



Analysis of psychological factors influencing citizens' willingness to communicate with chatbots instead of officials in exercising rights in local government

Vanja Stojković

National Employment Service of the Republic of Serbia.

Email: vanjastojkovic988@gmail.com

Abstract

The rapid integration of artificial intelligence (AI) into local government services has generated a pressing need to understand the psychological determinants that shape citizen behaviour toward automated communication systems. This paper examines the key psychological factors that either facilitate or impede citizens' willingness to interact with chatbots rather than human officials when exercising administrative rights at the local government level. Drawing upon the Technology Acceptance Model (TAM), the Unified Theory of Acceptance and Use of Technology (UTAUT), and the evolving literature on trust in algorithmic systems, the study explores how perceived usefulness, perceived ease of use, social influence, privacy concerns, anthropomorphism, and the absence of empathy in AI systems collectively determine citizen adoption rates. A quantitative research design based on a structured online survey administered to 340 citizens in the Nišava District of Serbia was employed. The findings reveal that institutional trust, data privacy concerns, and the perceived empathy deficit of chatbot systems are the strongest inhibitors of adoption, while perceived efficiency gains and prior digital experience are the most robust predictors of willingness to engage. The paper concludes with policy recommendations aimed at designing psychologically informed AI interfaces for local government services.

Keywords:

*AI in public administration
Chatbot adoption
Citizen trust
E-government
Local government
Psychological barriers
Technology acceptance model.*

Copyright:

© 2026 by the author. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>)

Publisher:

Scientific Publishing Institute

Received: 7 April 2026

Revised: 6 May 2026

Accepted: 21 May 2026

Published: 5 June 2026

Funding: This study received no specific financial support.

Institutional Review Board Statement: The study involved minimal risk and followed ethical guidelines for social science fieldwork. Formal approval from an Institutional Review Board was not required under the policies of Institute for Research Ethics Committee of the National Employment Service of the Republic of Serbia. Informed verbal consent was obtained from all participants, and all data were anonymized to protect participant confidentiality.

Transparency: The author confirms that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

Competing Interests: The author declares that there are no conflicts of interests regarding the publication of this paper.

1. Introduction

The digitisation of public administration has accelerated substantially over the past decade, driven by demands for greater efficiency, cost reduction, and improved service quality. Across Europe, local governments have progressively adopted digital service channels, ranging from online citizen portals to

automated telephony systems. The most recent and arguably most disruptive development in this trajectory is the deployment of conversational AI systems — commonly known as chatbots — as front-line interfaces between citizens and government services (Wirtz & Müller, 2019). In countries such as Estonia, Denmark, and increasingly Serbia, municipal administrations have begun experimenting with AI-assisted communication channels for handling routine administrative inquiries, appointment scheduling, and the processing of standard requests.

Despite the technical maturity of contemporary chatbot systems, citizen adoption remains uneven and frequently falls short of institutional expectations. A critical gap exists between the supply of AI-powered government services and actual citizen engagement with those services. This gap cannot be fully explained by technological factors alone. Rather, it is increasingly evident that psychological variables — including trust, perceived risk, emotional expectations, and social norms — play a decisive role in determining whether citizens choose to communicate with an automated system or seek out human interaction (Glikson & Woolley, 2020).

This discrepancy is particularly pronounced in the domain of local government, where administrative interactions often involve sensitive personal information (social welfare claims, property rights, financial obligations) and where citizens may have deeply ingrained expectations of personalised, empathetic service. The stakes are therefore higher than in commercial contexts; erroneous or impersonal handling of a social assistance application carries consequences that are qualitatively different from a failed online retail transaction. Understanding what makes citizens willing — or unwilling — to engage with chatbots in this context is consequently not merely an academic exercise but a pressing governance challenge.

1.1. Research Objectives

The primary objective of this paper is to identify and analyse the psychological factors that influence citizens' willingness to communicate with chatbots rather than human officials when accessing local government services. Specifically, the study aims to:

1. Determine the relative weight of key psychological predictors (Trust, perceived usefulness, perceived ease of use, privacy concern, anthropomorphism, and empathy expectations) in explaining chatbot adoption intention;
2. Assess whether institutional trust in local government mediates the relationship between trust in AI technology and adoption willingness;
3. Examine the moderating role of demographic variables (Age, digital literacy, prior experience with automated services) on psychological barriers;
4. Provide evidence-based recommendations for the design of chatbot systems that address identified psychological barriers.

1.2. Significance of the Study

The significance of this research is threefold. First, it addresses an identified gap in the e-government adoption literature, which has tended to focus on information system quality rather than the psychological dimensions of human-AI interaction in public sector contexts. Second, it contributes empirical data from South-Eastern Europe, a region underrepresented in comparative e-government research, where post-socialist institutional legacies may generate distinctive patterns of trust and technology scepticism. Third, it provides actionable insights for municipal administrators and public sector technology designers who must balance the efficiency imperatives of AI adoption with the social and psychological needs of their citizen populations.

2. Literature Review and Theoretical Framework

2.1. The Technology Acceptance Model

The Technology Acceptance Model, first articulated by Davis (1989) remains the most influential theoretical framework for explaining individual-level technology adoption. TAM posits that two primary cognitive beliefs — perceived usefulness (PU) and perceived ease of use (PEOU) — determine an individual's attitude toward a technology, which in turn predicts actual system use. Perceived usefulness refers to the degree to which a person believes that using a particular system will enhance their performance, while perceived ease of use captures the degree to which the technology is expected to be free of cognitive effort.

In the context of chatbot adoption in local government, perceived usefulness can be operationalised as the citizen's belief that using a chatbot will enable them to resolve their administrative matter more quickly, accurately, or conveniently than visiting a human official. Perceived ease of use, conversely, relates to the intelligibility of conversational interfaces, the clarity of language used, and the absence of technological literacy barriers. Research applying TAM to e-government contexts has consistently confirmed that both constructs significantly predict adoption intention, though the relative strength of each predictor varies across service type and user demographic (Carter & Bélanger, 2005; Venkatesh, Morris, Davis, & Davis, 2003).

A critical limitation of the original TAM formulation, however, is its insufficient attention to affective and relational dimensions of technology interaction. In commercial chatbot contexts, studies have documented that citizens' emotional responses to automated systems — including feelings of frustration, alienation, or

conversely, reassurance — significantly mediate the cognitive beliefs captured by TAM (Sheehan, Jin, & Gottlieb, 2020). This limitation is particularly salient in government service contexts, where interactions frequently involve emotionally charged circumstances.

2.2. UTAUT: Social Influence and Facilitating Conditions

Venkatesh et al. (2003) Unified Theory of Acceptance and Use of Technology (UTAUT) extends TAM by integrating social influence as a determinant of technology adoption. UTAUT identifies four core predictors of usage intention: performance expectancy, effort expectancy, social influence, and facilitating conditions. Of these, social influence — the degree to which an individual perceives that important others believe they should use a particular system — is of special theoretical interest in the context of local government chatbots.

Citizens' technology adoption decisions are not made in isolation; they occur within social networks in which norms about appropriate interaction with authority carry significant weight. If the prevailing norm in a community is that important matters require face-to-face interaction with officials, chatbot adoption may be socially stigmatised even where the individual citizen would otherwise be receptive. Conversely, peer adoption can accelerate willingness to engage, particularly among citizens who observe positive outcomes in their social environment (Venkatesh et al., 2003).

Facilitating conditions — the organisational and technical infrastructure supporting system use — also merit attention. In many municipalities, inadequate digital infrastructure, poor mobile connectivity, or absence of multilingual support can function as structural barriers that compound psychological ones. The interaction between facilitating conditions and psychological predispositions is an understudied dimension of e-government adoption research.

2.3. Trust in E-Government and Algorithmic Accountability

Trust represents perhaps the most theoretically complex and practically significant variable in the study of citizen-chatbot interaction. The literature distinguishes between at least three analytically separable dimensions of trust relevant to this context: institutional trust (trust in the government agency deploying the chatbot), technological trust (trust in the AI system itself), and interpersonal trust (the trust typically associated with human service interactions, which AI systems must somehow substitute for or complement).

Institutional trust in local government is conditioned by citizens' historical experiences of bureaucratic responsiveness, perceived corruption, procedural fairness, and service quality (Mayer, Davis, & Schoorman, 1995). Where institutional trust is low — as in many post-communist administrative contexts — citizens may be sceptical not merely of the chatbot itself but of the government's motivations for deploying it. They may reasonably fear that automated systems are designed to reduce accountability, facilitate surveillance, or systematically deny legitimate claims through algorithmic bias.

Algorithmic accountability — the degree to which citizens can understand, contest, and seek redress for decisions made by automated systems — is an emerging theme in both administrative law and public administration research (Androutsopoulou, Karacapilidis, Loukis, & Charalabidis, 2019). Citizens who cannot understand how a chatbot arrives at a particular response, and who lack clear recourse when the system provides incorrect or unhelpful information, may experience a heightened sense of vulnerability that depresses adoption willingness regardless of the system's technical performance.

Hoff and Bashir (2015) distinguish between dispositional trust (a general tendency to trust technology), learned trust (trust developed through direct experience), and situational trust (context-specific assessments of trustworthiness). This tripartite framework is particularly useful for understanding why some citizens may trust commercial chatbots (e.g., banking or retail) while remaining reluctant to engage with government AI systems, or vice versa.

2.4. Anthropomorphism and the Uncanny Valley Effect

Anthropomorphism — the attribution of human characteristics to non-human entities — is a pervasive cognitive tendency with ambivalent implications for chatbot adoption. On one hand, anthropomorphic design features (natural language processing, emotionally responsive dialogue, user-name recognition) can increase perceived warmth and reduce social distance, thereby increasing engagement (Nass & Moon, 2000). On the other hand, highly human-like AI can trigger the 'uncanny valley' effect first described by roboticist Masahiro Mori (1970) wherein objects that are almost but not quite human provoke feelings of discomfort or revulsion.

In government service contexts, anthropomorphism raises additional normative concerns. Citizens may object to the simulation of human empathy in contexts where real empathy should be present, perceiving the performance of emotional responsiveness by an AI as manipulative or disrespectful. This reaction may be especially pronounced in interactions involving vulnerable populations — elderly citizens, welfare recipients, individuals with disabilities — who may have heightened needs for genuine human connection and for whom the stakes of administrative decisions are particularly consequential.

Recent empirical work suggests that optimal chatbot design for government services should aim for a 'professional but not personal' register: clear, competent, and reassuringly consistent, without attempting to

simulate the relational warmth of human interaction (Glikson & Woolley, 2020). The ideal anthropomorphism level thus appears to be context-dependent and cannot be determined by technical capability alone.

2.5. Privacy Concerns and Data Vulnerability

Citizens' concerns about data privacy represent a structural inhibitor of chatbot adoption that operates somewhat independently of trust in the deploying institution. Even citizens who generally trust their local government may harbour specific anxieties about the storage, processing, and potential misuse of personal data disclosed in chatbot interactions. These concerns are amplified by the sensitivity of the information typically exchanged in government service contexts — income data, health status, family composition, property ownership — and by general awareness of high-profile data breaches in both public and private sectors.

Research on privacy calculus theory Dinev and Hart (2006) suggests that individuals weigh the perceived benefits of information disclosure against perceived risks, and that adoption behaviour is determined by the net valence of this calculation. In government chatbot contexts, the perceived benefits (convenience, speed, reduced queue times) must be sufficient to outweigh not only the perceived risk of data misuse but also the psychological discomfort associated with disclosing sensitive information to a machine rather than a trusted human professional.

The General Data Protection Regulation (GDPR) and national data protection frameworks have established formal rights that should, in principle, reduce the objective risks of data misuse in public sector AI applications. However, research consistently shows that citizens' subjective privacy concerns respond to perceived transparency and comprehensibility of data practices rather than to formal legal guarantees alone (Acquisti, Brandimarte, & Loewenstein, 2015). The communication of data protection practices in language accessible to ordinary citizens is therefore a significant design challenge with direct implications for adoption willingness.

2.6. Empathy Deficit and Emotional Adequacy

A dimension of chatbot interaction that has received relatively limited systematic attention in the e-government literature is the emotional adequacy of AI responses — the capacity of the system to recognise, validate, and respond appropriately to the emotional content of citizens' communications. This is a dimension where the gap between human and AI capabilities remains substantial, and where the consequences of failure may be particularly severe in government service contexts.

Consider a citizen applying for emergency social assistance following job loss. Such a citizen does not merely require factual information about eligibility criteria; they may need their circumstances to be understood, their anxiety to be acknowledged, and their dignity to be affirmed. An AI system that responds to expressions of distress with procedurally accurate but emotionally oblivious output risks not merely failing to assist the citizen but actively alienating them and reinforcing perceptions that government is indifferent to human suffering.

The concept of 'relational bureaucracy' — developed in the public administration literature — suggests that effective service delivery in sensitive areas requires not only technical competence but the cultivation of respectful, empathetic relationships between officials and citizens (Maynard-Moody & Musheno, 2003). AI systems that can deliver the former but not the latter face a fundamental legitimacy challenge in contexts where the relational dimension of service is normatively expected.

3. Methodology

3.1. Research Design

This study adopts a quantitative cross-sectional research design. A structured online survey was administered to a sample of adult citizens residing in the Nišava Administrative District of Serbia, a region encompassing the city of Niš and ten surrounding municipalities with a combined population of approximately 370,000. The Nišava District was selected as the study site because several municipalities in the region have recently introduced or are piloting digital communication channels for citizen services, creating a population with varied but substantive exposure to e-government initiatives.

The online survey format was selected to maximise reach within the digitally active portion of the population, to minimise interviewer effects on responses to sensitive items (Particularly those related to trust in government), and to facilitate rapid data collection and analysis. It is acknowledged that this approach introduces a self-selection bias toward more digitally literate respondents and may underrepresent older, less educated, or rural citizens. This limitation is addressed in the discussion section.

3.2. Instrument Development

The survey instrument was developed in three stages. First, an initial item pool was generated through a systematic review of validated scales drawn from the existing technology acceptance and e-government trust literature. Second, the instrument was reviewed by a panel of three academics specialising in public administration, information systems, and social psychology, who assessed content validity and suggested

modifications for contextual appropriateness. Third, a pilot test was conducted with a convenience sample of 35 respondents, followed by item analysis to refine scale reliability.

The final instrument comprised seven validated multi-item scales measuring: (1) Chatbot Adoption Intention (CAI), adapted from Venkatesh et al. (2003) (2) Perceived Usefulness (PU), adapted from Davis (1989) (3) Perceived Ease of Use (PEOU), adapted from Davis (1989) (4) Institutional Trust (IT), adapted from Grimmelikhuijsen (2012) (5) AI-Specific Trust (AIT), adapted from Hoff and Bashir (2015) (6) Privacy Concern (PC), adapted from Malhotra, Kim, and Agarwal (2004) and (7) Perceived Empathy Adequacy (PEA), developed specifically for this study. All items were measured on a 5-point Likert scale anchored at 1 (Strongly Disagree) and 5 (Strongly Agree). The survey also collected demographic data including age, education level, employment status, self-reported digital literacy, and prior experience with chatbot systems.

3.3. Sample

The target population was defined as adults aged 18 or older residing in the Nišava District who had interacted with a local government service (in any format) within the preceding 12 months. A total of 340 usable responses were collected between October and December 2024, after excluding 28 incomplete questionnaires. The achieved sample comprised 54.1% female respondents, with a mean age of 41.3 years (SD = 12.8). Educational attainment was distributed as follows: primary education (8.2%), secondary education (43.5%), undergraduate degree (34.7%), and postgraduate degree (13.6%). Self-reported digital literacy was measured on a 5-point scale, with a mean score of 3.4 (SD = 0.9), indicating moderate digital competence in the sample.

Among respondents, 61.5% reported having previously used some form of automated digital service (banking chatbot, customer service automation, or online government portal), while 38.5% reported no prior chatbot experience. Of those with chatbot experience, only 14.7% had used an AI system in a government service context.

3.4. Analytical Strategy

Data analysis proceeded in three stages. Descriptive statistics and internal consistency checks (Cronbach's alpha) were computed for all scales. Confirmatory factor analysis (CFA) was then conducted to assess the measurement model, evaluating construct validity and discriminant validity across the latent constructs. Finally, structural equation modelling (SEM) using maximum likelihood estimation was employed to test the hypothesised relationships among predictors and the dependent variable (Chatbot Adoption Intention). Moderation analyses were conducted using the PROCESS macro (Hayes, 2018), with age and digital literacy as moderators. All analyses were conducted using IBM SPSS Statistics 29 and AMOS 27.

4. Results and Discussion

4.1. Descriptive Statistics and Scale Reliability

Cronbach's alpha values for all seven scales exceeded the conventional threshold of 0.70, with values ranging from 0.74 (Perceived Empathy Adequacy) to 0.89 (Institutional Trust), indicating adequate to excellent internal consistency. Descriptive statistics revealed several noteworthy patterns. Mean scores for Chatbot Adoption Intention were relatively low ($M = 2.41$, $SD = 0.97$), suggesting that the majority of respondents were not strongly disposed toward chatbot interaction for government services. Privacy Concern registered the highest mean among all independent variables ($M = 3.98$, $SD = 0.81$), indicating widespread concerns about data safety. Institutional Trust was moderate ($M = 2.87$, $SD = 1.02$), while AI-Specific Trust was somewhat lower ($M = 2.61$, $SD = 1.04$), consistent with the hypothesis that trust in AI government systems does not simply mirror trust in the deploying institution.

4.2. Structural Model Results

The structural equation model demonstrated acceptable fit to the data ($\chi^2/df = 2.31$, $CFI = 0.94$, $RMSEA = 0.062$, $SRMR = 0.058$). All proposed relationships were statistically significant at the $p < 0.05$ level or better. The strongest direct predictor of Chatbot Adoption Intention was Perceived Usefulness ($\beta = 0.38$, $p < 0.001$), followed by Institutional Trust ($\beta = 0.29$, $p < 0.001$), and Privacy Concern, which exerted a significant negative effect ($\beta = -0.27$, $p < 0.001$). Perceived Empathy Adequacy also showed a significant positive relationship with adoption intention ($\beta = 0.21$, $p < 0.01$), indicating that citizens who believed a chatbot could respond adequately to their emotional needs were more willing to engage with it. Perceived Ease of Use showed a significant but weaker effect ($\beta = 0.16$, $p < 0.05$).

Institutional Trust was found to significantly mediate the relationship between AI-Specific Trust and Adoption Intention (indirect effect = 0.14, 95% CI [0.08, 0.21]), supporting the hypothesis that how citizens feel about the government deploying a chatbot substantially conditions how they respond to the AI system itself. This finding has important implications for practitioners: improvements in AI technical quality will yield diminishing returns in contexts where citizens' trust in the municipal government itself is already low.

4.3. The Role of Anthropomorphism

Respondents were presented with three vignette descriptions of chatbot interfaces varying in degree of anthropomorphic design (minimal/functional, moderately personalised, and highly humanised). Analysis of variance revealed a significant interaction effect ($F(2,337) = 7.43, p < 0.001$). Willingness to engage was highest for the moderately personalised chatbot ($M = 2.89, SD = 0.91$), significantly exceeded both the minimal ($M = 2.53, SD = 1.04$) and the highly humanised ($M = 2.47, SD = 1.08$) design conditions. This curvilinear relationship is consistent with the uncanny valley hypothesis: moderate humanisation increases comfort and engagement, while excessive humanisation generates discomfort, particularly among older respondents and those with lower digital literacy.

Qualitative open-text responses ($n = 147$ respondents provided optional comments) revealed that discomfort with highly humanised chatbots was often expressed in moralistic terms — 'it is deceptive', 'it pretends to understand when it doesn't', 'I feel manipulated' — suggesting that the concern is not merely aesthetic but involves perceptions of authenticity and communicative integrity that carry ethical significance.

4.4. Privacy Concerns: A Dominant Inhibitor

The magnitude of Privacy Concern as a predictor of adoption intention deserves particular attention. Qualitative responses indicated that privacy anxieties were frequently not abstract but grounded in specific narratives: fear of data sharing with third parties, concerns about security of stored transcripts, and anxiety about surveillance. Several respondents explicitly mentioned fear of their chatbot conversations being used to deny future benefit claims or to inform tax investigations — an expression of institutionalised distrust that cannot be addressed through purely technical privacy assurances.

Moderation analysis revealed that the negative effect of Privacy Concern on Adoption Intention was significantly stronger among respondents with lower institutional trust (interaction term $\beta = -0.14, p < 0.01$), suggesting a compounding dynamic: where citizens distrust the government, their privacy concerns about government chatbots are amplified, creating a particularly strong barrier to adoption.

4.5. Empathy and Sensitive Administrative Contexts

The variable Perceived Empathy Adequacy yielded insights that extend beyond its direct effect on adoption intention. Cross-tabulation analysis revealed that the importance assigned to chatbot empathy varied significantly by service type: respondents indicated significantly higher empathy requirements for interactions involving social assistance applications ($M = 4.21, SD = 0.77$), disability benefit claims ($M = 4.18, SD = 0.81$), and housing rights disputes ($M = 3.97, SD = 0.84$) compared to routine administrative inquiries such as vehicle registration ($M = 2.43, SD = 1.02$) or cadastral information requests ($M = 2.31, SD = 1.09$).

This finding points toward the necessity of context-sensitive deployment strategies: chatbots may be more readily accepted — and more ethically appropriate — for transactional, low-stakes interactions, while sensitive matters requiring the exercise of discretion and emotional responsiveness may continue to require human officials. A hybrid model, in which chatbots handle intake and information provision while human officials retain decision-making authority in sensitive cases, may offer a productive path that reconciles efficiency imperatives with psychosocial citizen needs.

4.6. Demographic Moderation

Age significantly moderated the effect of Perceived Ease of Use on Adoption Intention: the positive effect of ease of use was stronger among older respondents (β interaction = 0.19, $p < 0.01$), consistent with the established finding that interface usability is a particularly salient concern for older adults navigating digital services. Digital literacy moderated the effect of Perceived Usefulness: more digitally literate respondents showed a stronger positive response to usefulness perceptions (β interaction = 0.16, $p < 0.05$), suggesting that the capacity to appreciate the utility of AI systems is itself conditioned on prior digital experience. These moderation patterns have direct implications for inclusive design strategies.

5. Conclusions and Policy Implications

This study has demonstrated that citizens' willingness to engage with chatbots in local government contexts is determined by a multi-dimensional configuration of psychological factors that extends well beyond the basic cognitive beliefs captured by TAM. Privacy concern, institutional trust, perceived empathy adequacy, and anthropomorphism-related discomfort collectively represent a set of adoption barriers that are amenable to intervention through thoughtful system design, communication strategy, and institutional reform.

Several policy implications flow from these findings. First, local governments seeking to increase chatbot adoption should prioritise trust-building measures that address the institution rather than the technology. Citizens who trust their municipal government will be substantially more receptive to AI systems deployed by that government. Transparency in decision-making processes, clear accountability mechanisms, and genuine responsiveness to citizen feedback are prerequisites for technological adoption in public sector contexts. Second, data protection practices must be communicated in plain, accessible language, with specific, concrete descriptions of what data is collected, how it is stored, who has access, and what rights citizens have to review

and delete their records. Third, empathy-informed design principles — including acknowledgement of emotional context, appropriate escalation to human officials in sensitive cases, and avoidance of manipulative pseudo-empathic performance — should be incorporated as mandatory specifications in public sector chatbot procurement criteria. Fourth, a moderate level of anthropomorphism, avoiding both cold functionalism and uncanny over-humanisation, appears to optimise citizen comfort across demographic groups, though context-specific calibration is warranted. Fifth, inclusive design standards must ensure that ease-of-use provisions address the specific barriers faced by older citizens and those with lower digital literacy, who currently face compounded disadvantages when interacting with digital government services.

This study is not without limitations. The sample's digital self-selection bias means that findings may overestimate adoption willingness relative to the general population. The cross-sectional design precludes causal inferences, and the single-district sampling strategy limits geographic generalisability. Future research should employ longitudinal designs, include rural and elderly populations through alternative data collection methods, and extend comparative analysis to municipalities with more and less advanced digital service provision to illuminate the role of institutional context in shaping adoption dynamics.

References

- Acquisti, A., Brandimarte, L., & Loewenstein, G. (2015). Privacy and human behavior in the age of information. *Science*, *347*(6221), 509-514. <https://doi.org/10.1126/science.aaa1465>
- Androutsopoulou, A., Karacapilidis, N., Loukis, E., & Charalabidis, Y. (2019). Transforming the communication between citizens and government through AI-guided chatbots. *Government Information Quarterly*, *36*(2), 358-367. <https://doi.org/10.1016/j.giq.2018.10.001>
- Carter, L., & Bélanger, F. (2005). The utilization of e-government services: Citizen trust, innovation and acceptance factors. *Information Systems Journal*, *15*(1), 5-25. <https://doi.org/10.1111/j.1365-2575.2005.00183.x>
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, *13*(3), 319-340. <https://doi.org/10.2307/249008>
- Dinev, T., & Hart, P. (2006). An extended privacy calculus model for e-commerce transactions. *Information Systems Research*, *17*(1), 61-80. <https://doi.org/10.1287/isre.1060.0080>
- Glikson, E., & Woolley, A. W. (2020). Human trust in artificial intelligence: Review of empirical research. *Academy of Management Annals*, *14*(2), 627-660. <https://doi.org/10.5465/annals.2018.0057>
- Grimmelikhuijsen, S. (2012). Linking transparency, knowledge and citizen trust in government: An experiment. *International Review of Administrative Sciences*, *78*(1), 50-73. <https://doi.org/10.1177/0020852311429667>
- Hoff, K. A., & Bashir, M. (2015). Trust in automation: Integrating empirical evidence on factors that influence trust. *Human Factors*, *57*(3), 407-434.
- Malhotra, N. K., Kim, S. S., & Agarwal, J. (2004). Internet users' information privacy concerns (IUIPC): The construct, the scale, and a causal model. *Information Systems Research*, *15*(4), 336-355.
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review*, *20*(3), 709-734. <https://doi.org/10.5465/amr.1995.9508080335>
- Maynard-Moody, S., & Musheno, M. (2003). *Cops, teachers, counselors: Stories from the front lines of public service*. Ann Arbor, MI, USA: University of Michigan Press.
- Mori, M. (1970). The uncanny valley. *Energy*, *7*(4), 33-35.
- Nass, C., & Moon, Y. (2000). Machines and mindlessness: Social responses to computers. *Journal of social issues*, *56*(1), 81-103. <https://doi.org/10.1111/0022-4537.00153>
- Sheehan, B., Jin, H. S., & Gottlieb, U. (2020). Customer service chatbots: Anthropomorphism and adoption. *Journal of Business Research*, *115*, 14-24. <https://doi.org/10.1016/j.jbusres.2020.04.030>
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS quarterly*, *27*(3), 425-478. <https://doi.org/10.2307/30036540>
- Wirtz, B. W., & Müller, W. M. (2019). An integrated artificial intelligence framework for public management. *Public Management Review*, *21*(7), 1076-1100. <https://doi.org/10.1080/14719037.2018.1549268>