Citizen Engagement in Policy Formulation through E-participation: A Case of Academic Staff of Makerere University

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Abstract

There has been limited citizen engagement in policy formulation through eparticipation both nationally and locally. These low levels have led to the formulation of tenuous policies, which have hindered their effective implementation due to low compliance levels. This has as well negatively affected decisions making based on the formulated policies. This study, therefore, sought to determine the factors influencing citizens' engagement in policy formulation. A sample size of 377 members was derived from the target population of 1,493 academic staff of Makerere University using Kregie and Morgan (1970) formulae. Primary data collected from respondents using a quantitative survey questionnaire was analysed using SPSS. In addition, Hierarchical Regression was computed to determine the contribution of each variable in the study. The study findings reveal that there is a significant positive relationship between Eparticipation channels, perceived ease of use, trust in government, and behavioural intentions on citizen engagement as measured by voluntary community participation, representative democracy, and Democratic values through e-participation. Moreover, there is no significant relationship between eparticipation sensitization and usefulness on citizen engagement in eparticipation. The study birthed a new model of Citizen Engagement extending the TAM model of Davis (1989) to include two variables, namely; e-participation channels, and trust in government. The implications and recommendations made in this study would help the government and policymakers understand eparticipation supply factors that influence citizens' engagement in policy formulation through e-participation.

Key Words: Policy Formulation, Decision making, Citizen Engagement, E-participation

Introduction

The advancement in technology has revolutionized the traditional communication between government and citizens paving way for a participatory approach to decision making and enabling political debates to take place with a lot of ease. This revolution has also enabled most governments in developed and developing countries to use ICT in offering public services and doing administrative work (UN, 2020; Lallana, 2010). As a result, many benefits have been and are still being enjoyed including among others; increased access to information, convenience in accessing the required information 24/7, reduction in participation costs, wider involvement of users, easy

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accountability, and transparency. The use of ICTs in public administration and citizen engagement in government-related activities like policy formulation on tax, forest conservation, management of Covid-19, and budgeting has been supported by a variety of applications like; Virtual conferencing, zooming, and websites together with communication channels like social media in form of WhatsApp, Facebook, Twitter, LinkedIn, and many others (Yao & Xu, 2021). These applications have increased the interaction, that is; citizen to citizen, citizen to government, and government to business like never before.

A greater number of citizens are left out despite the perceived benefits accruing from the prevalence of ICT in government and private undertakings. According to Nilsson and Barbutiu (2019) and Lallana (2010), most citizens have not embraced the use of technology because of; poor mobilization of citizens through sensitization, limited IT skills, and lack of trust in government, lack of clear channels for interaction UN (2020) identified lack of physical access to ICTs, limited Internet penetration, unequal access to ICTs, and absence of legal frameworks as other factors affecting citizen engagement in policy formulation. Usage of ICTs by citizens to engage in policy formulation through e-participation is thus at different engagement levels among the educated and uneducated, the urban and rural-based citizens, and the haves and the have-nots. This experience of different usage levels has created a digital and usage divide and has affected the engagement levels in terms of the nature of policies and decisions made on national issues, which need majority views from all citizens.

According to the UN (2020), though most world regions have had rapid development of the supply side of e-participation and are only struggling with the demand side, Africa is still lagging on both supply and demand side (UN, 2020). This serves to suggest that increased e-government has not automatically led to increased e-participation in Uganda despite the initiatives put in place. Krishnan, et al. (2012) and Srivastava and Teo (2010) consented by cautioning governments implementing e-government and e-participation, in particular, to cater for supply factors and demand factors to ensure that e-participation is successful. Thus, this study aimed at first determining the supply factors that influence citizen engagement from the would-be participants given the fact that there is a disparity in income, location, and literacy levels. This research, therefore, determined the influence of Sensitization, perceived ease of use, perceived usefulness, and trust in government and e-participation channels on citizens' engagement in policy formulation through e-participation.

The research question that guided the study was, what is the influence of e-participation channels, usefulness, and ease of use, trust in government, sensitization, and behavioural intention on Citizen Engagement? This study was carried out among the academic staff of Makerere University, which is a major government University in the country located in the central region. The practical implication of the study is that it would help the government of Uganda to identify e-participation supply factors that influence citizens' engagement in policy formulation through e-participation. Understanding these supply factors would help improve the quality of decisions and policies made by the government. The theoretical implication is the extension of the TAM model by Davis (1989) with two variables of trust in government, and e-participation channels. This supplements the existing information system theories.

Literature Review

Concept of E-participation

The UN Survey (2020) defines E-participation as the process of engaging citizens in decision-making and service design and delivery through ICTs. Al-Dalou and Abu-Shanab (2013) define e-participation as the emergence and extension of electronic democratic participation and the consultation process supported by information and communication technologies, mainly through the internet. This study defines e-participation as citizens' use of ICT tools to engage in policy formulation and decision-making. E-participation is one of the three components of e-government namely, e-service, e-participation, and e-information. E-participation goals according to Abu-Shanab (2016), include, engaging a wide audience in policy formulation, use of ICT to support citizenship, and easing access to information. E-participation if fully embraced can lead to, cost reduction and efficiency in governments offering services to citizens online in terms of saving on paper, labour, and middle Men. It can also lead to improved quality of services offered with minimal errors, increased access to required information from government, ensure transparency and easily give accountability to citizens and reduce corruption in government ministries, give convenience to citizens by ensuring that they get the information they want at any time from any place whenever needed (Nkwe & Cohen, 2017).

Theoretical grounding

Among the many theories developed to guide and support the adoption of information systems are; Theory of Reasoned Action by Fishbein and Ajzen (1975), Innovation Diffusion Theory by Rogers (1995), Technology Acceptance Theory by Davis (1989), and later on UTAUT theory by Venkatesh et al. (2003). The UTAUT model synthesized eight of the previous theories. This study extended the Technology Acceptance Model of Davis (1989). The justification for the choice of this model was the ability of its variables of perceived usefulness, perceived ease of use, and user behaviour to link closely to the conditions of Ugandan citizens. Ugandan citizens' use of eparticipation to engage in policy formulation was presumed to be highly dependent on, the friendliness and ease of use of e-participation tools and usefulness of e-participation outcomes at individual, community, and country levels. Besides that, other fields like education, banking, leisure, entrepreneurship, and service delivery had applied the model but there was a limited application in policy formulation in general and e-participation in particular. Thus, following the fact that limited research was done on the influence of e-participation channels and e-participation sensitization on Citizen Engagement, this study incorporated e-participation channels, sensitization, and trust in government in the TAM model to determine their influence on citizens' engagement in policy formulation through e-participation in the Ugandan context. The conceptual model below depicts an extension of the TAM model.

Conceptual framework

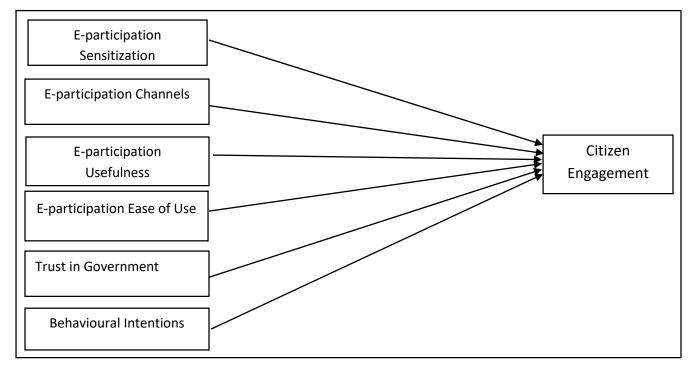


Figure 1: Conceptual framework adapted from TAM by Davis (1989)

The conceptual framework in figure 1 above depicts the relationship between the independent variables e-participation channels, usefulness, ease of use, trust in government, sensitization, and behavioural intentions on Citizen Engagement in policy formulation through e-participation. It is an extension of Davis (1989). While studying the relationship between e-participation usefulness and Citizen Engagement, the assumption made is that, if users expect better policies and decisions to be made because of their engagement, it will increase their engagement (Davis, 1989). Secondly, if users expect to use less energy and time to learn how to engage electronically, they will develop interest and engage in policy formulation (Davis, 1989). Additionally, if e-participation channels are readily available, clearly known, and are affordable, then citizens are likely to use them to engage in policy formulation. The TAM model of Davis (1989) predicts the acceptance of technology by the intended users. TAM has been widely used in various fields with a major focus on two psychological dimensions of perceived Usefulness and Perceived Ease of Use and the effect of individual behavioural intentions on actual usage of the technology.

Effects of E-participation Usefulness on Citizen Engagement

E-participation usefulness is the individual's perception that using the new technology will improve his or her performance (Cho, 2015). Applying this definition to the context of e-participation, this study defines e-participation usefulness as the degree to which citizens believe that using e-participation as a channel of engagement in e-government activities will improve their interaction with the government and enhance outcomes. Several tests made on the influence of perceived usefulness on citizen engagement found it significant. For instance in the study of Davis (1989), perceived usefulness was found to have a significant positive influence on Citizen Engagement (Davis, 1989). Thus, this study hypothesizes that:

Ho1. Perceived Usefulness has a significant influence on Citizens' Engagements.

Effect of Ease of Use on Citizen Engagement

Davis (1989) defines perceived ease of use as the individual's perception that using the new technology will be free of effort. This research defines perceived ease of use as the anticipation by citizens that the use of e-participation tools to engage in policy formulation will involve minimum effort to learn, master, and use. According to Ayo *et al.* (2015) perceived ease of use has a significant influence on citizen engagement. This finding was supported by the findings of Davis (1989) which reported that perceived ease of use has a significant positive influence on both current and future usage of e-participation. This study aimed at testing perceived ease of use in the context of citizen engagement in policy formulation to understand its influence. Thus, this study hypothesized that:

Ho2. Perceived Ease of Use has a significant influence on Citizens' Engagements.

Effect of Trust in Government on Citizen Engagement

Zahid and Din (2019) define trust as reliability, honesty, and confidence exhibited between two parties. This study defines trust in government as the honesty and confidence citizens have in the government to put into consideration their views during policy formulation and decision-making. Trust plays a very important role in the e-participation process both before, during, and after participation. Thus, the government must strive to enhance trust and fight distrust to increase citizen engagement in policy formulation and compliance with the decisions made (Scherer & Wimmer, 2014). Research carried out by Shabbir et al. (2018) revealed that e-consultation, eempowering, and e-informing are factors that build citizens' trust in government. E-consulting is a two-way channel of communication that enable citizens to share their views, E-empowering is the power that citizens have to make a decision and determine the weight of their responsibilities while E-informing is a one-way channel that provides information to citizens either by government or by fellow citizens (Shabbir et al., 2018). Research carried out by Schachter (2018) reported the significant influence of trust on citizen engagement. This was supported by research findings of Ayo et al. (2015) who also reported the same that trust in the government leads to an increase in citizen engagement. However, other scholars like Goldstein and Wiedemann (2020) reported that trust in government might lead to non-engagement in e-participation especially depending on how much citizens trust their government. Since e-participation usage levels in Uganda are low and levels of citizen trust in government have reduced according to OECD (2019), it was deemed necessary to find out its influence on citizen engagement, thereby hypothesizing that:

Ho3. Trust in Government has a significant influence on citizens' Engagement.

Effects of E-participation Sensitization on Citizen Engagement.

Annune *et al.* (2020) define sensitization as the process of making library users aware of the existence of COVID-19 in the world and its consequences on humanity to stay safe even in the university library. This study in the context of citizen engagement in e-participation defines sensitization as the process of making citizens aware of the existence and capability of e-participation in enabling them to engage in policy formulation and decision making electronically for the betterment of their communities and country. Despite the numerous programs put in place

by the Ugandan government to sensitize citizens, they seem not to have met their set objective of increasing awareness and usage levels as citizens have not given it as much attention as expected. Poor choice of language, mode of communication, and time of communication could partly be the factors behind limited engagement. Research findings of Dinev and Hu (2007) indicate that sensitization is a strong predictor of behavioural intention. This prompted another research to determine its influence on citizen engagement. For instance, the study was done on the effect of community dialogues and sensitization on patient reporting, by Ndagije et al. (2019) reported that community members' most effective sensitization tool was radios. While health professionals purportedly prefer meetings. Implying that the one size fits all approach may not work well when it comes to the channel of communication used in sensitizing citizens. Thus, it is necessary to establish the right channel of communication first before conducting community-level consultations and sensitization. This would help to ensure effective communication, create awareness and win citizens' trust and ownership of the project before it commences (Dierickx et al., 2018). This study, therefore, aimed to assess the relevance of community sensitization in increasing citizen engagement in policy formulation through e-participation. This study thus hypothesized that:

Ho4. E-participation Sensitization has a significant influence on citizens' Engagement.

Effects of E-participation Channels on Citizen Engagement.

E-participation channels are electronic tools and devices used to access and pass on information to those in need Abu-Shanab, (2016). In addition, Yao and Xu (2021) emphasized the need to use multiple platforms and media ranging from online forums, virtual discussion rooms, web-conferencing, webcasting, electronic juries, electronic polls, and streaming, chatting, and social media to cater for the needs of multiple users. E-participation Channels are reported by Ngagije *et al.* (2019) to have a significant influence on Citizen Engagement. The nature of the e-participation channel used influences engagement, thus, this study aimed at understanding the effect of online e-participation channels in increasing citizens' engagement in policy formulation. This research thus hypothesized that:

Ho5. E-participation channels have a significant influence on citizens' Engagement.

Effects of Behavioural Intention on Citizen Engagement

Behavioural intentions are "the person's subjective probability that he or she will perform the behaviour in question" (Venkatesh *et al.*, 2016; Fishbein & Ajzen, 1975). This study defines behavioural intention as the likelihood that citizens will perform the behaviour of engaging with the government in policy formulation and decision making through e-participation. Many scholars' research findings have found out that behavioural intentions have a significant influence on Citizen Engagement (Venkatesh *et al.*, 2016). It is not clear yet whether behavioural intentions in the context of citizen engagement in policy formulation through e-participation also influence Ugandan Citizens' Engagement. This study, therefore, hypothesized that:

Ho6. Behavioural intentions have a significant influence on Citizens' Engagement.

Methodology

This study used the quantitative survey research method because of its ability to; allow a broader study, give greater objectivity and accuracy of results, generalize, share and replicate results over time (Lichtman, 2013). The approach focused on examining the influence of e-participation perceived ease of use, perceived usefulness, and trust in government, channels, sensitization, and behavioural intentions on citizens' engagement in policy formulation through e-participation. A cross-sectional research design was adopted due to the limitation of time and resources. The study population included 1,493 Academic staff of Makerere University according to the National Council for Higher Education (NCHE, 2017). This study population was selected on assumption that the majority of the staff in Public Universities have Smartphones, access to the internet, and basic technology skills to engage in e-participation. This research used a sample size of 377 respondents derived from a target population of 1,493 using Krejcie and Morgan (1970) table. The justification for use of Krejcie and Morgan (1970) table is the ease in using it to determine the sample size and being one of the four methods commonly used to determine sample sizes (Kharuddin et al., 2020). A proportionate stratified sampling method was used to select 377 respondents from different colleges basing on titles and gender. The justification for its choice is its ability to obtain a more representative sample by ensuring equal representation of all elements from each stratum and improved precision (Lynn, 2019; Taherdoost, 2016).

The study used both secondary and primary data. Primary data was collected from the Academic staff of Makerere University whereas secondary data were obtained from literature review on both dependent and independent variables. Quantitative data were collected from the respondents using a five-point Likert scale of the self-administered survey questionnaire. The questionnaire had few items as recommended by Apuke (2017). This questionnaire was pre-tested before being distributed to respondents in the field. This helped to identify errors for corrections. Perceived Ease of Use and Perceived usefulness were measured using the model of TAM by Davis (1989), trust in government and Citizen engagement were measured using Naranja-Zolotovu (2018), E-participation channels was measured using Gao and Bai, (2014) while Behavioural intention was measured using Venkatesh *et al.* (2016).

Both item correlation validity and reliability of the questionnaire were computed using the itemtest correlation, and Cronbach Alpha. This fulfilled the requirement of Apuke (2017) which states that a research instrument used to collect data should be valid and able to yield similar results at all times. Collected data were coded and entered in SPSS software for analysis. Hierarchical Regression was used to determine the contribution of each independent variable on the dependent variable in the study.

Presentation of Study Findings

The reliability and validity results of study variables are presented in table 1 and 2 below,

Table 1: Reliability Results

Latent Variables	Items	Cronbach Alpha	Latent Variables	Items	Cronbach Alpha
E-participation Channels	8	0.735	Ease of Use	3	0.736
E-participation Usefulness	8	0.799	Behavioural intentions	5	0.786

Sensitization	4	0.798	Citizen Engagement	8	0.777
Trust in Government	3	0.792			

According to the reliability results in Table 1 above, all the constructs met the reliability requirement of the Cronbach Alpha of being 0.7 and above. This implies that the constructs were reliable.

Table 2: Item Correlation for Validity Test

E-Participation Channels		Ease of Use	Item Total
There is an active website for citizens.	.588**	Learning to use e-participation tools is easy for me.	.757**
We have a website that updates us.		My interaction through e- participation is clear	.799**
We are connected via active chart rooms.	.623**	E-participation tools are flexible	.748**
E-Participation Usefulness	Item Total	Behavioural Intention	Item Total
E-participation channels have useful Apps.	.521**	I intent to interact through e-participation tools.	.760**
I usually achieve what I want using e-participation channels.	.615**	I intent to interact through e- participation next year.	.766**
E-participation channels enable me interact whenever I want.	.566**	I predict to interact through e- participation next year.	.745**
The variety of e-participation channels used help to accommodate even the neediest users.	.567**	I plan to interact through e- participation next year.	.721**
Sensitization	Item Total	Citizen Engagement	Item Total
Adverts are done to ensure citizens awareness on existence of e-participation.	.680**	I use e-participation to interact because of quality factors.	.667**
Radio, Television and leaflets are used to teach citizens how to use e-participation	.722**	I use e-participation to interact because of perceived usefulness.	.741**
There is continuous sensitization of citizens regarding use of e-participation tools.	.640**	I use e-participation because of perceived ease of use.	.703**
Trust in Government	Item Total	I have positive attitude towards use of e-participation tools.	.624**
I am comfortable sharing personal information while using e-participation.	.737**	I want to use e-participation tools to express my views.	.529**
I believe that e-participation application is secure enough.	.781**	I frequently express my views through e-participation tools.	.589**
I believe that e-participation application is confidential.	.800**	Most of my interactions are done through e-participation.	.599**

The validity of the items of the instrument that was employed for data collection was tested using the item-test correlation, which is the Pearson correlation coefficient for a specific item and the

total test score of the respective constructs. The results in Table 2 above show that the correlation coefficients for each construct score and their respective items were positive and significant with values above 0.5, an indication of moderate correlation or higher. This therefore shows that all items passed the validity measurement (Johnson, 1951).

Table 3: Frequency for Background Information

Gender	Frequency	Percent	Age	Frequency	Percent
Male	207	57.0	25-30	64	17.6
Female	156	43.0	31-35	66	18.2
			36-40	70	19.3
			41-45	85	23.4
			46-60	78	21.5
Marital Status	Frequency	Percent	Level of Education	Frequency	Percent
Single	90	24.8	Diploma	5	1.4
Married	256	70.5	Degree	101	27.8
Divorced	12	3.3	Masters	250	68.9
Separated	5	1.4	Ph.D.	7	1.9

In Table 3, results show that the higher percentage of respondents were males with 57% and females with 43%. For the age group majority were in the age bracket of 41-45 with 23.4% followed by 46-60 with 21.5%, then 36-40 with 19.3%. Marital status was such that the majority were married comprising 70.6% and the rest were single. Regarding education level, the majority had Masters Degrees accounting for 68.9%, followed by 27.8% with first degree and 1.9% had doctorates.

Hierarchical Regression Coefficient Analysis Results

To understand the degree of contribution of each independent variable on a dependent variable, Hierarchical Regression Coefficients were computed, and below are the results in table 4.

Table 4: Coefficients for all Independent Variables and Dependent Variable Citizen Engagement

	Unstand Coef		ıd	Stand Coef					Correla	ntions	
		В	Std. Error	Beta	t	sig	\mathbb{R}^2	R ² Change	Zero- order	Partial	Part
6	(Cons)	2.086	1.267		1.647	.101					
	Channels	.111	.050	.097	2.219	.027	.105	.105	.324	.117	.084
	Usefulness	.096	.053	.085	1.803	.072	.224	.119	.450	.095	.068
	Sensitization	.090	.065	.064	1.401	.162	.274	.050	.418	.074	.053
	Trust in Gov	.312	.062	.230	5.007	.000	.368	.094	.529	.256	.188
	Ease of Use	.491	.080	.277	6.129	.000	.458	.089	.553	.309	.231
	B. Intention	.326	.063	.234	5.150	.000	.495	.038	.528	.263	.194
	Citizen Engagement										

Regression Coefficient results in Table 4 indicate that independent variables e-participation usefulness and sensitization have no significant influence on citizen engagement with an R² and P-value of (R²=.224, Sig=.072, R²=.274, Sig=.162) respectively. While trust in government, perceived ease of use, e-participation channels, and behavioural intentions have a significant influence on Citizen Engagement with R² and the P-value of (R2=.368, Sig=.000, R2=.458, Sig=.000, R2=.105, Sig=.027, R2=.495, Sig=.000) respectively. Implying that, trust in government increases citizen engagement in policy formulation by 9%, Perceived ease of use by 9%, e-participation channels by 11%, and behavioural intentions by 3%. Overall, all the four identified independent variables of trust in government, perceived ease of use, e-participation channels, and behavioural intentions influence citizens' engagement by 49.5%.

Figure 2 is a conceptual model designed basing on this study findings.

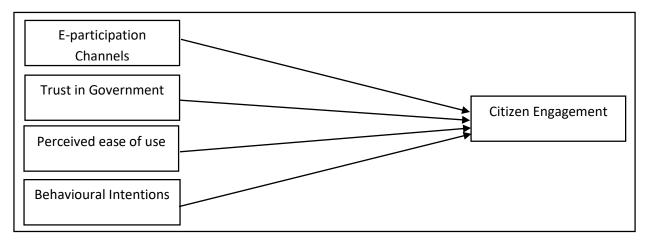


Figure 2: Conceptual Model depicting this research study findings

The model in Figure 2 is a presentation of study findings after testing the set hypothesis. The model shows that only four variables of, e-participation perceived ease of use, e-participation channels, trust in government, and behavioural intentions have a significant positive influence on citizens' engagement. Findings of this study like perceived usefulness, and behavioural intentions support the extended TAM model while those of perceived ease of use contradict with TAM mode. The contradiction could be attributed to advancements in technology and increased levels of IT skills among members of the study population.

Discussion of Study Findings

Concerning factors that influence Citizen Engagement in policy formulation through e-participation, four factors found significant were e-participation channels, trust in government, perceived ease of use, and behavioural intentions. The finding that trust in government influences citizen engagement is supported by study findings of Schachter (2018) and Ayo *et al.* (2015). However, they contradict the study findings of Zahid and Din (2019) and Alomari *et al.* (2012) which reported that trust in Government does not influence Citizen Engagement. Implying that citizens will only engage in policy formulation through e-participation if they have trust in the ruling government but once trust is lost; citizens will ultimately stop engaging in policy

formulation. However, the study findings of Devine *et al.* (2020) and Goldstein and Wiedemann (2020) revealed that the existence of trust in government among citizens may completely lead to non-engagement of citizens on assumption that whatever they will deliberate will be helpful and favouring every citizen. Besides that, this study finding that existence and affordability of e-participation channels have a direct influence on citizen engagement is in support of study findings of Ndagije *et al.* (2019) which found out that e-participation channels have a direct influence on Citizen engagement. The study findings however contradicted those of Yao and Xu (2021) and Abu-Shanab (2016) that reported that e-participation channels have a significant influence on behavioural intentions and indirect influence on Citizen Engagement. Implying that e-participation channels have a direct influence on Citizen Engagement through e-participation.

Furthermore, this study found, perceived ease of use to have a significant direct influence on Citizen Engagement in policy formulation which is in line with study findings of Davis, (1989). However, the study findings contradict with findings of Cho (2015), and Takele and Sira (2013) which reported that perceived ease of use has an indirect influence on Citizen Engagement through behavioural intentions. Lastly, behavioural intentions were reported to have a significant direct influence on Citizen Engagement and were in support of Venkatesh *et al.* (2016).

Conclusion of the Study

This study while examining the influence of e-participation channels, usefulness, sensitization, trust in government, perceived ease of use, and behavioural intentions on citizen engagement on the academic staff of Makerere University followed the following hypothesis. E-participation channels, usefulness, ease of use, trust in government, sensitization, and behavioural intentions influence citizen engagement in e-participation. This study finding reported that e-participation channels, perceived ease of use, behavioural intention, and trust in government have a significant direct influence on citizen engagement in e-participation. Since this study was based on the TAM model of Davis (1989), the study finding that behavioural intentions influence citizen engagement is in support of Davis (1989). Besides that, the TAM model also supports the study finding that perceived usefulness does not influence citizen engagement as reported by this study but rather influences behavioural intentions as in the TAM model. However, the study finding that perceived ease of use influences citizens' engagement contradicts with study findings of Davis (1989). Besides the TAM model of Davis (1989), other variables that were added, to test their influence on citizen engagement as supported by existing literature were e-participation channels, sensitization, and trust in government. The study findings reported that out of the three added variables; e-participation channels and trust in government have a significant positive influence on citizen engagement while sensitization was insignificant. Thus, e-participation channels, perceived ease of use, trust in government, and behavioural intentions have a significant positive influence on citizen engagement in e-participation while e-participation usefulness and sensitization were insignificant implying that they could be having an indirect influence on citizens' engagement through a mediating variable.

Contributions of the Study

Theoretically, this study extended the TAM model of Davis (1989) by adding two variables of e-participation channels, and trust in government. According to study findings, only four variables of e-participation channels, trust in government, perceived ease of use, and behavioural intentions influence citizen engagement on e-participation. This implies that e-participation channels,

perceived ease of use, trust in government, and behavioural intentions are very important factors that need a lot of attention by the government if they are to reap from e-participation because they have a direct influence on citizens' engagement in e-participation. Besides that, it creates awareness on the side of the government that e-participation sensitization and perceived usefulness may not directly influence citizen engagement but indirectly. Implying that they have an indirect influence. Hence, this study adds to the existing literature by adding these three factors.

The practical implication of this study was the identification of the two variables of e-participation channels, and trust in government in influencing citizen engagement through e-participation. Limited research was done on the influence e-participation sensitization, trust in government and e-participation channels on citizens' engagement in Uganda. This study findings thus adds to the existing pool of knowledge and literature by reporting factors that influence citizens' engagement through e-participation in the Ugandan context and developing countries at large.

Recommendations

The government of Uganda should support use of e-participation channels that seem most appropriate and affordable to citizens and create the perception of ease of use of electronic channels by training and giving out user manuals to citizens to support engagement in policy formulation. It should also support and enable use of both offline and online channels to get views from both the literate and the illiterate, urban, and rural-based citizens. Besides that, much emphasis should also be put in building citizens' trust in government by availing them with participation information, considering their views during policy formulation and decision-making, and giving them feedback on which views were considered and the justification for such choices.

References

- Abu-Shanab, E. (2016). How perceptions of E-participation levels influence the intention to use E-government websites, Article in Transforming Government People Process and Policy DOI: 10.1108/TG-12-2015-0058.
- Al-Dalou, R., & Abu-Shanab, E. (2013), "E-participation levels and technologies", The 6th International Conference on Information Technology (ICIT 2013), Amman, 8-10 May, pp. 1-8.
- Alomari, M., Woods, P., & Sandhu, K. (2012). "Predictors for e-government adoption in Jordan: Deployment of an empirical evaluation based on a citizen-centric approach", *Information Technology & People*, 25(2)207 34.
- Annune, A. E., Agoh, J. A., Annune, D., & Ihongo, D. A. (2020). "Sensitization and Awareness Creation as Tools for Curbing Perceived Effects of COVID-19 Pandemic on University Library Users in Nigeria" (2020). Library Philosophy and Practice (e-journal). 4192. https://digitalcommons.unl.edu/libphilprac/4192
- Apuke, D. O. (2017). Quantitative Research Methods: A Synopsis Approach, *Arabian Journal of Business and Management Review*, DOI: 10.12816/0040336, 6 (10).
- Ayo, K. C, Mbarika, W. V., & Oni, A. A. (2015). The Influence of Trust and Risk on Intention to Use E-Democracy in Nigeria, *Mediterranean Journal of Social Sciences* MCSER *Publishing, Rome-Italy*, 6 (6), Doi: 10.5901/MJSS.
- Cho, H. (2015) Acceptance of online customization for apparel shopping, *International Journal of Retail & Distribution Management*, 37, 5, 389-407.

- Davis, D. F. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology, *Management Information Systems Research*, 13(3)319-340, https://doi.org/10.2307/249008.
- Devine, D., Gaskell, J., Jennings, W., & Stoker, G. (2020). <? covid19?> Trust and the Coronavirus Pandemic: What are the Consequences of and for Trust? An Early Review of the Literature. *Political Studies Review*, 1478929920948684, https://doi.org/10.1177/1478929920948684.
- Dierickx, S., O'Neill, S., Gryseels, C., Immaculate A, E., Bannister-Tyrrell, M., Okebe, J., & Peeters G, K. (2018). Community sensitization and decision-making for trial participation: A mixed-methods study from The Gambia. *Developing world bioethics*, *18*(4), 406-419, https://doi.org/10.1111/dewb.12160.
- Diney, T., & Hu, Q. (2007). The Centrality of Awareness in the Formation of Citizen engagement Intention toward Protective Information Technologies, *Journal of the Association for Information Systems*, DOI: 10.17705/1jais.00133.
- Fishbein, M. & Ajzen, I. (1975), Belief, Attitude, Intention, and Behavior: *An Introduction to Theory and Research*, Addison-Wesley, Reading, MA.
- Gao, L.L. & Bai, X.S. (2014) A Unified Perspective on the Factors Influencing Consumer Acceptance of Internet of Things Technology. *Asia Pacific Journal of Marketing and Logistics*, 26, 211-231. http://dx.doi.org/10.1108/APJML-06-2013-0061
- Goldstein, Dan., & Wiedemann, J. (2020). Whom Do You Trust? The Consequences of Political and Social Trust for Public Responsiveness to COVID-19 Orders. Available at: https://ssrn.com/abstract=3580547 or http://dx.doi.org/10.2139/ssrn.3580547 Google Scholar.
- Johnson, A. P. (1951). Notes on a suggested index of item validity: The U-L Index. *Journal of Educational Psychology*, 42(8), 499–504. https://doi.org/10.1037/h0060855
- Kharuddin, F. A., Azid, N., Mustafa, Z., Kamari, N. M., Ibrahim, K. F., & Kharuddin, D. (2020). Determination of Sample Size in Early Childcare Centre (TASKA) Service Project in Malaysia: Classification and Analytical Approach, *Albukhary Social Business Journal* (ASBJ), One (2).
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607-610.
- Krishnan, S., Teo, T. S., & Lim, V. K. (2012). Contextual factors, e-participation, and e-government development: testing a multiple-mediation model.
- Lichtman, M. (2013). *Qualitative Research in Education: A User's Guide.* (3rd Ed). USA: SAGE Publicationwwabianjbmr.com
- Lynn, P. (2019). The Advantage and Disadvantage of Implicitly Stratified Sampling, methods and data, analyses, <u>Institute for Social and Economic Research</u>, 13(2), 253-266 DOI: 10.12758/mda.2018.
- Naranjo-Zolotov, M., Oliveira, T., & Casteleyn, S. (2018). Citizens' intention to use and recommend e-participation drawing upon UTAUT and citizen empowerment, *Journal of Information Technology and People*, Emerald Publishing Limited.
- NCHE (2017) Public universities, National Council for Higher Education.
- Ndagije, H. B., Manirakiza, L., Kajungu, D., Galiwango, E., Kusemererwa, D., & Olsson, S. (2019). The effect of community dialogues and sensitization on patient reporting of adverse events in rural Uganda: Uncontrolled before-after study. *PLoS One* 14(5): e0203721. https://doi.org/10.1371/journal.pone.0203721.
- Nilsson, M., & Barbutiu, S. M. (2019). E-participation For Increased Citizen Engagement? A Case from Uganda. *JeDEM-eJournal of eDemocracy and Open Government*, 11(1), 14-36.

- Nkwe, N., & Cohen, J. (2017). The Effects of Intrinsic, Extrinsic, Hedonic and Utilitarian Motivation on IS Usage: An Updated Met-Analytic Investigation, Twenty-third American Conference Systems, Boston, 2017.
- Ochara, M, N. (2012). Grassroots Community Participation as a Key to E-Governance Sustainability in Africa, *the African Journal of Information and Communication*, philosophies, theories, methods, and practice. *Government Information Quarterly*, Issue 12. October 2017 from http://www.unche.or.ug/institutions/public-universities
- OECD (Organization for Economic Co-operation and Development). (2019). The E-Government Imperative, OECD Publications Services, Paris.
- Rogers, E. (1995), Diffusion of Innovations, The Free Press, New York, NY.
- Schachter, L. H. (2018). Exploring the Relationship between Trust in Government and Citizen Participation, *International Journal of Public Administration*, 42, 405-416, doi.org/10.1080/01900692.2018.1465956.
- Scherer, S., & Wimmer, A. M. (2014). Trust in e-participation: Literature review and emerging research needs, Proceedings of the 8th International Conference on Theory and Practice of Electronic Governance, DOI: 10.1145/2691195.2691237
- Shabbir, B., Nadeem, M., Dai. Z., Fuhrer. S. M., Xue, Q., Wang, X., and Bao, Q. (2018). Longrange intrinsic erromagnetism in two-dimensional materials and dissipationless future technologies, *Applied Physics Reviews*, 26, 211-231. https://doi.org/10.1063/1.5040694.
- Srivastava, S. C. & Teo, T. S. H. (2010). E-government, e-business, and national economic performance. *Communications of the Association for Information Systems*, 26(1), 267-286. State of Progress and Measurement. *The African Journal of Information*.
- Sukamolson, S. (2007). Fundamentals of quantitative research. *Language Institute Chulalongkorn University*, 1(3), 1-20.
- Taherdoost, A. (2016). Sampling Methods in Research Methodology; How to Choose a Sampling Technique for Research, *International Journal of Academic Research in Management* (IJARM), 5(2), 18-27.
- Takele, Y., & Sira, Z. (2013). Analysis of Factors Influencing Customers' Intention to the Adoption of E-Banking Service Channels in Bahir Dar City: An Integration of Tam, TPB, and PR, *European Scientific Journal*, 9(13)1857 7881
- Tommasetti, A., Singer, P., Troisi, O., Maione, G. (2018). Extended Theory of Planned Behavior (ETPB): Investigating Customers' Perception of Restaurants' Sustainability by Testing a Structural Equation Model, Sustainability 2018, 10, 2580; doi:10.3390/su10072580.
- Lallana, E. C. (2010). ICT for Development policy, process and governance. *Incheon: Asian and Pacific Training Centre for Information and Communication Technology for Development.*
- United Nations. (2020). E-participation: Quick overview of recent qualitative trends, Department of Economic and social affairs, UN secretariat, 405, east! 42nd Street, New York, N.Y, USA.
- Venkatesh, V., Thong, L. Y. J., Chan, Y. K. F., & Hu, H, J. P. (2016). Managing citizens' uncertainty in e-government services: The mediating and moderating roles of transparency and trust, Inf.Syst.Res. 27(1), 87–111, http://dx.doi.org/10.1287/isre.2015.0612.
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS quarterly*, 425-478.
- Yao, Y., & Xu, P. (2021). "E-participation decision across different channels", *Information Technology and People*, https://doi.org/10.1108/ITP-05-2020-0314
- Zahid, H., & Din, H. B. (2019). Determinants of Intention to Adopt E-Government Services in Pakistan: An Imperative for Sustainable Development, *Resources*. 8(3):128. https://doi.org/10.3390/resources8030128