

The Influence of Social Media and Trust in Institutions on Digital Participation in Indonesia

Nora Lestari Hutajulu^{1*}, Febriyani Arinda Putri Lestari²

^{1,2}Independent Researcher

Kata Kunci

Partisipasi Digital;
Media Sosial;
Kepercayaan
terhadap institusi;
CBDC Indonesia.

Keywords

Digital participation;
Social media;
Trust in institution;
Indonesian CBDCs.

Abstrak

Pemanfaatan media sosial oleh lembaga negara dinyatakan memiliki potensi positif untuk mempromosikan inovasi digital. Namun, pemanfaatannya masih terbatas hanya pada penyediaan informasi satu arah. Oleh karena itu, penelitian ini berkontribusi untuk menyelidiki peran media sosial dalam mendorong partisipasi digital masyarakat khususnya dalam penggunaan digital rupiah. Penelitian ini juga menyelidiki pengaruh kepercayaan pada institusi terhadap partisipasi digital karena semakin tinggi tingkat kepercayaan masyarakat maka akan semakin mudah untuk terlibat dalam partisipasi digital. Penelitian ini merupakan penelitian kuantitatif konfirmatori yang ditujukan untuk menguji hipotesis penelitian. Penelitian ini melibatkan sebanyak 300 respon yang dikumpulkan melalui survei secara daring (*google form*) yang kemudian dianalisis menggunakan *Partial Least Squares (PLS-SEM)* pada alat SmartPLS 3.0. Temuan penelitian menunjukkan bahwa media sosial berpengaruh signifikan terhadap partisipasi digital sementara kepercayaan pada institusi tidak memberikan pengaruh yang signifikan.

Abstract

The utilization of social media by state institutions holds great promise in fostering digital innovation. However, its current implementation remains limited to one-way information dissemination. Hence, this study aims to explore how social media can play a pivotal role in encouraging community digital participation, particularly concerning the adoption of digital rupiah. Additionally, it investigates the influence of institutional trust on digital participation, as higher public trust is presumed to facilitate greater engagement in digital initiatives. Employing a confirmatory quantitative approach, the research hypothesis was rigorously tested. A total of 300 responses were collected through an online survey conducted via Google Forms. These responses were subsequently subjected to analysis using Partial Least Squares Structural Equation Modeling (PLS-SEM) via the SmartPLS 3.0 tool. The study's findings indicate a substantial positive effect of social media on digital participation. However, contrary to expectations, the level of trust in institutions was not found to have a significant effect on digital participation. These results shed light on the significance of social media as a catalyst for community involvement in digital initiatives, offering valuable insights for policymakers and institutions seeking to enhance digital adoption and innovation within the community.

*Correspondence Author

Email: norahutajulu96@gmail.com

1. Introduction

Since the COVID-19 pandemic, the trend of digitizing digital finance has strengthened. According to a joint study conducted by Google, Temasek, and Brain in both 2021 and 2022, Indonesia has witnessed a remarkable surge in digital financial activities since 2020. One of which can be seen in the increasing adoption of crypto assets in Indonesia. Based on data from Commodity Futures Trading Regulatory Agency (Bappebti), there has been a significant addition of crypto asset investors, namely as of February 2023 where the number of crypto asset investors in Indonesia reached 17 million with an average addition of 500 thousand investors per month, which grew significantly from 16 million in 2022. Crypto assets are not an official currency issued by the central bank, so various risks need to be watched out for, such as money laundering, terrorism financing, and prohibited transactions. The massive use of crypto assets can also affect the effectiveness of central bank policies such as financial stability, shadow currency, shadow central banking, and the international monetary system at the global level. The potential for this phenomenon requires Bank Indonesia, as one of the state institutions that has the authority to implement monetary policy, to explore the issuance of trusted money, namely Indonesia's Central Bank Digital Currency (CBDC), which is called Digital Rupiah. Money that can be trusted and relied on by the public is money that is generally accepted as a unit of account, has a stable value, and can act as an efficient and safe means of payment (Bank Indonesia, 2022). The digital rupiah is one of the public goods whose aim is to meet the needs of public transactions in the digital era so that in the issuance process it prioritizes public interests, supports financial inclusion through offline features in the outermost, frontier, and lagging (3T) regions.

Digital participation is an indicator to measure the success of digital initiatives. To increase public digital participation, Bank Indonesia and other authorized institutions need to pay attention to good governance practices and provide quality information to the public and attract public participation in digital initiatives. According to Mansoor (2021), social media is a digital channel that is increasingly popular among the public and therefore various developed countries use it to promote public innovation. The results of the research by Duan et al. (2021) found that the use of social media can create positive sentiments to guide public opinion. Loukis et al. (2017) stated that publishing content and exchanging opinions are very common among social media users, ultimately turning social media into a platform for engaging public digital participation.

The research results of Mai et al. (2018) revealed that social media sentiment influences the value of innovations such as Bitcoin. The research explains that social media sentiment is a significant predictor in the early stages of bitcoin issuance because social media can become a forum for information sharing and discussion that affects the value of bitcoin. Other research results on the influence of social media sentiment also found that social media sentiment has a positive impact on the stock market in China (Shen et al., 2022) and reduces disinformation, and directs public opinion to comply with government initiatives (Yin et al., 2022).

Alarabiat et al. (2022) revealed that trust also has a significant impact on people's intentions to engage in digital participation and if a citizen shows a higher level of trust, it is easier to engage in digital participation activities. Naronjo-Zolotov et al. (2018) said that this trust acts as social capital which will have a positive impact on increasing people's intention to use Digital Rupiah. In this research, besides analyzing the impact of social media, we will explore the role of institutional trust as a determining factor in fostering digital participation in the adoption of the Digital Rupiah, a new digital initiative in Indonesia.

Previous research conducted by Yuan et al. (2023), said that research on information communication between state and government agencies still focuses on crisis management and has not considered how social media can be used as an instrument to promote digital initiatives initiated by state institutions. Based on the background explanation above, this study aims to answer this gap by examining the relationship or direct influence of social media and trust in institutions on community digital participation in the context of using digital rupiah. This research is presented in several sections such as; literature review, hypothesis development, research model, methodology, analysis and discussion, implications, and conclusions.

2. Literature Review

2.1. Digital Participation

The definition of digital participation according to Sæbø et al. (2008), can be broadly understood as the use of information and communication technology to facilitate deliberations and online consultations between the government and the public to encourage public involvement in democratic decision-making processes. Meanwhile, according to Seifert and Rössel (2021), the term digital participation refers to the active engagement of citizens through the use of modern information and communication

technologies, such as the Internet. The main idea is that digital participation requires active engagement through social media because just being online is not enough (Hughes et al., 2017). To be an effective digital participant, people need to understand how social media works. Digital participation can also be understood as the right of all people to engage socially, culturally, politically, and economically where technology and media are present in everyday life (Hague and Williamson, 2009).

The general benefits of digital participation are undeniable in terms of strengthening the relationship between the government and its citizens, creating greater government transparency, as well as achieving social inclusion or the process of increasing the role of individuals in society and creating a democratic society (Jiang et al., 2019). However, implementing government initiatives for effective and successful digital participation is not easy. It becomes very difficult when citizens who are the main actors in participation refuse to participate (Oliveira and Garcia, 2019). This is in line with research conducted by Naranjo-Zolotov et al. (2018), which shows that digital participation in projects that are encouraged and enforced by the government requires great effort to be accepted due to the low level of community acceptance and intention to participate. Although governments have increased the use of social media, particularly Facebook, as a means of interacting and engaging with citizens, a lack of citizen participation remains a reality in both developed and developing countries (Silva et al., 2019). Therefore, this study adopts the concept of digital participation to generalize the research question to the societal level by providing insight into the factors influencing citizens to engage in digital participation initiatives in Central Bank Digital Currency (CBDC) development led by Indonesian state agencies.

2.2. Social media

Social media, according to Budi et al. (2020), is part of the techno-social sector which provides a platform for users to voice their aspirations effectively, efficiently, and in real-time. The increasing use of social media allows people to connect, interact and collaborate. Consequently, many government agencies have adopted social media as part of their e-government initiatives. The use of social media according to the United Nations (2014), by government agencies is increasing worldwide: 118 countries have used social media as part of e-government initiatives, and these initiatives increased by 50 percent from 2012 to 2014.

In Indonesia, the Ministry of Administrative Reform and Bureaucratic Reform (PANRB) regulates the use of social media by government agencies for information disclosure, cooperation, and citizen participation (Permenpan, 2012). The role of social media in public administration activities has slowly increased from being used only by the government to disseminate information to becoming a medium for conveying complaints and aspirations of the people. Bertot et al. (2010), asserted that social media enables constructive dialogue between the government and society. Similarly, Khan et al. (2021), found in their research that social media serves as an efficient means for establishing and nurturing public relationships. It facilitates information exchange and enhances government transparency.

Budi et al. (2020), contain an overview of the use of social media by Indonesian government agencies where 64% of government agencies have one social media account, and the rest (36%) do not have any social media accounts. Supported by research conducted by Idris (2018) based on social network analysis on social media conversations of Indonesian government agencies, it was concluded that two-way symmetrical communication occurs, but in a limited manner. However, researchers generally agree that government social media is useful for government interaction with the public, and research related to the use of government social media has been conducted in many fields (Yuan et al., 2023). Yavetz and Aharony (2020) also emphasized that user involvement in social media information disclosure plays an important role in strengthening government relations with the public. Therefore, it can be anticipated that involvement in the use of social media can increase public trust in state or government institutions, supporting public acceptance of government initiatives (e.g. adopting new technology) in this study is the Indonesian CBDC which is called Digital Rupiah. This study considers CBDC as a new technology that is not yet familiar to most Indonesians, so information intake from social media can be used as a significant external stimulus to investigate how social media influences society's digital participation.

2.3. Trust in Institutions

Khan et al. (2014), said that trust is a necessary condition for increasing the involvement and active participation of citizens in the decision-making process. Bélanger et al. (2002), define trust as the perception of confidence in the reliability and integrity of electronic marketers. Lee et al. (2011), even argued that the level of trust in the institution is more important than trust in the technology that facilitates each e-government service. This was also disclosed by Naranjo-Zolotov et al. (2019), that citizen trust has a significant

impact on their intention to use digital participation systems. Carter and Bélanger (2005) state that perceptions of trust can also influence citizens' intentions to use e-government services.

Hwang and Lee (2012), argue that user trust reflects their perception of the honesty, capability, and reputation of technology providers. In general, if a citizen shows a higher level of trust in the government, he or she is more likely to interact with the government and engage in different participatory activities (Alharbi et al., 2016). Therefore, it can be said that the success of a state agency initiative is highly dependent on this type of trust. This study proposes that the social effect of trust in institutions is seen as a positive effect variable produced by citizen engagement behavior and vice versa. Therefore, Trust in institutions is very important and care must be taken to examine citizens' trust in participating in digital technology initiatives, namely CBDCs. It is widely supported that citizen trust in institutions plays an important role as a motivator for citizen engagement (Warren et al., 2014).

3. Development of Hypotheses and Research Framework

According to Liu (2020), social media services have developed rapidly as the dominant channel for broadcasting and seeking information. In a study by Farooq et al. (2020), the use of social media by state institutions can significantly increase public awareness of the information being disseminated. These social media accounts are used to provide better information and services and to help build closer relationships with the community. In addition, Liu (2020) in his research also revealed that seeking information through social media has motivated users to pay more attention to information guidelines from state institutions.

Mai et al. (2018), found that social media was a significant predictor of the early stages of bitcoin issuance. Social media sentiment is the most prominent channel as a forum for information sharing and discussion that influences the value of Bitcoin. This description further strengthens the assumptions of this research, namely the importance of using social media to foster community digital participation. Herman et al. (2020), also found that social media platforms such as Facebook create positive sentiments to foster user perceptions and intentions. Then Trkman et al. (2023), found that the influence of others on social media is a significant factor in society's digital participation because individuals depend on the opinions of other parties about the use of digital services. Besides that, high levels of media exposure can increase people's beliefs about a particular

subject or phenomenon. This is supported by the findings of Yuan et al. (2023), where social media is recognized as a potential channel to help the government foster community digital participation. This indicates that social media has great potential to encourage community digital participation. Therefore, the more often Indonesian people are exposed to digital rupiah news from social media it is assumed that it can increase public views to be involved in implementing the rupiah digital currency, and based on this idea H1 is formulated. **H1: Social media has a positive effect on digital participation**

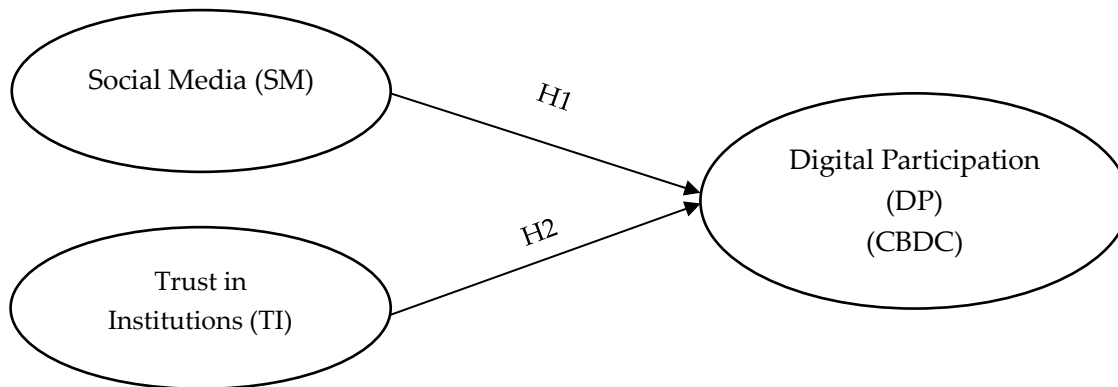
Trust in institutions is defined as the level of individual trust in the legal system and public services provided to the public. Trust in institutions is part of adopting digital initiatives (Trkman et al., 2023). Akinbi et al. (2021) revealed that trust in institutions is a key factor influencing people's intentions to use digital participation. Teo et al. (2008) added trust is a significant antecedent of participation in interacting with institutions and online transactions because trust serves as a central mechanism to reduce perceptions of uncertainty and risk. In their research, Ho and Chung stated, public trust is formed based on the quality of these interactions which then plays an important role in the adoption of digital initiatives (Ho and Chung, 2020). Thus, people's trust in the past is critical to the success of digital initiatives (Alarabiat et al., 2022).

According to Tronnier et al. (2022), the central bank is the most trusted state institution for issuing digital money. This is supported by research by Alharbi et al. (2016), whereas a whole, people have more trust in state institutions making it possible to encourage increased participatory digital activities. Thus, this study assesses a high level of trust in Bank Indonesia, which is built through social media interaction, which is assumed to encourage positive public attitudes towards digital participation in the use of CBDCs in Indonesia. Based on the results of previous research conducted by Alomari et al. (2016), shows that trust in state institutions has a strong impact on the attitude of citizens to adopt digital services initiated by state institutions. On the contrary, the findings of Alarabiat et al. (2022), shows that trust in institutions does not have a significant effect on people's digital participation which is promoted through social media. The inconsistency of these findings prompted this study to re-examine this effect by focusing on the Indonesian situation, especially in the digital rupiah context. Therefore, hypothesis 2 in this study is formulated:

H2: Trust in institutions has a positive effect on digital participation

Based on the explanation mentioned above, a research model is proposed in Figure 1. Figure 1 shows that digital participation includes two dimensions: social media and trust in institutions.

Figure 1. Research Framework



4. Research Methods

4.1. Data Analysis Technique

This research is a quantitative study aimed at testing hypotheses with the survey method as a data collection technique. Sampling used a non-probability sampling technique, namely convenience sampling. Instrument testing uses structural equation modeling (SEM)-partial least squares (PLS) with the SmartPLS 3.0 program estimation method because it can effectively predict the potential relationship between two or more constructs in relatively complex research models (Hair et al., 2017).

4.2. Research Instruments

This research consists of three main constructs, namely social media (SM), trust in institutions (TI), and digital participation (DP). In this study, adapting pre-existing measurement items (Table 2). The measurement items on the social media construct were adapted from research by Yuan et al. (2023) and Tang et al. (2021). Measurement items for the digital participation construct were adapted from Yuan et al. (2023), while the measurement items on the construct of trust in institutions are adapted from Belanger and Carter (2008). Each item was assessed using a Likert scale of 1 to 5 (strongly disagree to agree strongly).

4.3. Data Collection and Respondent Profiles

Questionnaires were prepared online via a Google form which was then distributed via social media applications, group chat applications, and the Kudadata

survey platform. According to Cohen (1992), the sample collection must pay attention to the statistical power of 80% with a significance level of 5% and R2 0.25, so that the total sample collected is 300 responses. Before starting to answer the questionnaire, in the first part, respondents were asked to fill in demographic information such as gender, age, domicile, frequency of using social media, social media most frequently used, number of social media accounts, number of m-payment applications, and cost of living (Table 1).

Table 1.
Profile of Respondents

Characteristics of Respondents		Frequency	Percentage (%)
Gender	Man	118	39,3
	Woman	182	60,7
Age	21-25 Years	121	40,3
	26-30 Years	136	45,4
	31-35 Years	36	12
	>35 Years	7	2,3
Domicile	Java Island	240	80
	Outside of Java Island	60	20
Frequency of Use of Social Media	<2 Hours	47	15,7
	2-5 Hours	154	51,3
	6-9 O'clock	78	26
	>9 Hours	21	7
Most used social media	Instagram	207	69
	Twitter	127	42,3
	Facebook	125	41,7
	Tiktok	167	55,7
	Other	46	15,3
Number of Social Media Accounts	1	29	9,7
	2	120	40%
	3	64	21,3
	>3	87	29
	1	54	18
Number of M-Payment Applications	2	148	49,3
	3	69	23
	>3	29	9,7
	1	177	59
Cost of Living Per Month	< IDR 5,000,000	177	59
	IDR 5,000,000-IDR 10,000,000	115	38,3
	>IDR 10,000,000	8	2,7

Based on Table 1, the majority of respondents in this study were dominated by women (60.7%) aged 26-30 years (45.4%) who live on Java Island (80%). Instagram is the most widely used social media (69%) with the frequency of using social media by respondents for 2-5 hours (51.3%). In addition, respondents have 2 social media accounts (40%), have 2 m-payment applications (49.3%), and spend < IDR 5,000,000 (59%) each month to meet living expenses.

5. Data Analysis

5.1. Descriptive Statistical Analysis

Based on the results of the data inspection, there were two respondents' responses that were eliminated because there were outliers, namely outside the range of -4 to 4 (Hair et al., 2017) so the total number of respondents who deserved to be analyzed to the next stage was 298 responses. Examination of outliers using the XY scatter plot graph method. Statistical test results (Lind et al., 2021) show that the use of social media and trust in institutions is in the moderate category, while the level of digital participation, especially in the Indonesian CBDC context, is in the high category (Table 2).

Table 2.
Instrument Measurements

Construct		Items	Indicator Means	Category
Government social media	SM1	I always read content posted by government social media	3,409	Moderate
	SM2	I always share content posted by government social media	3,352	
	SM3	I always recommend content posted on government social media to my friends, colleagues, and family	3,312	
	SM4	I always think about government social media initiatives	3,419	
Variable Means			3,373	
Digital participation	DP1	If I had Digital Rupiah, I thought I would use it	4,121	Substantial
	DP2	In making transactions, I will consider using Digital Rupiah	3,936	
	DP3	The existence of the Digital Rupiah increased my curiosity to learn about this technology	4,040	
	DP4	If I have the opportunity, I want to use Digital Rupiah compared to other alternatives	4,064	
Variable Means			4,040	
Trust in institutions	TI1	I thought I could trust state agencies	3.195	

TI2	State agencies can be trusted to carry out online transactions appropriately	3,171	
TI3	I believe state institutions will look after and think about the best interests for me	3,181	
TI4	In my opinion, state institutions can be trusted	3,221	
Variable Means		3,192	Moderate

5.2. Measurement Model Testing (Outer Model)

5.2.1. Validity and Reliability Test

The results of the data test show that the relationship between the variables social media (SM), trust in institutions (TI), digital participation (DP), and the measuring items fulfills the general rule of outer loading > 0.70 , AVE value > 0.50 , *Cronbach's Alpha* and composite reliability > 0.70 (Hair et al., 2017), so that it meets discriminant validity and reliable criteria.

Table 3.
Validity and Reliability Test

Construct	items	Outer loading	Average Variance Extracted (AVE)	Cronbach's Alpha	Composite reliability (CR)
SM	SM1	0.879	0.758	0.895	0.926
	SM2	0.835			
	SM3	0.876			
	SM4	0.891			
TI	TI1	0.891	0.796	0.915	0.940
	TI2	0.917			
	TI3	0.887			
	TI4	0.874			
DP	DP1	0.788	0.597	0.775	0.855
	DP2	0.792			
	DP3	0.722			
	DP4	0.786			

In addition, Hanseler et al. (2015), also suggested using Hetero-trait-mono-trait (HTMT) to detect discriminant validity compared to the cross-loading approach and the Fornell-larcker criterion because it indicates poor performance. HTMT is recommended < 0.90 so that discriminant validity can be accepted. Based on the results of the construct discriminant validity test it complies with the HTMT requirements (Table 4).

Table 4.
Heterotrait-Monotrait Ratio (HTMT)

	Digital Participation	Social media	Trust in Institutions
Digital Participation			
Social media	0.365		
Trust in Institutions	0.300	0.823	

5.3. Structural Testing Model (Inner Model)

This structural model, which is often called the inner model, aims to describe the relationship between latent/construct variables in research. This stage helps researchers in validating theoretical assumptions, identify the driving factors that influence the results of the relationship between latent variables, and finally to provide a better understanding of complex relationships in the research context. To find out the direction of the relationship between each variable in this study, researchers used several steps, namely Predictive Relevance Test (Q^2), Effect Size Test (F^2), Predictive Power Model (R^2), Fit Models, and Collinearity Test.

5.3.1. Predictive Relevance Test (Q^2)

The results of the data test (Table 5) show that the predictive relevance value produced by the PLS model has good predictive relevance, namely $Q^2 > 0$ (Hair et al., 2017). Therefore, the research model is stated to be able to predict accurately the observed data.

Table 5.
Predictive Relevance (Q^2)

	SSO	SSE	$Q^2 (=1-SSE/SSO)$
Digital Participation	1192,000	1125,878	0.055
Social media	1192,000	1192,000	
Trust in Institutions	1192,000	1192,000	

5.3.2. Effect Size Test (F^2)

The F^2 measure is intended to assess the contribution of exogenous constructs to the R^2 value of endogenous latent variables. Exogenous variables are any variables that affect other variables. While endogenous variables are any variables that are influenced by other variables. In this study, the exogenous variables are social media and trust in

institutions. While the endogenous variable is digital participation. In Table 6 of the research findings, the F^2 measure is used to evaluate the substantive impact of the exogenous construct "social media and trust in an institution" on the endogenous latent variable "digital participation." The reported F^2 value for social media is 0.037, which indicates a relatively weak effect. Similarly, the F^2 value for "trust in institutions" on "digital participation" is reported as 0.002, also showing a relatively weak effect.

The F^2 measure is particularly useful in PLS-SEM when researchers want to understand the importance of specific exogenous constructs in explaining the variance or variability in endogenous latent variables. A larger F^2 value suggests a more substantial impact of the exogenous construct on the endogenous construct's variation. Conversely, a smaller F^2 value indicates a weaker impact. It's worth noting that effect sizes can be interpreted differently depending on the context of the research and the specific domain being studied. While an F^2 value of 0.037 or 0.002 might be considered relatively weak in some fields, it could still be meaningful and relevant in others, depending on the research context and the magnitude of other effects. Overall, these reported F^2 values suggest that social media and trust in institutions have relatively limited direct effects on digital participation in the given research model, according to Hair et al.'s analysis in 2017. Researchers should interpret these results with caution and consider the broader implications within the specific context of their study.

Table 6.
Effect Size (F^2)

	Digital Participation	Social media	Trust in Institutions
Digital Participation			
Social media	0.037		
Trust in Institutions	0.002		

5.3.3. Model Predictive Power (R^2)

The predictive power of the PLS model is measured using the coefficient of determination (R^2). Hair et al. (2017), divided R^2 into three categories 0.25 (weak), 0.50 (moderate), 0.75 (substantial). Changes in the endogenous latent variable of digital participation can be explained by the exogenous latent variable of social media and trust in institutions of 10% and this change measure is stated to have weak predictive power. In the context of the PLS-SEM model, the coefficient of determination (R^2) is a measure used to assess the predictive power of the model. It indicates the proportion of variance in the endogenous latent variable (in this case, "digital participation") that can be

explained by the exogenous latent variables (i.e., "social media" and "trust in institutions").

In the research conducted by Hair et al. (2017), they categorized the R^2 values into three groups: $R^2 = 0.25$ (weak): This means that 25% of the variance in the endogenous latent variable (digital participation) is explained by the combined influence of the exogenous latent variables (social media and trust in institutions). A weak R^2 suggests that there are other factors or variables not included in the model that also contribute to explaining digital participation. $R^2 = 0.50$ (moderate): When the R^2 value is 0.50, it indicates that 50% of the variance in digital participation can be explained by the exogenous latent variables. This is considered a moderate level of predictive power, implying that the model accounts for a substantial portion of the variation in digital participation. $R^2 = 0.75$ (substantial): An R^2 value of 0.75 suggests that 75% of the variance in digital participation is explained by the exogenous latent variables. This indicates a high level of predictive power, as the model can account for a significant amount of variability in the endogenous latent variable.

In the case of the research findings, the R^2 value of 0.10 (10%) for digital participation indicates that the exogenous latent variables, social media, and trust in institutions, together explain a relatively low proportion of the variation in digital participation. This means that there are other factors not included in the model that have a more substantial influence on digital participation, and the model's ability to predict digital participation based solely on social media and trust in institutions is limited. Researchers should interpret the R^2 value in the context of the specific study and the domain being investigated. In some cases, a lower R^2 may still provide meaningful insights, especially if the relationships between the variables are complex, and other factors play a significant role in influencing the endogenous latent variable.)

Table 7.
Model's Predictive Power

	R Square	R Square Adjusted
Digital Participation	0.100	0.094

5.3.4. Fit Models

Kock (2018) states that the PLS model is declared to have a level of conformity with empirical data if the SRMR value is <0.1 . Based on Table 8 it is known that the model formed based on theory has a good fit with empirical data.

Table 8.
Model Fit Evaluation

	Saturated Model	Estimated Model
SRMR	0.056	0.056
d_ULS	0.245	0.245
d_G	0.117	0.117
Chi-Square	208,041	208,041
NFIs	0.903	0.903

5.3.5. Collinearity Test

The collinearity assessment in this study used the Variance Inflation Factor (VIF) through the SEM-PLS blindfolding procedure to assess whether there is a strong correlation or relationship between two or more independent variables in the research model. Hair et al. (2021) stated that collinearity assessments can be used to test common method bias (CMB) and collinearity problems usually occur when the VIF value is more than 3.3. In this research regression model, the research model does not experience multicollinearity problems because the VIF value in Table 9 does not cross the 3.3 limit.

Table 9.
Collinearity Test

	Digital Participation	Social media	Trust in Institutions
Digital Participation			
Social media	2,218		
Trust in Institutions	2,218		

5.4. Hypothesis Test

Hair et al. (2017), suggested that the number of bootstrap samples is greater than the number of observations in the original data, so this study used a 5000 bootstrap sample approach in SEM-PLS in a two-tailed test with a significance level of 5% (alpha value 0.05). Based on Table 10, hypothesis 1, SM@DP declared supported with $\beta = 0.0272$, P value < 0.05 , t-statistic > 1.96 . While hypothesis 2, TI@DP is not supported with $\beta = 0.056$, *p-value* > 0.05 , *t statistic* < 1.96 .

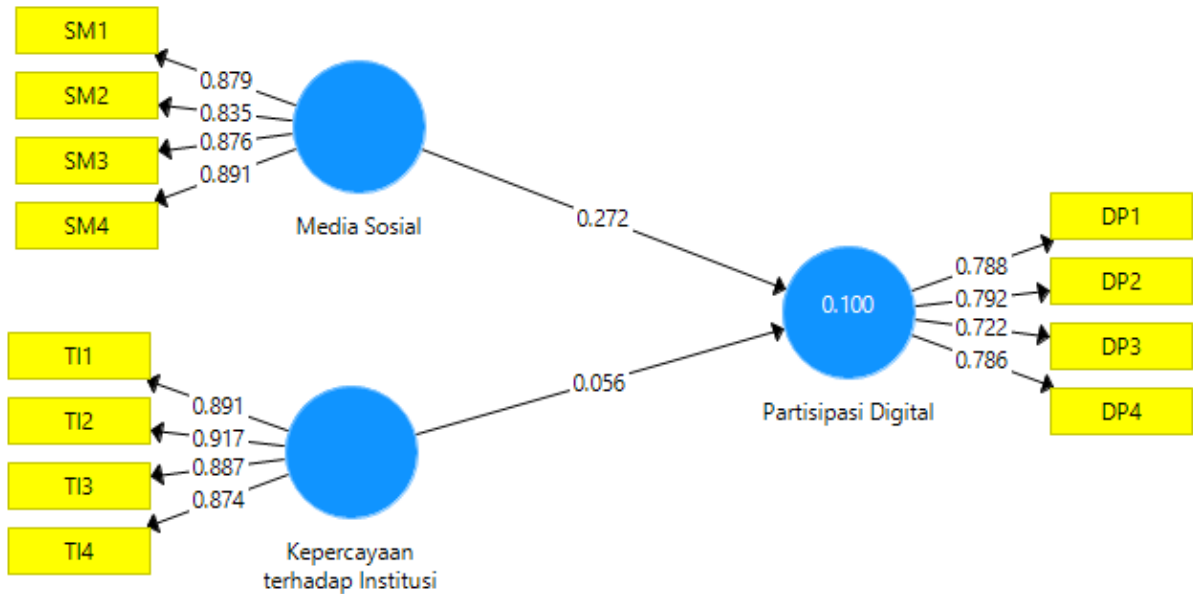
Table 10.
Hypothesis Test Results

Hypothesis	Original sample (O)	Sample mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values	CI 2.5%	97.5% CI	Supported

H1	BC→DP	0.272	0.277	0.068	4,030	0.000	0.119	0.402	Yes
H3	TI→DP	0.056	0.060	0.066	0.856	0.392	-0.070	0.191	No

*two-tailed, p value < 0.05, t-statistic > 1.96

Figure 2. SEM-PLS Structural Model Test



6. Discussion

6.1. Social Media Has A Significant Influence On Encouraging Digital Participation (CBDC) In Indonesia

The results of the study show that social media has a significant positive influence on community digital participation ($\beta = 0.272$) so hypothesis 1 is supported. This finding is similar to that of Yuan et al. (2023), who revealed that social media has a significant influence on digital participation. The findings of Tang et al. (2021), also stated the role of social media for state institutions can increase public perceptions of information security. In the context of this research, the public feels that if information about Indonesia's CBDC is published through state institutions' social media, it will influence the public perception that the information has a high level of security against fraud. According to Cheng et al. (2016), a society that is increasingly exposed to social media can increase beliefs about a particular subject or phenomenon. This indicates that state institutions' social media channels have the potential to help foster digital participation in society.

According to Warren et al. (2014), when individuals already have an initial interest that is further stimulated by exposure to social media, they are more inclined to participate in digital activities. By sharing posts, in a matter of minutes, you can reach thousands of people through social media. The findings of this study indicate that the level of digital participation of the Indonesian people is in the high category (4.040). The indicator with the highest score is found in the DP1 item, namely if the community has Digital Rupiah, they will use it. In this study, the community is stated to have a high interest in using CBDC Indonesia and when encouraged by the influence of social media from state institutions it will produce the maximum level of implementation of digital participation. Arshad and Khurram (2020) stated the provision of quality information by social media of state institutions is the main trigger for digital participation. When viewed from the level of social media utilization, state institutions are still in the moderate category (3.373). Researchers consider that this needs to be improved again because according to Tang et al. (2021), the greater use of social media makes people more aware of digital initiatives created by state institutions.

6.2 Trust In Institutions Has No Significant Effect On Increasing Digital Participation

The results of the hypothesis test show that trust in institutions has no significant effect on digital participation ($\beta = 0.056$) so that hypothesis 2 is not supported. Contrary to our expectations, the research findings indicate that trust in institutions does not significantly predict the promotion of community digital participation, particularly in the context of the Indonesian CBDC. However, our findings contradict the results of previous research that trust in institutions was found to have a significant effect on digital participation (Alomari, 2016; Belanger and Carter, 2008). On the other hand, our findings are similar to those of Alarabiat et al., (2022); Naranjo-Zolotov et al., (2018); Goldfinch et al. (2009) that trust has no significant effect on digital participation.

In this study, based on the results of descriptive statistical tests through the bootstrapping procedure, it was found that the level of public trust in government institutions was classified as moderate or moderate (3.192). Researchers use a scale or measurement to assess the level of trust, and the numerical value of 3.192 is the average score or rating obtained from participants' responses to questions related to trust in government institutions. In this context, "moderate" implies that the level of confidence is neither too high nor very low but somewhere in between. Even though the level of trust is in the moderate category, it does not mean that trust does not affect digital participation. Therefore, it is necessary to increase the level of public trust in institutions or the state to positively maximize digital participation in Indonesian CBDCs, especially in the context of implementing digital initiatives such as CBDCs in Indonesia.

According to Lee et al. (2011), the level of trust in institutions such as state institutions is more important than trust in technology that facilitates digital initiatives. Then Alomari (2016), argues that a higher level of trust in institutions can directly predict a higher adoption rate of digital participation. When the community engages in digital participation it is stated that the community trusts that state agencies will take action to ensure digital initiatives are fair and reliable. This level of trust may be the cause of the differences in the research findings. Kwak et al. (2004) stated that trust in state institutions is considered an important element for maintaining community involvement in digital participation. In increasing the level of public trust in institutions or countries to maximize digital participation in Indonesian CBDCs, it is important to consider the wider context and research findings.

Warren et al. (2014), found a lack of trust that raises concerns that institutions can be triggered by crimes such as corruption. Corruption cases often arise when people discuss whether an institution is considered honest or not when carrying out its duties and responsibilities. In general, Indonesia has a high level of corruption that affects the level of public trust in state and government institutions. As of 2021, Indonesia has been grappling with the issue of corruption, and it has had an impact on public trust in state and government institutions. According to Transparency International's Corruption Perceptions Index (CPI) for 2020, which measures perceived levels of public sector corruption, Indonesia scored 37 out of 100 points, indicating a moderate level of corruption perception. A lower score on the CPI suggests a higher perception of corruption in the public sector. As of August 2023, according to CPI for 2022, Indonesia scored 34 out of 100 points. The prevalence of corruption can erode public trust in government institutions and lead to skepticism and disillusionment among citizens. Corruption can hinder economic growth, undermine public services, and create an unequal playing field for businesses and citizens. Addressing corruption and improving transparency and accountability remain critical challenges for Indonesia's governance and development efforts.

6.3 Practical Implications

This study provides some information about the practical implications. First, the results of the hypothesis test show that the influence of social media can significantly influence community digital participation. The use of social media aims to facilitate the promotion and advocacy of CBDC Indonesia. This research is expected to be a reference for BI to formulate a strategy so that CBDCs can be well received by the people of Indonesia.

The case of the Indonesian CBDC is suitable as an example of implementing public information governance effectively given the high interest of the Indonesian people in digital finance. Second, even though the H2 findings are not supported, it does not mean that trust in state institutions is not important in encouraging community digital participation. Kwak et al. (2004) revealed that trust in state institutions is considered an important element for maintaining community involvement in digital participation. Therefore, we recommend that state institutions, in this case, Bank Indonesia, pay attention to this matter.

6.4 Conclusions, Limitations, and Suggestions for Further Research

In conclusion, this research delves into the mechanisms that boost digital participation, focusing on Indonesia's Central Bank Digital Currency (CBDC) initiative. The study highlights that the use of social media significantly encourages digital engagement, while trust in institutions does not show a notable impact. This research contributes to the field of public administration, specifically in public information governance, by exploring social media's role as an effective strategy to advocate and promote Indonesia's CBDC policy. This research focuses on increasing digital participation in digital initiatives initiated by Bank Indonesia which is responsible for achieving and maintaining the stability of the rupiah in the digital era. Based on the results of a survey conducted by researchers on 300 respondents, researchers found that the use of social media is one of the right strategies to encourage increased community digital participation. In addition, this study has several limitations that deserve attention in future studies. First, research on the Indonesian CBDC is still in the development stage so it is possible to change the findings from time to time so that longitudinal research with similar topics is needed to predict the findings sustainably. Second, this research only focuses on investigating the role of social media variables and trust in encouraging digital participation. Thus, future research can add other variables such as the push-pull mooring (PPM) theoretical framework into the research model to explain societal transitional behavior.

References

Akinbi, A., Forshaw, M., & Blinkhorn, V. (2021). Contact tracing apps for the COVID-19 pandemic: A systematic literature review of challenges and future directions for Neoliberal societies. *Health Information Science and Systems*, 9(1). <https://doi.org/10.1007/s13755-021-00147-7>

- Alarabiat, A., Soares, D., & Estevez, E. (2021). Determinants of citizens' intention to engage in government-led electronic participation initiatives through Facebook. *Government Information Quarterly*, 38(1), 101537.<https://doi.org/10.1016/j.giq.2020.101537>
- Alharbi, A., Kang, K., & Sohaib, O. (2016). Citizens engagement in e-participation on e-government websites through swat model: a case of Saudi Arabia. *PACIS 2016 proceedings*, 360.<https://aisel.aisnet.org/pacis2016/360>
- Alomari, MK (2016). E-voting adoption in a developing country. *Transforming Government: People, Process and Policy*, 10(4).<https://doi.org/10.1108/TG-11-2015-0046>
- Bélanger, F., & Carter, L. (2008). Trust and risk in e-government adoption. *The Journal of Strategic Information Systems*, 17(2), 165-176.<https://doi.org/10.1016/j.jsis.2007.12.002>
- Belanger, F., Hiller, JS, & Smith, WJ (2002). Trustworthiness in electronic commerce: The role of privacy, security, and site attributes. *The Journal of Strategic Information Systems*, 11(3-4), 245-270.[https://doi.org/10.1016/s0963-8687\(02\)00018-5](https://doi.org/10.1016/s0963-8687(02)00018-5)
- Bertot, JC, Jaeger, PT, & Grimes, JM (2010). Using ICTs to create a culture of transparency: E-government and social media as openness and anti-corruption tools for societies. *Government Information Quarterly*, 27(3), 264-271.<https://doi.org/10.1016/j.giq.2010.03.001>
- Budi, NF, Fitriani, WR, Hidayanto, AN, Kurnia, S., & Inan, DI (2020). A study of government 2.0 implementation in Indonesia. *Socio-Economic Planning Sciences*, 72, 100920.<https://doi.org/10.1016/j.seps.2020.100920>
- 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>
- Cohen, J. (1992). A power primary. *Psychological Bulletin*, 112(1), 155-159.<https://doi.org/10.1037/0033-2909.112.1.155>
- Duan, Y., Liu, L., & Wang, Z. (2021). COVID-19 sentiment and Chinese stock market: Official media news and Sina Weibo. *SSRN Electronic Journal*.<https://doi.org/10.2139/ssrn.3639123>
- E-conomy SEA 2022. (2022, October 27). bain. Retrieved May 18, 2023, from [HTTPS](https://www.bain.com/sea2022)
- Farooq, A., Laato, S., & Islam, AK (2020). Impact of online information on self-isolation intention during the COVID-19 pandemic: Cross-sectional study. *Journal of Medical Internet Research*, 22(5), e19128.<https://doi.org/10.2196/19128>
- Feroz Khan, G., Young Yoon, H., Kim, J., & Woo Park, H. (2014). From e-government to social government: Twitter use by Korea's central government. *Online Information Review*, 38(1), 95-113.<https://doi.org/10.1108/oir-09-2012-0162>
- Garuda project: Navigating the rupiah digital architecture. (n.d.). Retrieved April 17, 2023, from <https://www.bi.go.id/id/rupiah/digital-rupiah/default.aspx>
- Goldfinch, S., Gauld, R., & Herbison, P. (2009). The participation divide? Political participation, trust in government, and e-government in Australia and New Zealand. *Australian Journal of Public Administration*, 68(3), 333-350.<https://doi.org/10.1111/j.1467-8500.2009.00643.x>
- Hague, C., Williamson, B., & Futurelab. (2009). Digital participation, digital literacy, and school subjects: A review of the policies, literature and evidence.

- Hair, Jr., JF, Hult, GT, Ringle, CM, & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)*(2nd ed.). SAGE Publications.
- Head of CoFTRA: Government Strengthens Regulation and Development of Crypto Asset Ecosystem. (2023, April 6). CoFTRA Website - Main Menu. Retrieved April 17, 2023, from https://bappebti.go.id/resources/docs/siaran_pers_2023_04_06_mkvtki451_id.pdf
- Henseler, J., Ringle, CM, & Sarstedt, M. (2014). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135. <https://doi.org/10.1007/s11747-014-0403-8>
- Hermann, E., Eisend, M., & Bayón, T. (2020). Facebook and the cultivation of ethnic diversity perceptions and attitudes. *Internet Research*, 30(4), 1123-1141. <https://doi.org/10.1108/intr-10-2019-0423>
- Ho, MH, & Chung, HF (2020). Customer engagement, customer equity and repurchase intention in mobile apps. *Journal of Business Research*, 121, 13-21. <https://doi.org/10.1016/j.jbusres.2020.07.046>
- Hughes, H., Foth, M., Dezuanni, M., Mallan, K., & Allan, C. (2017). Fostering digital participation and communication through social living labs: A qualitative case study from regional Australia. *Communication Research and Practice*, 4(2), 183-206. <https://doi.org/10.1080/22041451.2017.1287032>
- Hwang, Y., & Lee, KC (2012). Investigating the moderating role of uncertainty avoidance cultural values on multidimensional online trust. *Information & Management*, 49(3-4), 171-176. <https://doi.org/10.1016/j.im.2012.02.003>
- Idris, IK (2018). Government social media in Indonesia: Just another information dissemination tool. *Communication Journal: Malaysian Journal of Communication*, 34(4), 337-356. <https://doi.org/10.17576/jkmjc-2018-3404-20>
- Jiang, J., Meng, T., & Zhang, Q. (2019). From internet to social safety net: The policy consequences of online participation in China. *Governance*, 32(3), 531-546. <https://doi.org/10.1111/gove.12391>
- Joseph F. Hair, J., Hult, GT, Ringle, CM, & Sarstedt, M. (2021). *A primer on partial least squares structural equation modeling (PLS-SEM)*. SAGE Publications.
- Khan, S., Umer, R., Umer, S., & Naqvi, S. (2021). Antecedents of trust in using social media for e-government services: An empirical study in Pakistan. *Technology in Society*, 64, 101400. <https://doi.org/10.1016/j.techsoc.2020.101400>
- Kock, N. (2018). *Warp PLS User Manual: Version 6.0*.
- Kwak, N., Shah, D. V., & Holbert, R. L. (2004). Connecting, trusting, and participating: The direct and interactive effects of social associations. *Political Research Quarterly*, 57(4), 643. <https://doi.org/10.2307/3219825>
- Lee, J., Kim, HJ, & Ahn, MJ (2011). The willingness of e-government service adoption by business users: The role of offline service quality and trust in technology. *Government Information Quarterly*, 28(2), 222-230. <https://doi.org/10.1016/j.giq.2010.07.007>
- Lind, DA, Marchal, WG, & Wathen, SA (2021). *Basic statistics for business and economics* (10th ed.). McGraw Hill.

- Liu, PL (2020). COVID-19 information seeking on digital media and preventive behaviors: The mediation role of worry. *Cyberpsychology, Behavior, and Social Networking*, 23(10), 677-682.<https://doi.org/10.1089/cyber.2020.0250>
- Loukis, E., Charalabidis, Y., & Androutsopoulou, A. (2017). Promoting open innovation in the public sector through social media monitoring. *Government Information Quarterly*, 34(1), 99-109.<https://doi.org/10.1016/j.giq.2016.09.004>
- Mai, F., Shan, Z., Bai, Q., Wang, X. (., & Chiang, RH (2018). How does social media impact bitcoin value? A test of the silent majority hypothesis. *Journal of Management Information Systems*, 35(1), 19-52.<https://doi.org/10.1080/07421222.2018.1440774>
- Mansoor, M. (2021). Citizens' trust in government as a function of good governance and government agency's provision of quality information on social media during COVID-19. *Government Information Quarterly*, 38(4), 101597.<https://doi.org/10.1016/j.giq.2021.101597>
- Medaglia, R., & Zhu, D. (2017). Public deliberation on government-managed social media: A study on Weibo users in China. *Government Information Quarterly*, 34(3), 533-544.<https://doi.org/10.1016/j.giq.2017.05.003>
- Naranjo-Zolotov, M., Oliveira, T., & Casteleyn, S. (2019). Citizens' intention to use and recommend E-participation. *Information Technology & People*, 32(2), 364-386.<https://doi.org/10.1108/itp-08-2017-0257>
- Naranjo-Zolotov, M., Oliveira, T., Cruz-Jesus, F., Martins, J., Gonçalves, R., Branco, F., & Xavier, N. (2018). Examining social capital and individual motivators to explain the adoption of online citizen participation. *Future Generation Computer Systems*, 92, 302-311.<https://doi.org/10.1016/j.future.2018.09.044>
- Oliveira, C., & Garcia, AC (2019). Citizens' electronic participation: A systematic review of their challenges and how to overcome them. *International Journal of Web Based Communities*, 15(2), 1.<https://doi.org/10.1504/ijwbc.2019.10020619>
- Pan & rb candy no. 83 of 2012 concerning Guidelines for Utilizing Social Media for Government Agencies [Jdih bpk ri]. (2012). Regulation Database [JDIH BPK RI].<https://peraturan.bpk.go.id/Home/Details/132847/permen-pan-rb-no-83-tahun-2012>(accessed 18 May 2023).
- Sæbø, Ø., Rose, J., & Skiftenes Flak, L. (2008). The shape of eParticipation: Characterizing an emerging research area. *Government Information Quarterly*, 25(3), 400-428.<https://doi.org/10.1016/j.giq.2007.04.007>
- SEA E-conomy 2021. (2021, November 10). bain. Retrieved May 18, 2023, from<https://www.bain.com/insights/e-conomy-sea-2021/>
- Seifert, A., & Rössel, J. (2021). Digital participation. *Encyclopedia of Gerontology and Population Aging*, 1446-1450.https://doi.org/10.1007/978-3-030-22009-9_1017
- Shen, S., Xia, L., Shuai, Y., & Gao, D. (2022). Measuring news media sentiment using big data for Chinese stock markets. *Pacific-Basin Finance Journal*, 74, 101810.<https://doi.org/10.1016/j.pacfin.2022.101810>
- Silva, P., Tavares, AF, Silva, T., & Lameiras, M. (2019). The good, the bad and the ugly: Three faces of social media usage by local governments. *Government Information Quarterly*, 36(3), 469-479.<https://doi.org/10.1016/j.giq.2019.05.006>

- Tang, Z., Miller, AS, Zhou, Z., & Warkentin, M. (2021). Does government social media promote users' information security behavior towards COVID-19 scams? Cultivation effects and protective motivations. *Government Information Quarterly*, 38(2), 101572. <https://doi.org/10.1016/j.giq.2021.101572>
- Teo, TS, Srivastava, SC, & Jiang, L. (2008). Trust and electronic government success: An empirical study. *Journal of Management Information Systems*, 25(3), 99-132. <https://doi.org/10.2753/mis0742-1222250303>
- Transparency International. (2019, November 1). Indonesia. [Transparency.org](https://www.transparency.org/en/countries/indonesia). Retrieved August 5, 2023, from <https://www.transparency.org/en/countries/indonesia>
- Trkman, M., Popovič, A., & Trkman, P. (2023). The roles of privacy concerns and trust in voluntary use of governmental proximity tracing applications. *Government Information Quarterly*, 40(1), 101787. <https://doi.org/10.1016/j.giq.2022.101787>
- Tronnier, F., Harborth, D., & Hamm, P. (2022). Investigating privacy concerns and trust in the digital euro in Germany. *Electronic Commerce Research and Applications*, 53, 101158. <https://doi.org/10.1016/j.elerap.2022.101158>
- United Nations. (2014). United nations E-government survey. <https://www.un.org/en/development/desa/publications/e-government-survey-2014.html> (accessed 18 May 2023)
- Warren, AM, Sulaiman, A., & Jaafar, NI (2014). Social media effects on fostering online civic engagement and building citizen trust and trust in institutions. *Government Information Quarterly*, 31(2), 291-301. <https://doi.org/10.1016/j.giq.2013.11.007>
- Warren, AM, Sulaiman, A., & Jaafar, NI (2014). Social media effects on fostering online civic engagement and building citizen trust and trust in institutions. *Government Information Quarterly*, 31(2), 291-301. <https://doi.org/10.1016/j.giq.2013.11.007>
- Yavetz, G., & Aharony, N. (2020). Social media in government offices: Usage and strategies. *Aslib Journal of Information Management*, 72(4), 445-462. <https://doi.org/10.1108/ajim-11-2019-0313>
- Yin, F., Xia, X., Pan, Y., She, Y., Feng, X., & Wu, J. (2022). Sentiment mutation and negative emotion contagion dynamics in social media: A case study on the Chinese Sina Microblog. *Information Sciences*, 594, 118-135. <https://doi.org/10.1016/j.ins.2022.02.029>
- Yuan, Y., Dwivedi, YK, Tan, GW, Cham, T., Ooi, K., Aw, EC, & Currie, W. (2023). Government digital transformation: Understanding the role of government social media. *Government Information Quarterly*, 40(1), 101775. <https://doi.org/10.1016/j.giq.2022.101775>