

Organizational Culture and Organizational Performance: Does the Mediating Role of Organizational Innovation Exist?

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KEYWORDS

Organizational Performance, Organizational Culture, Organizational Innovation and SEM-PLS.

ABSTRACT

This study aims to analyze the influence of organizational culture on organizational performance, with organizational innovation positioned as an intervening variable in the functional relationship between the two variables. The research sample consists of 248 employees from the Land Agency in the province of Aceh, Indonesia. Data collection using a questionnaire and the data analysis tool applied to estimate the direction and significance of the relationships between variables was Structural Equation Modelling (SEM-PLS). The study found that organizational culture positively and significantly impacts organizational performance. Organizational innovation enhances organisational performance and moderates the influence of culture on the performance of the public institution.

1. Introduction

The National Land Agency in the Province of Aceh plays a crucial role in ensuring the effectiveness and efficiency of public service delivery related to land-related aspects. In countering environmental dynamics, the Land Agency needs to understand how its organizational culture can influence organizational performance. As highlighted by Kayworth & Leidner [20], organizational culture significantly affects organizational behavior and performance.

However, the uncertainty regarding the extent to which innovation plays a role in connecting culture with the organizational performance of the Land Agency in the Province of Aceh remains a partially explored aspect.

Given the importance of innovation in addressing environmental changes and the demands of public service delivery, fundamental questions arise regarding the role and existence of organizational innovation in strengthening the link between culture and the organizational performance of the Land Agency in the Province of Aceh.

Several researchers have asserted that innovation is crucial for enhancing organizational performance. Therefore, practitioners and academics advocate for more innovation in the public sector [9]. Innovation successfully implements ideas and processes to address existing problems and develop new opportunities [22]. It is considered a key factor influencing the long-term success of public organizations [23], [5]. Organizational innovation has been believed to encourage organizational performance [2].

The attitudes and innovative behaviors among organizational members subsequently become important determinants of innovation related to the values and norms embraced by the organization. A positive culture encourages innovative behaviors among organizational members, and creating an appropriate culture that supports innovation within the organization is a prerequisite for innovation [5].

This research makes a significant contribution to the literature by detailing and systematically analyzing how organizational culture can influence the organizational performance of the National Land Agency in the Province of Aceh while exploring the critical role of innovation in this relationship. Previous studies have focused on the influence of organizational culture and have yet to delve deeply into the implications of innovation in the context of the National Land Agency. Thus, this research is expected to serve as a crucial foundation for better policies and managerial practices in the National Land Agency and similar organizations at the provincial level.

Systematically, this paper is arranged into five sections. The second section narrates the literature review, which encompasses the relationship between organizational performance and organizational culture and the theoretical role of innovation in mediating these two variables. The third section explains the population and sample, data, measurement model, and the analytical model used to analyze the relationships between variables. The fourth

section presents the results and discussion, providing information and discussion on empirical findings. Finally, the fifth section contains conclusions, recommendations, and the limitations of the research.

2. Literature Review

Organizational culture and organizational performance

Organizational culture is a set of value systems that determine how a company perceives and responds to its environment [30], [20]. The organizational culture is crucial as a reference point for the values of its members [12]. Culture comprises shared values, norms, assumptions, and beliefs influencing employees' attitudes and behaviors [32]. Furthermore, organizational culture affects employee behavior in their interactions with other employees and external stakeholders, thereby impacting organisational practices. Additionally, the culture guides understanding problems and making decisions regarding internal and external challenges; this can foster commitment to the organization and its goals, creating a sense of group identity among employees [18].

The influence of organizational culture on organizational performance is attributed to its impact on employee behavior [3]. A favorable organisational culture assessment motivates employees to adopt attitudes and behaviors toward performance improvement [27], [1]. Conversely, a negative evaluation can lead to the emergence of unproductive behaviors such as turnover, which, in turn, has detrimental effects on individual work outcomes and organizational performance [35]. Organizational culture positively affects organizational effectiveness; hence, this relationship is mediated by organizational innovation. The positive impact of organizational innovation on organizational effectiveness is more significant among individuals who embrace improvements rapidly compared to those who do not [24]. Therefore, the fourth hypothesis of the study can be declared as follows:

H₁: Organizational culture has a positive effect on organizational performance.

Organizational culture and organizational innovation

Innovation is crucial for the survival and development of a company, reflecting the outcomes of the company's innovative behaviors [13], [17]. Therefore, every organization needs to foster the emergence of organizational innovation. In public organizations, innovation reflects the development of new innovative ideas, behaviors, processes, and management systems [4]. Aimed at enhancing the performance of public services. Organizations need to have a social context that encourages innovation.

So far, studies on the interconnection between organizational culture and organizational innovation have been a focus of previous researchers [21]. Research by Olori & Mark [26] demonstrated that culture can influence innovation. While some constructs of organizational culture act as inhibitors to company innovation, others function as supporters of company innovation. Consistent with Olori & Mark, the findings of Gorzelany et al. [14] provide empirical evidence that organizational culture can significantly enhance organizational innovation. Based on the empirical literature above, the second hypothesis in this study is as follows:

H₂: Organizational culture has a positive effect on organizational innovation.

Organizational innovation and organizational performance

Studies on the relationship between innovation and organizational performance have received significant attention from human resource practitioners [1], [2]. Camisón & Villar-Lopez [6] revealed that organizational innovation is an enabler of technological innovation capabilities, which, in turn, can enhance organizational performance. Chen et al. [7] also demonstrated that innovation influences organizational performance. Previous research has found that innovation is crucial for the long-term competitive advantage of organizations and technical innovation [32]. Empirical research conducted by Phan [28], using a sample of 266 private companies in Vietnam, revealed that organizational innovation impacts organizational performance. Aspects of innovation that significantly enhance organizational performance include innovation in business practices and workplace organization, which can drive organizational performance. Overall, the innovation has a significant influence on organizational performance. Based on the empirical literature above, the third hypothesis of the study is as follows:

H₃: Organizational innovation has a positive effect on organizational performance.

The mediating Role of the Innovation Model on the organizational performance-culture Nexus

Organizational innovation is a crucial necessity for every organization, particularly public organizations that

focus on public services in their operational activities. Innovation within an organization reflects the employer's innovative attitudes and behaviors in carrying out their assigned tasks. The behavior is closely related to the values and norms embraced within the organizational culture. Therefore, building and enhancing a conducive culture that supports innovation within the organization is a prerequisite for fostering innovation [5]. Previously, a research study conducted by Hock et al. [18] demonstrated that sound cultural values improve capabilities that support organizational innovation. It suggests that innovation is a function of the organization's culture. Furthermore, the existence of innovation is a determinant of success in achieving organizational performance. Therefore, the fourth hypothesis of the study as follows:

H₄: Organizational innovation mediates the effect of organizational culture on organizational performance.

3. Method

The unit of analysis in this study is the National Land Agency (where BPN) office in the province of Aceh. The research sample consists of 248 personnel selected through a sampling method. The questionnaires were distributed online through Google Forms. This study operationalizes three latent variables: organizational performance, organizational culture, and organizational innovation. The managerial performance of the National Land Agency (BPN) reflects the implementation of the strategic plan of the public institution. Thus, the BPN plan was achieved when the strategic plan set was fulfilled over the years (Regulation of the Minister of Agrarian and Spatial Planning/National Land Agency Number 27 of 2020).

The measure of mental performance utilises five indicators: service quality, professionalism, trustworthiness, performance achievement, and land mapping. These five indicators are adopted from the Regulation of the Minister of Agrarian and Spatial Planning/National Land Agency of the Republic of Indonesia Number 6 of 2018 and the Decree of the Minister of Agrarian and Spatial Planning/Head of the National Land Agency Number 115/SK-OT.02/V/2020 regarding the values of the Ministry of Agrarian and Spatial Planning/National Land Agency.

Furthermore, organizational culture is related to the values and norms within an organization. Measurement of these variables refers to Bendak et al. [5], comprising five indicators: Innovation and risktaking, attention to detail, outcome orientation, people orientation, and team orientation. Additionally, organizational innovation reflects the public organization's ability to engage with the community, effectively utilize communication channels, and provide products and services to attract potential or existing customers [15]. The measurement of this variable, following Kattel et al. [19], includes input to innovation, innovation processes, outputs of innovation, outcomes of innovation, and environmental conditions.

The three constructs are qualitative variables, so the quantification process requires a measurement scale. The measurement scale applied in this study is the Likert scale, ranging from 1, 2, 3, 4, to 5. The initial step in the data processing process is to test the validity and reliability of the constructs. Validity testing includes outer loading. In addition, discriminant validity is utilized to test validity testing. Finally, to estimate the functional relationships between variables, both directly and indirectly, we use structural equation modelling (SEMPLS).

4. Results and Discussion

SEM-PLS is employed as an analytical model due to its suitability with the study's model and objectives [11]. This methodology encompasses a measurement model analysis to elucidate the validity and reliability of the study's data, secondary confirmatory factor analysis for validating each dimension's identification, general method bias tests to address potential biases arising from respondent data collection, and structural equation model analysis to test the hypotheses [16].

The outcomes of the validity and reliability assessments are detailed in Table 1. The loading factor values, ranging from 0.733 to 0.854, indicate good internal validity. The Cronbach's Alpha values, ranging from 0.778 to 0.894, demonstrate good reliability. Similarly, the Composite Reliability (CR) values, ranging from .861 to .880, signify strong reliability. The average variance extract (AVE) values between 0.643 and 0.676 suggest satisfactory discriminant validity.

Table 1. The result of the validity and reliability test

Constructs	Item	Outer loadings	Cronbach's alpha	Composite reliability	Average variance extracted (AVE)
Organizational performance	OP1	0.854	0.880	0.882	0.676
	OP2	0.811			
	OP3	0.797			
	OP4	0.820			
	OP5	0.827			
Organizational culture	OC1	0.824	0.870	0.870	0.657
	OC2	0.785			
	OC3	0.793			
	OC4	0.839			
	OC5	0.812			
Organizational innovation	OI1	0.816	0.861	0.869	0.643
	OI2	0.733			
	OI3	0.827			
	OI4	0.850			
	OI5	0.778			

Source: Author's computation by Smart-PLS.

The evaluation of the structural model aims to determine whether the model used to estimate the functional relationships between variables can provide accurate estimation results. In other words, the evaluation assesses the model's accuracy in predicting the influence of an exogenous variable, such as organizational culture, on endogenous variables comprising the organization's innovation and performance. In the structural evaluation, a commonly used metric is the R-squared value for each endogenous variable. According to the framework of relationships between variables, the endogenous variables in this study consist of organizational innovation and performance. The R-squared of these variables is as in Table 2.

Table 2. R² and Adjusted R²

	R2	Adjusted R ²
Organizational performance	0.597	0.594
Organizational innovation	0.217	0.214

Source: Author's computation by Smart-PLS.

Based on Table 2 above, the R-squared of the endogenous variable is 0.597 for organizational performance and 0.217 for organizational innovation, respectively. The two determination coefficients indicate that the applied structural model of estimating the relationships between variables fulfils good criteria.

As explained earlier, this study applies SmartPLS to estimate the functional relationships between variables. The Smart-PLS output points out these functional relationships as depicted in the PLS bootstrapping below.

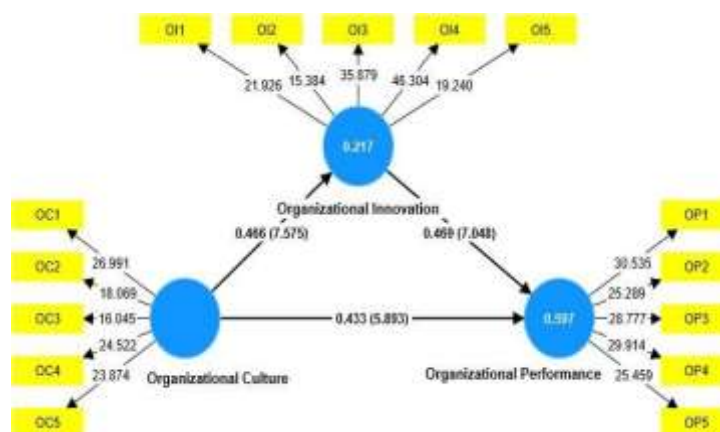


Figure 1. PLS-Bootstrapping

The organizational culture significantly and positively influences organizational performance ($\beta = 0.433$, $p < 0.05$). The stronger the values and norms embraced within the organization and the better the perceived organizational culture, the better the organizational performance. Therefore, the first hypothesis (H_1) stating that "Organizational culture has a positive effect on organizational innovation" can be accepted.

The organizational culture of the land agency fundamentally reflects the values and norms adhered to by all its employees. In carrying out their duties, employees are encouraged to engage in innovative activities and be responsive to potential risks, pay attention to details to efficiently complete tasks, prioritize effectiveness and efficiency, be outcome and service-oriented toward the community, and have a team-oriented approach. The better the implementation of these cultural principles, the greater the employees' ability to perform their tasks, ultimately leading to improved organizational performance. This research finding confirms Sackmann's [29] perspective that organizational performance is closely related to employees' views of culture. When employees perceive the values and norms embraced by the organization positively, it can stimulate enthusiasm, and work motivation impacts individual performance improvement, but it also contributes to the overall organizational performance. This finding aligns with Zhang et al.'s [36] research, which similarly demonstrated the positive effect of culture on organizational performance.

Table 3. Direct effect and hypothesis testing

Hypothesis	Direction of effect	Estimate coeff	t-test	p-value	finding
H_1	OC \rightarrow OP	0.433	5.893	0.000	Accepted
H_2	OC \rightarrow OI	0.466	7.575	0.000	Accepted
H_3	IMO \rightarrow OP	0.469	7.048	0.000	Accepted

Source: Author's computation by Smart-PLS

As shown in Table 3 above, organizational culture positively impacts organizational innovation

($\beta = 0.466$, $p < 0.05$). This thing indicates that the implementation of the values and norms of an organization can significantly stimulate the emergence of innovative work behavior among employees. The better their perception of organizational culture, the higher the potential for the emergence of creative ideas and work behaviors, which, in turn, manifest in the form of process innovation [4]. Therefore, the second hypothesis (H_2), stating that "Organizational culture has a positive effect on organizational innovation," can be accepted.

In the context of the land agency in the province of Aceh, organizational innovation takes the form of process/administrative innovation and services innovation. Overall, these innovations impact the employees' ability to perform their duties as providers of public services regarding land administration. The presence of a positive and significant influence of organizational culture on organizational innovation is consistent with the views of Olori & Mark [26] that the organizational culture influences company innovation positively.

Organizational innovation has positive effects on organizational performance ($\beta = 0.469$, $p < 0.05$). The better the innovation, the higher the organizational performance. Therefore, the third hypothesis (H_3), stating that "Organizational innovation has a positive effect on organizational performance," can be accepted. This finding confirms the results of the study by Odumeru [25], which revealed a positive influence of innovation on organizational performance. Innovation within an organization can enhance competitiveness and the work productivity of officers. In public institutions, such as land agencies, innovation is manifested in the availability of resources, especially work equipment for innovation, the innovation process itself, the output of innovation, and the supportive environment for innovation. The innovation process is translated into innovative activities carried out by employees in providing services to the public. Improvements in service delivery, coupled with efforts to enhance services, positively impact performance improvement. It is what causes the positive influence of organizational innovation on the performance of the public institution. This finding aligns with the views of Phan [28], asserting that innovation drives performance improvement.

The positive and significant influence of organizational innovation on organizational performance is also consistent with the findings of the research conducted by Schuldt & Gomes [31], which similarly demonstrated the impact of culture on organizational performance. Earlier empirical research by Suhag et al. [34] also concluded that process innovation significantly improves organizational performance.

Furthermore, regarding the indirect influence between variables, as shown in Table 4, organizational culture also influences organizational performance through organizational innovation. This indirect influence is highly significant. Thus, the fourth hypothesis (H_4), stating that "Organizational innovation mediates the influence of

organizational culture on organizational performance," can be accepted.

Table 4. Indirect effect and hypothesis testing

Hypothesis	Direction of effect	Estimate coeff	t-test	pvalue	finding
H ₄	OC → OI → OP	0.469	7.048	0.000	Accepted

Source: Author's computation by Smart-PLS

The mediating effect of organizational innovation on the functional relationship between organizational performance and organizational culture indicates that the existence of innovation can serve as an intermediary for both constructs. The positive influence of culture on organizational performance occurs not only directly but also indirectly. In fact, organizational innovations enhance the positive impact of culture on organizational performance.

5. CONCLUSION

The National Land Agency of Aceh Province plays a crucial role in providing public services in land management. The success of this institution depends on organizational performance. This research investigates the influence of culture on organizational innovation and performance. Additionally, innovation is positionalized as a mediating variable in the functional relationship between culture and organizational performance. Using a sample of 248 officers distributed across 24 National Land Agency offices throughout Aceh, data collection through a questionnaire distributed via Google Forms. The statistical tool for data processing is the Structural Equation Model (SEM) Smart-PLS.

The study concludes that organizational culture positively affects the organizational performance of the National Land Agency offices. The better the perceived culture, the better the organizational performance. Furthermore, organizational culture also significantly impacts organizational innovation. The values and norms in the workplace environment encourage innovative behaviors among officers. The innovative model also has a positive and significant impact on the organizational performance of the land agency offices. The better the creative model, the higher the organizational performance in carrying out its tasks and functions, namely providing land-related services to the public. In addition to its positive impact on organizational performance, innovation also mediates the influence of culture on organizational performance.

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