders with conflicting interests, often referred to as wicked problems [100]. By definition, wicked problems are exceedingly difficult to solve; however, it is possible to develop provisional courses of action for these problems [101]. Examples of previously mentioned wicked problems include inequality, poverty, unsustainability, crime, polarization, the refugee crisis, and pandemics, which can be addressed through different forms of democratic collaboration, such as open collaboration and deliberation. To stimulate greater engagement with these urgent challenges, IS research could investigate how collaboration on digital democracy platforms can produce provisional solutions to wicked problems at local and global scales. For example, scholars might examine how sociotechnical affordances, such as knowledge

collaging, purposeful deliberating, and knowledge interlacing identified by Malhotra et al. [100], can be leveraged to enhance collaboration in digital democracy practices. Additionally, future IS research could extend beyond passive observation. Researchers could also employ action-oriented interventionist approaches, such as Design Science Research (DSR) and Action Research, to design, implement, and evaluate purpose-built digital democracy platforms alongside deliberative processes and practices that enable effective communication and dispute resolution among stakeholders.

RA3: Big Tech's influence on democracy and the public sphere. Related to the fourth domain of digital democracy (issues of domination and rights) [1], prior conceptual studies have identified ways in which privately owned IT corporations, especially large social media platforms, such as YouTube and Facebook, influence democratic activities in the public sphere [24, 102, 103]. However, empirical IS research on this topic remains limited. As an ever larger share of human activity is mediated through their platforms, and as their vast financial resources continue to expand, Big Tech companies are increasingly positioned to influence societies [102]. Therefore, we propose this as a key research avenue through which IS researchers can contribute to understanding democracy, particularly by exploring the complex interplay of corporations, governments, information systems, and the public sphere. Given their expertise in studying sociotechnical organizational contexts, IS researchers are well positioned to uncover the mechanisms through which corporations influence democratic processes, whether positively or negatively. From a theoretical perspective, institutional logics may provide a promising lens for approaching this topic [103]. In addition, given the highly intertwined, complex, and dynamic nature of digital democracy, context-specific approaches that account for the contextual complexity are likely to be particularly valuable.

RA4: Institutionalizing and scaling validated formats and methods. For decades, researchers and practitioners have designed innovative processes and practices, both online and offline, that allow citizens to participate and find solutions to local or societal issues. These experimentations of deliberative democracy have produced viable methods and formats, such as planning cells [104], consensus conferences [105], deliberative mini-publics [106], and open consultation processes [107], which can generate workable solutions to societal problems, build trust, and orient citizens toward the common good [108]. However, these positive impacts remain limited if such practices cannot be scaled to broader audiences [109] and systemically integrated to democratic institutions [110]. Within the reviewed literature, we observed limited attention to these participatory formats and methods. Nevertheless, we argue that IS researchers, with their technological and organizational competence, are well positioned to contribute to digital democracy research by exploring ways in which these methods and formats could be scaled and integrated into institutional democratic processes at the local, regional, and national levels. For example, these efforts could be divided into two focus areas. While the first area could focus on identifying solutions to the challenge of scaling validated offline formats through the use of IT, the second could consist of generating knowledge regarding how such solutions can be effectively integrated into institutional democratic processes. A sociotechnical perspective informs us that scaling validated participatory formats through IT is fundamentally a social and political challenge rather than a technical one [111], requiring a deep understanding of citizen behavior within democratic structures.

5.3. Limitations

We are aware of the following limitations pertaining to our study. First, as we intentionally focused on a selected 23 IS journals, our review overlooks contributions from other IS outlets. Additionally, by including only journal articles, the synthesis is not enriched by the insights of conference papers. Second, we acknowledge that there are concepts such as "online governance" and "politics" that are related to digital democracy. However, these terms were excluded from the search query due to their broad and ambiguous use across domains not relevant to this study. Third, by examining only empirical studies, we left out findings from conceptual articles.

6. Conclusion

We conducted a systematic literature review to examine the nature and extent of democracy-related empirical research in the IS field. We analyzed the themes, topics, and concepts present in the literature and classified the ways in which IT influences democratically organized entities. By synthesizing 67 empirical IS studies published between 1998 and April 2026, our work establishes a robust foundation for the emerging domain of digital democracy within IS research. As our primary contribution, we identified 11 themes grouped into three clusters that capture different ways in which IT use affects and shapes democracies. Due to the increasing pervasiveness of technology in democratic forms of collective life, we argue that IS scholars, given their expertise in sociotechnical systems, are well positioned to advance research in digital democracy. Continued efforts from the IS community are essential to keep pace with the evolving and increasingly complex nature of contemporary societies. Ultimately, by deploying our proposed research agenda, the IS community can look beyond system-driven algorithmic design to design sociotechnical systems that support human agency, equity, and social justice at the core of digital democracy.

Declaration on generative AI

We used generative AI tool Microsoft Copilot to check the grammar and spelling of the article. Aside from that we have not employed generative AI tools in the development of this manuscript.

References

[1] Berg S, Hofmann J. Digital democracy. *Internet Policy Review*; 10. Epub ahead of print 20 December 2021. DOI: 10.14763/2021.4.1612.

[2] Fischli R, Muldoon J. Empowering Digital Democracy. *Perspectives on Politics* 2024; 22: 819–835.

[3] Lorenz-Spreen P, Oswald L, Lewandowsky S, et al. A systematic review of worldwide causal and correlational evidence on digital media and democracy. *Nat Hum Behav* 2022; 7: 74–101.

[4] Weinhardt C, Fegert J, Hinz O, et al. Digital Democracy: A Wake-Up Call. *Bus Inf Syst Eng* 2024; 66: 127–134.

[5] Wattal S, Schuff D, Mandviwalla M, et al. Web 2.0 and politics: The 2008 U.S. presidential election and an e-politics research agenda. *MIS Quarterly: Management Information Systems* 2010; 34: 669–688.
[6] Sarker S, Chatterjee S, Xiao X, et al. The Sociotechnical Axis of Cohesion for the is Discipline: Its Historical Legacy and its Continued Relevance1. *MIS Quarterly* 2019; 43: 695–719.
[7] Päivärinta T, Sæbø Ø. Models of E-Democracy. *CAIS*; 17. Epub ahead of print 2006. DOI: 10.17705/1CAIS.01737.
[8] Checkland P, Holwell S. *Information, systems and information systems: Making sense of the field*. Wiley, 1998.
[9] Christiano T, Bajaj S. Democracy. In: Zalta EN, Nodelman U (eds) *The Stanford Encyclopedia of Philosophy*. Metaphysics Research Lab, Stanford University, https://plato.stanford.edu/archives/sum2024/entries/democracy/ (2024, accessed 12 May 2026).
[10] Habermas J. *A New Structural Transformation of the Public Sphere and Deliberative Politics*. John Wiley & Sons, 2023.
[11] Dewey J. *Democracy and education: an introduction to the philosophy of education*. New York: The Macmillan Company, 1916.
[12] Adut A. A Theory of the Public Sphere. *Sociological Theory* 2012; 30: 238–262.
[13] Habermas J. The Public Sphere: An Encyclopedia Article (1964)*. In: *New Critical Writings in Political Sociology*. Routledge, 1964.
[14] Mumford E. A Socio-Technical Approach to Systems Design. *Requirements Eng* 2000; 5: 125–133.
[15] Winner L. Do Artifacts Have Politics? *Daedalus*.
[16] Okoli C. A Guide to Conducting a Standalone Systematic Literature Review. *CAIS*; 37. Epub ahead of print 2015. DOI: 10.17705/1CAIS.03743.
[17] Webster J, Watson RT. ANALYZING THE PAST TO PREPARE FOR THE FUTURE: WRITING A LITERATURE REVIEW.
[18] Bandara W, Furtmueller E, Gorbacheva E, et al. Achieving Rigor in Literature Reviews: Insights from Qualitative Data Analysis and Tool-Support. *CAIS*; 37. Epub ahead of print 2015. DOI: 10.17705/1CAIS.03708.
[19] van Giffen B, Ludwig H. How Siemens Democratized Artificial Intelligence. *MIS Q Exec*; 22. Epub ahead of print 2023. DOI: 10.17705/2msqe.00072.
[20] Dutton WH. The politics of next generation research: Democratizing research-centred computational networks. *J Inf Technol* 2011; 26: 109–119.
[21] Orlikowski WJ, Iacono CS. Research Commentary: Desperately Seeking the "IT" in IT Research—A Call to Theorizing the IT Artifact. *Information Systems Research* 2001; 12: 121–134.
[22] Ruoff M, Gnewuch U, Maedche A, et al. Designing Conversational Dashboards for Effective Use in Crisis Response. *J Assoc Inf Syst* 2023; 24: 1500–1526.
[23] Amrollahi A. A Conceptual Tool to Eliminate Filter Bubbles in Social Networks. *Australasian Journal of Information Systems* 2021; 25: 1–16.
[24] Zuboff S. Big other: Surveillance capitalism and the prospects of an information civilization. *Journal of Information Technology* 2015; 30: 75–89.
[25] Braun V, Clarke V. Using thematic analysis in psychology. *Qualitative Research in Psychology* 2006; 3: 77–101.
[26] Au CH, Ho KKW, Chiu DKW. The Role of Online Misinformation and Fake News in Ideological Polarization: Barriers, Catalysts, and Implications. *Information Systems Frontiers* 2022; 24: 1331–1354.

[27] Beam MA, Hutchens MJ, Hmielowski JD. Clicking vs. sharing: The relationship between online news behaviors and political knowledge. *Computers in Human Behavior* 2016; 59: 215–220.
[28] Dylko I, Dolgov I, Hoffman W, et al. The dark side of technology: An experimental investigation of the influence of customizability technology on online political selective exposure. *Computers in Human Behavior* 2017; 73: 181–190.
[29] Gil de Zúñiga H, Borah P, Goyanes M. How do people learn about politics when inadvertently exposed to news? Incidental news paradoxical Direct and indirect effects on political knowledge. *Computers in Human Behavior*; 121. Epub ahead of print 2021. DOI: 10.1016/j.chb.2021.106803.
[30] Goyanes M, Borah P, Gil de Zúñiga H. Social media filtering and democracy: Effects of social media news use and uncivil political discussions on social media unfriending. *Computers in Human Behavior*; 120. Epub ahead of print 2021. DOI: 10.1016/j.chb.2021.106759.
[31] Heiss R, Nanz A, Matthes J. Social media information literacy: Conceptualization and associations with information overload, news avoidance and conspiracy mentality. *Computers in Human Behavior*; 148. Epub ahead of print 2023. DOI: 10.1016/j.chb.2023.107908.
[32] Kim Y, Chen H-T. Smartphone use and knowledge gap hypothesis: the relationship between mobile news consumption, discussion network heterogeneity, and political knowledge. *Information Technology and People* 2023; 36: 2756–2773.
[33] Leonhard L, Karnowski V, Kümpel AS. Online and (the feeling of being) informed: Online news usage patterns and their relation to subjective and objective political knowledge. *Computers in Human Behavior* 2020; 103: 181–189.
[34] Lin H, Kim Y. Learning from disagreement on social media: The mediating role of like-minded and cross-cutting discussion and the moderating role of fact-checking. *Computers in Human Behavior*; 139. Epub ahead of print 2023. DOI: 10.1016/j.chb.2022.107558.
[35] Nanz A, Matthes J. Seeing political information online incidentally. Effects of first- and second-level incidental exposure on democratic outcomes. *Computers in Human Behavior*; 133. Epub ahead of print 2022. DOI: 10.1016/j.chb.2022.107285.
[36] Werner Axelsson C-A, Nygren T. The advantage of videos over text to boost adolescents' lateral reading in a digital workshop. *Behaviour and Information Technology*. Epub ahead of print 2024. DOI: 10.1080/0144929X.2024.2308046.
[37] Matthes J, Heiss R, van Scharrel H. The distraction effect. Political and entertainment-oriented content on social media, political participation, interest, and knowledge. *Computers in Human Behavior*; 142. Epub ahead of print 2023. DOI: 10.1016/j.chb.2022.107644.
[38] Okdie BM, Rempala DM, Garvey KJ. Life in the bubble: Examining the forwarding of political videos. *Computers in Human Behavior* 2013; 29: 2425–2430.
[39] Zanabazar G, Mohi Ud Din Q, Hong T. How digital literacy shapes the conversion of political awareness into participation: A cross-national comparative study of Mongolia and China. *Computers in Human Behavior*; 179. Epub ahead of print 2026. DOI: 10.1016/j.chb.2026.108946.
[40] Bastick Z. Would you notice if fake news changed your behavior? An experiment on the unconscious effects of disinformation. *Computers in Human Behavior*; 116. Epub ahead of print 2021. DOI: 10.1016/j.chb.2020.106633.
[41] Durani K, Eckhardt A, Durani W, et al. Visual audience gatekeeping on social media platforms: A critical investigation on visual information diffusion before and during the Russo–Ukrainian War. *Information Systems Journal* 2024; 34: 415–468.

[42] von Sikorski C, Merz P, Heiss R, et al. Both AI-generated and human influencers can correct misinformation: Investigating the effectiveness of corrections for polarized and non-polarized issues. *Computers in Human Behavior*; 176. Epub ahead of print 2026. DOI: 10.1016/j.chb.2025.108845.
[43] Hameleers M, van der Meer TGLA, Dobber T. Distorting the truth versus blatant lies: The effects of different degrees of deception in domestic and foreign political deepfakes. *Computers in Human Behavior*; 152. Epub ahead of print 2024. DOI: 10.1016/j.chb.2023.108096.
[44] Mikkilineni SD, Lee J. Immersive falsehood: the impact of political orientation, spatial presence, and enjoyment on deepfake credibility in immersive media. *Behaviour and Information Technology*. Epub ahead of print 2025. DOI: 10.1080/0144929X.2025.2577221.
[45] Deng R, Ahmed S. Between trust and skepticism: unpacking the impact of social media skepticism on online political participation. *Behaviour and Information Technology* 2025; 44: 4765–4779.
[46] Li B, Ji D, Fu M, et al. Unveiling the formation of conspiracy theory on social media: A discourse analysis. *Journal of Information Technology* 2024; 39: 392–416.
[47] Bozdag E, Gao Q, Houben G-J, et al. Does offline political segregation affect the filter bubble? An empirical analysis of information diversity for Dutch and Turkish Twitter users. *Computers in Human Behavior* 2014; 41: 405–415.
[48] Gronow A, Xia Y, Malkamäki A, et al. Do external threats decrease political polarization? Climate change and immigration discussions on Finnish Twitter after the Russian invasion of Ukraine. *Computers in Human Behavior*; 173. Epub ahead of print 2025. DOI: 10.1016/j.chb.2025.108775.
[49] Halpern D, Gibbs J. Social media as a catalyst for online deliberation? Exploring the affordances of Facebook and YouTube for political expression. *Computers in Human Behavior* 2013; 29: 1159–1168.
[50] Kim Y. The contribution of social network sites to exposure to political difference: The relationships among SNSs, online political messaging, and exposure to cross-cutting perspectives. *Computers in Human Behavior* 2011; 27: 971–977.
[51] Shirazi F. Social media and the social movements in the Middle East and North Africa: A critical discourse analysis. *Information Technology and People* 2013; 26: 28–49.
[52] Cukier W, Ngwenyama O, Bauer R, et al. A critical analysis of media discourse on information technology: Preliminary results of a proposed method for critical discourse analysis. *Information Systems Journal* 2009; 19: 175–196.
[53] Atai MR, Chahkandi F. Democracy in computer-mediated communication: Gender, communicative style, and amount of participation in professional listservs. *Computers in Human Behavior* 2012; 28: 881–888.
[54] Gonzalez-Bailon S, Kaltenbrunner A, Banchs RE. The structure of political discussion networks: A model for the analysis of online deliberation. *Journal of Information Technology* 2010; 25: 230–243.
[55] Au CH, Ho KKW. Deliberation in mobile messaging application: A case in Hong Kong. *Communications of the Association for Information Systems* 2019; 45: 270–298.
[56] Stiegler H, De Jong MDT. Facilitating personal deliberation online: Immediate effects of two ConsiderIt variations. *Computers in Human Behavior* 2015; 51: 461–469.
[57] Hopp T, Vargo CJ. Does negative campaign advertising stimulate uncivil communication on social media? Measuring audience response using big data. *Computers in Human Behavior* 2017; 68: 368–377.

[58] Moreno-Jiménez JM, Aguarón J, Cardeñosa J, et al. A collaborative platform for cognitive decision making in the Knowledge Society. *Computers in Human Behavior* 2012; 28: 1921–1928.
[59] Verkijika SF, De Wet L. A usability assessment of e-government websites in Sub-Saharan Africa. *International Journal of Information Management* 2018; 39: 20–29.
[60] Ahmad KM, Campbell J. Citizen perceptions of e-government in the Kurdistan Region of Iraq. *Australasian Journal of Information Systems* 2015; 19: 1–29.
[61] Alomari M, Woods P, Sandhu K. Predictors for e-government adoption in Jordan Deployment of an empirical evaluation based on a citizen-centric approach. *Inf Technol People* 2012; 25: 207–234.
[62] Carter L, Bélanger F. Internet voting and political participation: An empirical comparison of technological and political factors. *Data Base for Advances in Information Systems* 2012; 43: 26–46.
[63] Ifinedo P. Factors Influencing E-government Maturity in Transition Economies and Developing Countries: A Longitudinal Perspective. *Data Base Adv Inf Syst* 2011; 42: 98–116.
[64] Bratteteig T, Verne G. Conditions for autonomy in the information society: Disentangling as a public service. *Scandinavian Journal of Information Systems* 2013; 24: 51–78.
[65] Mutula S, Wamukoya JM. Public sector information management in east and southern Africa: Implications for FOI, democracy and integrity in government. *International Journal of Information Management* 2009; 29: 333–341.
[66] Madan R, Ashok M. Making Sense of AI Benefits: A Mixed-method Study in Canadian Public Administration. *Information Systems Frontiers* 2025; 27: 889–923.
[67] Salehan M, Kim DJ, Lee J-N. Are there any relationships between technology and cultural values? A country-level trend study of the association between information communication technology and cultural values. *Information and Management* 2018; 55: 725–745.
[68] Soper DS, Demirkan H, Goul M, et al. An empirical examination of the impact of ICT investments on future levels of institutionalized democracy and foreign direct investment in emerging societies. *Journal of the Association for Information Systems* 2012; 13: 116–149.
[69] Hasan H, Linger H. Letting the public in: dialectic tensions when local governments move beyond e-government to e-democracy. *Australasian Journal of Information Systems* 2020; 24: 1–31.
[70] Mahrer H, Krimmer R. Towards the enhancement of e-democracy: identifying the notion of the 'middleman paradox'. *Information Systems Journal* 2005; 15: 27–42.
[71] Naranjo-Zolotov M, Oliveira T, Casteleyn S. Citizens' intention to use and recommend e-participation: Drawing upon UTAUT and citizen empowerment. *Information Technology and People* 2019; 32: 364–386.
[72] Fan Z, Zhang N. Disconnected citizens in the social media age: unpacking the effects of digital exclusion on satisfaction with democracy in Europe. *Information Technology and People* 2022; 35: 1652–1673.
[73] Díaz Nafría JM, Alfonso Cendón J, Panizo Alonso L. Building up eParticipatory decision-making from the local to the global scale. Study case at the European Higher Education Area. *Computers in Human Behavior* 2015; 47: 26–41.
[74] Coelho TR, Pozzebon M, Cunha MA. Citizens influencing public policy-making: Resourcing as source of relational power in e-participation platforms. *Information Systems Journal* 2022; 32: 344–376.

[75] Arayankalam J, Krishnan S. Social Media as a Source of Citizens' Communicative Power: Relating Social Media Diffusion, E-participation, and Corruption. *Communications of the Association for Information Systems* 2022; 51: 303–326.
[76] Avgerou C. Explaining trust in it-mediated elections: A case study of e-voting in Brazil. *Journal of the Association for Information Systems* 2013; 14: 420–451.
[77] Avgerou C, Masiero S, Poulymenakou A. Trusting e-voting amid experiences of electoral malpractice: The case of Indian elections. *Journal of Information Technology* 2019; 34: 263–289.
[78] Liu J, Skoric MM, Li C. Disentangling the relation among trust, efficacy and privacy management: a moderated mediation analysis of public support for government surveillance during the COVID-19 pandemic. *Behaviour and Information Technology* 2024; 43: 551–570.
[79] Zarouali B, Strycharz J, Helberger N, et al. Exploring people's perceptions and support of data-driven technology in times of COVID-19: the role of trust, risk, and privacy concerns. *Behaviour and Information Technology* 2022; 41: 2035–2046.
[80] Matherly T, Greenwood BN. NO NEWS IS BAD NEWS: THE INTERNET, CORRUPTION, AND THE DECLINE OF THE FOURTH ESTATE. *MIS Quarterly: Management Information Systems* 2024; 48: 699–714.
[81] Markey P, Markey C. Pornography-seeking behaviors following midterm political elections in the United States: A replication of the challenge hypothesis. *Computers in Human Behavior* 2011; 27: 1262–1264.
[82] Basak E, Tafti A, Pang M-S. The Role of Online and Geographically Distant Social Networks in Political Decision-Making: Empirical Evidence from the 2016 United States Presidential Election. *Journal of the Association for Information Systems* 2024; 25: 721–737.
[83] Lau KM, Hou WK, Hall BJ, et al. Social media and mental health in democracy movement in Hong Kong: A population-based study. *Computers in Human Behavior* 2016; 64: 656–662.
[84] Chen H-T, Ping S, Chen G. Far from reach but near at hand: The role of social media for cross-national mobilization. *Computers in Human Behavior* 2015; 53: 443–451.
[85] Bang CC, Lee J, Rao HR. The Egyptian protest movement in the twittersphere: An investigation of dual sentiment pathways of communication. *Int J Inf Manage* 2021; 58: 102328.
[86] Pak Y, Hannigan TR, Jennings PD, et al. Scaling a tech-mediated community: Prefigurative enrolling atop evolving institutional logics. *Information and Organization*; 36. Epub ahead of print 2026. DOI: 10.1016/j.infoandorg.2026.100608.
[87] Soleimanof L, Neufeld DJ. Pursuit of decentralization in blockchain-based systems: An empowerment perspective. *Journal of Information Technology*. Epub ahead of print 2025. DOI: 10.1177/02683962251389979.
[88] Gómez R. The nostalgia of virtual community:A study of computer-mediated communications use in Colombian non-governmental organizations. *Information Technology & People* 1998; 11: 217–234.
[89] Post R. The Constitutional Concept of Public Discourse: Outrageous Opinion, Democratic Deliberation, and Hustler Magazine v. Falwell. *Harvard Law Review*.
[90] Bae SY, Kwak N, Campbell SW. Who will cross the border? - The transition of political discussion into the newly emerged venues. *Computers in Human Behavior* 2013; 29: 2081–2089.
[91] Ciborra C. Interpreting e-government and development: Efficiency, transparency or governance at a distance? *Information Technology and People* 2005; 18: 260–279.

[92] Royo S, Pina V, Garcia-Rayado J. Decide Madrid: A Critical Analysis of an Award-Winning e-Participation Initiative. *Sustainability*; 12. Epub ahead of print 24 February 2020. DOI: 10.3390/su12041674.
[93] Kassen M. Open data in Kazakhstan: incentives, implementation and challenges. *Information Technology and People* 2017; 30: 301–323.
[94] Mayer RC, Davis JH. An Integrative Model of Organizational Trust.
[95] Gerring J, Thacker SC. Political Institutions and Corruption: The Role of Unitarism and Parliamentarism. *Brit J Polit Sci* 2004; 34: 295–330.
[96] Mousavi R, Gu B. The impact of twitter adoption on lawmakers' voting orientations. *Information Systems Research* 2019; 30: 133–153.
[97] Morris A. Reflections on Social Movement Theory: Criticisms and Proposals. *Contemporary Sociology* 2000; 29: 445.
[98] Summerfield C, Argyle LP, Bakker M, et al. The impact of advanced AI systems on democracy. *Nat Hum Behav* 2025; 9: 2420–2430.
[99] Robles P, Mallinson DJ. Artificial intelligence technology, public trust, and effective governance. *Review of Policy Research* 2025; 42: 11–28.
[100] Malhotra A, Majchrzak A, Lyytinen K. Socio-Technical Affordances for Large-Scale Collaborations: Introduction to a Virtual Special Issue. *Organization Science* 2021; 32: 1371–1390.
[101] Head BW, Alford J. Wicked Problems: Implications for Public Policy and Management. *Administration & Society* 2015; 47: 711–739.
[102] Lindman J, Makinen J, Kasanen E. Big Tech's power, political corporate social responsibility and regulation. *Journal of Information Technology* 2023; 38: 144–159.
[103] Schuessler E, Maric S, Dobusch L. Digital platforms and democratic publics: How social media platforms selectively appropriate and strategically subvert institutional logics. *Information and Organization*; 36. Epub ahead of print 2026. DOI: 10.1016/j.infoandorg.2026.100612.
[104] Dienel PC. Planning Cells: The German Experience. In: *Participation Beyond the Ballot Box*. Routledge, 1999.
[105] Joss S, Durant J. *Public Participation in Science: The Role of Consensus Conferences in Europe*. NMSI Trading Ltd, 1995.
[106] Warren ME, Gastil J. Can Deliberative Minipublics Address the Cognitive Challenges of Democratic Citizenship? *The Journal of Politics* 2015; 77: 562–574.
[107] Hsiao YT, Lin S-Y, Narayanan D, et al. vTaiwan: An Empirical Study of Open Consultation Process in Taiwan. Epub ahead of print 4 July 2018. DOI: 10.31235/osf.io/xyhft.
[108] Jain A, Dienel H-L. Deliberative democracy in times of crisis: the capability of citizens' assemblies to overcome societal polarization. *Innovation: The European Journal of Social Science Research* 2024; 37: 681–686.
[109] Shortall R, Itten A, Meer MVD, et al. Reason against the machine? Future directions for mass online deliberation. *Front Polit Sci* 2022; 4: 946589.
[110] Setälä M. Connecting deliberative mini-publics to representative decision making. *Eur j polit res* 2017; 56: 846–863.
[111] Sommerville PI. Designing software for a million users – It's not about the technology.

A. Selected 23 journals of the review

Table 3

Selected 23 journals and number of hits identified per journal

	Journal	Hits
Senior Scholars' list of Premier Journals	Information Systems Research	1
	Information Systems Journal	4
	MIS Quarterly	2
	Journal of Management Information Systems	0
	Journal of Information Technology	4
	Journal of the Association for Information Systems	3
	Journal of Strategic Information Systems	0
	European Journal of Information Systems	0
	Decision Support Systems	0
	Information and Management	1
	Information and Organization	1
Other prominent IS journals	Information Systems Frontiers	2
	Information Technology and People	7
	Data Base for Advances in Information Systems	2
	International Journal of Information Management	3
	Journal of Information Systems	0
	Australasian Journal of Information Systems	2
	Computers in Human Behavior	27
	Business and Information Systems Engineering	0
	Scandinavian Journal of Information Systems	1
	Behaviour and Information Technology	5
	MIS Quarterly Executive	0
	Communications of the Association for Information Systems	2
Total sum		67