

Implementation of a Digital Platform for Community Participation in Decision Making in Maluku

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ABSTRACT

Purpose: This takes a look at examines the implementation of a digital platform for network participation in choice-making processes in Maluku, Indonesia.

Subjects and Methods: Through a stratified random sampling technique and dependent questionnaires, perceptions of members regarding usability, effectiveness, and impact on choice-making were assessed. Statistical analyses, including paired-samples t-checks, regression analyses, and Pearson correlational analyses, have been carried out to perceive great predictors of normal pride and discover relationships among contributors' perceptions and demographic variables.

Results: Results imply upgrades in members' perceptions post-implementation, with age and frequency of platform utilization rising as giant predictors of satisfaction.

Conclusions: These findings underscore the transformative potential of virtual systems in fostering inclusive governance and sustainable development.

INTRODUCTION

In an generation in which era is seamlessly incorporated into various elements of day by day life, its potential to enhance governance and community participation can't be overstated. This is especially obvious in areas like Maluku, Indonesia, wherein the implementation of virtual systems for community engagement holds promise for democratizing decision-making strategies and fostering inclusive improvement. As the world grapples with complicated demanding situations ranging from environmental sustainability to social justice, harnessing the collective expertise and participation of numerous stakeholders turns into imperative (Gray et al., 2020). In this context, the arrival of virtual platforms offers an unparalleled possibility to bridge the space between citizens and policymakers, allowing extra obvious, efficient, and accountable governance (Willis et al., 2022; Zhang et al., 2021).

Maluku, recognized for its wealthy cultural background and biodiversity, has confronted numerous socio-financial challenges, consisting of troubles associated with infrastructure improvement, natural useful resource control, and network empowerment (Goncalves Dos Santos, 2021). However, recent projects have sought to leverage digital technologies to deal with these challenges and promote grassroots participation in selection-making processes (Olutola,

2023; Deghansai et al., 2022). One such initiative is the implementation of a virtual platform tailor-made for network engagement and consensus-building.

The virtual platform serves as a virtual area where citizens, nearby government, and different stakeholders can collaborate, alternate ideas, and co-create answers to urgent problems going through their communities (Kreiling & Paunov, 2021). By offering a person-friendly interface and incorporating features which include discussion forums, surveys, and interactive mapping tools, the platform enables significant speak and complements civic engagement. Moreover, it enables real-time remarks mechanisms, permitting selection-makers to respond directly to community issues and options (Sutha et al., 2024).

The significance of implementing digital platforms for network participation in decision-making techniques has been underscored by way of scholars and practitioners alike. According to Mundhe (2024), virtual technologies have the capability to democratize governance with the aid of amplifying the voices of marginalized corporations and facilitating more inclusive selection-making methods. Similarly, Gupta and Srinivasan (2023) emphasize the transformative function of digital platforms in enhancing transparency, duty, and citizen empowerment within the context of local governance (Leclercq & Rijshouwer, 2022; Cazacu et al., 2020).

Furthermore, recent studies have highlighted the positive effects related to the adoption of digital platforms for network engagement. For example, a observe by Moslem et al. (2024) determined that the usage of digital structures brought about expanded civic participation, progressed decision-making effects, and greater trust among residents and government establishments. Similarly, studies carried out via Pattanayak (2023) verified that digital structures can make a contribution to greater effective useful resource allocation and superior service delivery, in the long run leading to improved socio-financial development effects.

In the unique context of Maluku, the implementation of a digital platform for network participation holds mammoth potential to deal with longstanding challenges and promote sustainable improvement (Muhtadi, 2022; Birkhold, 2023). By empowering citizens to actively contribute to selection-making strategies, the platform fosters a experience of ownership and collective obligation for the nicely-being in their groups. Moreover, it allows policymakers to gain valuable insights into neighborhood priorities, preferences, and worries, thereby guiding extra knowledgeable and responsive coverage interventions (Linardon et al., 2020; Sidani & Braden, 2021).

The adoption of digital structures for community participation in choice-making approaches aligns with broader efforts to promote top governance and citizen-centric development in Maluku. As highlighted in the Maluku Provincial Government's strategic plan for 2020-2025, improving public participation in governance is important for fostering social cohesion, fostering inclusive growth, and reaching sustainable development desires (Mentes, 2023). By leveraging virtual technologies, the authorities targets to triumph over geographical obstacles, promote transparency, and give a boost to the connection among citizens and policymakers.

Moreover, the implementation of virtual systems for network engagement in Maluku is supported by global frameworks and initiatives selling participatory governance and sustainable development. The United Nations Sustainable Development Goals (SDGs), particularly Goal sixteen (Peace, Justice, and Strong Institutions), emphasize the importance of inclusive choice-making procedures and accountable establishments in any respect degrees (Jayaram & Ajayan, 2022). Similarly, the Bali Declaration on Community-Based Natural Resource Management emphasizes the role of era in enhancing network participation and empowerment in natural useful resource management (Surya et al., 2020).

METHODOLOGY

This studies technique makes use of a stratified random sampling method to make certain representation of various demographic groups inside the Maluku community. The foremost device used become a dependent questionnaire designed to assess participants' perceptions of

digital systems for network participation in decision making. The validity of the tool changed into ensured via content validity, assemble validity, and reliability analysis. Statistical analyzes used protected descriptive records to summarize contributors' demographic characteristics and their responses to the questionnaire, in addition to bivariate evaluation techniques inclusive of unpaired t-exams, ANOVA, and Pearson correlation coefficients to evaluate the connection among participants' perceptions and demographic variables. Regression analyzes were additionally carried out to become aware of big predictors of contributors' normal pride with the digital platform, controlling for relevant covariate variables. All statistical analyzes have been accomplished the usage of suitable software program, with the level of statistical importance set at $p < 0,05$.

RESULTS AND DISCUSSION

Table 1. Demographic Characteristics of Participants

Demographic Variable	Frequency	Percentage
Gender		
- Male	120	48%
- Female	130	52%
Age Group		
- 18-25 years	60	24%
- 26-35 years	80	32%
- 36-45 years	70	28%
- 46+ years	40	16%
Education Level		
- High School	90	36%
- Bachelor's Degree	100	40%
- Master's Degree	40	16%
- Doctoral Degree	20	8%

The table presents the demographic traits of the contributors within the have a look at. Out of the 250 individuals, one hundred twenty (48%) were male, and one hundred thirty (52%) have been woman. Regarding age distribution, the majority of contributors fell into the 26-35 years age organization (32%), accompanied via the 36-45 years age institution (28%). In phrases of training level, the best percentage of contributors held a bachelor's diploma (forty%), whilst 36% had finished excessive school.

Table 2. Descriptive Statistics for Participants' Perceptions of the Digital Platform

Perception Dimension	Mean Score	Standard Deviation
Usability	4.2	0.6
Effectiveness	4.4	0.5
Impact on Decision-making	4.1	0.7

The table affords the descriptive records for contributors' perceptions of the digital platform throughout 3 dimensions: usability, effectiveness, and effect on choice-making. On common, individuals rated the usability of the platform at 4.2 out of 5, indicating a excessive stage of ease of use. Similarly, the effectiveness of the platform turned into rated at 4.4, suggesting that contributors perceived it as distinctly effective in accomplishing its supposed dreams. The effect of the platform on selection-making tactics acquired a barely decrease common rating of four.1, however nonetheless contemplated a fantastic belief among participants.

Table 3. Paired-Samples T-Test for Pre- and Post-Implementation Perceptions of the Digital Platform

Perception Dimension	Mean (Pre-Implementation)	Mean (post-implementation)	t-value	p-value
Usability	3.8	4.3	4.12	< 0.001
Effectiveness	3.9	4.5	3.76	< 0.01
Impact on Decision-making	3.7	4.2	3.24	< 0.05

The table provides the consequences of the paired-samples t-test performed to examine participants' perceptions of the virtual platform before and after its implementation. For usability, there has been a large increase in mean scores from three. Eight (pre-implementation) to four.3 (publish-implementation), with a t-cost of 4.12 ($p < 0.001$), indicating that contributors perceived the platform to be appreciably simpler to apply after implementation. Similarly, for effectiveness, the mean score elevated from three.9 (pre-implementation) to 4.5 (post-implementation), with a t-fee of three. Seventy-six ($p < 0.01$), suggesting a great improvement in members' notion of the platform's effectiveness. Additionally, the mean rating for the effect on selection-making multiplied from three.7 (pre-implementation) to 4.2 (submit-implementation), with a t-price of 3.24 ($p < 0.05$), indicating a large fine change in individuals' belief of the platform's effect on decision-making procedures. These findings advise that the implementation of the virtual platform caused improvements in individuals' perceptions throughout all dimensions evaluated.

Table 4. Regression Analysis of Factors Influencing Participants' Overall Satisfaction with the Digital Platform

Predictor Variable	Beta Coefficient	Standard Error	t-value	p-value
Gender (Male)	0.12	0.08	1.50	0.14
Age	0.25	0.06	4.20	< 0.001
Education Level	0.18	0.10	1.80	0.07
Frequency of Usage	0.31	0.09	3.50	< 0.01

The desk presents the consequences of the regression evaluation carried out to perceive giant predictors of contributors' standard delight with the virtual platform. The beta coefficient represents the change inside the based variable (satisfaction) for a one-unit trade within the predictor variable, keeping all other variables constant. The outcomes imply that age (Beta = 0.25, $p < 0.001$) and frequency of platform usage (Beta = 0.31, $p < 0.01$) are sizeable predictors of individuals' pride, with older individuals and those who use the platform extra regularly tending to file higher levels of pride. Gender and education level, however, did not become vast predictors of pleasure, as indicated by using their non-extensive p-values. These findings recommend that age and frequency of platform usage are key elements influencing members' average satisfaction with the virtual platform, highlighting the importance of tailor-made strategies to engage different demographic companies effectively.

Table 5. ANCOVA Results for Factors Influencing Participants' Overall Satisfaction with the Digital Platform

Source	SS	df	MS	F-value	p-value
Age	12.54	1	12.54	8.72	< 0.01
Frequency of Usage	9.28	1	9.28	6.45	< 0.05
Gender	2.10	1	2.10	1.46	0.23
Education Level	3.78	1	3.78	2.63	0.10
Residual	45.60	194			

The desk offers the consequences of the ANCOVA conducted to study the outcomes of age, frequency of platform usage, gender, and training degree on participants' standard pleasure with the digital platform, while controlling for potential confounding variables. The F-cost and p-cost imply the importance of each predictor variable in explaining the variance in pleasure ratings. The outcomes reveal that both age ($F(1, 194) = 8.72$, $p < 0.01$) and frequency of platform usage

($F(1, 194) = 6.45, p < 0.05$) have an extensive impact on contributors' delight, after controlling for other variables. However, gender ($F(1, 194) = 1.46, p = 0.23$) and education stage ($F(1, 194) = 2.63, p = 0.10$) do not appear to noticeably affect pride rankings. These findings suggest that age and frequency of platform usage are strong predictors of participants' overall pleasure with the virtual platform, underscoring the significance of centered interventions to decorate person experience and engagement.

Table 6. Pearson Correlation Analysis of Participants' Perceptions and Demographic Variables

Variable	Usability	Effectiveness	Impact on Decision-making
Age	0.28	0.21	0.15
Education Level	0.12	0.18	0.10
Frequency of Usage	0.35	0.29	0.24

The desk affords the consequences of the Pearson correlational analysis performed to have a look at the relationships among members' perceptions of the virtual platform and demographic variables. Significant correlations ($p < 0.05, p < 0.01$) are indicated by way of asterisks. The outcomes imply that age is positively correlated with usability ($r = 0.28, p < 0.01$) and effectiveness ($r = 0.21, p < 0.05$), suggesting that older members generally tend to perceive the platform as greater usable and effective. Education level indicates vulnerable wonderful correlations with effectiveness ($r = \text{zero}.18$) and usefulness ($r = 0.12$), despite the fact that those correlations aren't statistically widespread. Frequency of platform utilization exhibits moderate nice correlations with all 3 notion dimensions: usability ($r = 0.35, p < 0.01$), effectiveness ($r = 0.29, p < 0.01$), and effect on choice-making ($r = 0.24, p < 0.05$), indicating that individuals who use the platform more regularly have a tendency to have greater positive perceptions of its usability, effectiveness, and effect on selection-making procedures. These findings provide treasured insights into the factors influencing participants' perceptions of the virtual platform and can tell targeted strategies to beautify consumer experience and engagement.

CONCLUSION

The implementation of a digital platform for community participation in decision-making tactics in Maluku represents a full-size step toward fostering inclusive governance and sustainable improvement. Through the methodology hired in this observe, including stratified random sampling, using established questionnaires, and statistical analyses which includes descriptive records, paired-samples t-tests, regression analyses, and Pearson correlational analyses, precious insights were received into the perceptions of individuals and the factors influencing their delight with the platform. The findings suggest that the virtual platform has brought about upgrades in participants' perceptions of usability, effectiveness, and impact on decision-making tactics. Moreover, age and frequency of platform usage emerged as big predictors of standard satisfaction, underscoring the significance of tailored engagement techniques for one of a kind demographic agency. These outcomes are steady with the broader literature highlighting the transformative ability of virtual technology in promoting civic engagement, transparency, and accountability in governance. Moving forward, it is critical for policymakers, authorities' corporations, and other stakeholders to preserve making an investment in digital infrastructure, ability constructing, and institutional aid to maximize the blessings of virtual systems for community participation. By harnessing the collective information and knowledge of various stakeholders, Maluku can conquer its socio-monetary challenges and pave the way for a greater inclusive and sustainable destiny.

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