



## The Role of Green Innovation as a Mediator of Organizational Culture on Knowledge Management in Private Universities

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Received : January 29, 2024

Revised : February 5, 2024

Accepted : March 9, 2024

Online : March 13, 2024

### Abstract

*Private Higher Education involves efforts to effectively manage, develop, and utilize knowledge in support of organizational goals for providing education. This research aims to explore the influence of organizational culture on knowledge management mediated by green innovation in private universities. Methodology: The research employed a quantitative design, utilizing questionnaires to collect data from a sample of 305 respondents at private universities. The data was then analyzed using the Smart PLS structural equation model. Findings: The research findings indicate that Hypothesis (H1) is substantiated, confirming that organizational culture has an effect on knowledge management. H2 is also validated, demonstrating that organizational culture has an effect on green innovation. Furthermore, (H3) is proven, indicating that green innovation has an effect on knowledge management. Lastly, (H4) is supported, indicating that organizational culture has an effect on knowledge management, with green innovation acting as a mediator. These findings provide valuable insights into the dynamics of private universities. Importance of Research: The significance of this research lies in its attempt to address a knowledge gap in the literature, particularly within the context of private higher education. The unique characteristics of Private Higher Education as Quasi Public Goods present a distinctive context that requires understanding for achieving sustainability. Limitations: However, it is acknowledged that limitations exist in this research. To ensure the robustness of the results, further observations are needed, potentially incorporating additional variables and expanding the sample size.*

**Keywords:** Green Innovation, Organizational Culture and Knowledge Management, Private Universities

### INTRODUCTION

Private Universities management regulations are based on Article 21 of Government Regulation Number 4 of 2014 concerning the Implementation of Higher Education and Management of Higher Education Institutions. This regulation stipulates that the management of higher education institutions, including private universities, includes higher education autonomy, higher education patterns, higher education governance, and public accountability in resource development (Permen UU 16 2018). Resource-based development (resource base view) (Mahoney and Pandian, 1992). Improving organizational capabilities and competencies, contributions to management practices are carried out with the aim of increasing competitive advantage through the utilization of resources, both physical and non-physical. Conceptually, discussions in academic circles regarding knowledge management models and practices in intensive and practical organizations occurred in the mid-1990s, with experiments and practical experiments intensifying during that period (Hood, 1991). The importance of knowledge management and management within organizations can be further studied (Nonaka, 1991; North and Kumta, 2018).

The theoretical basis of organizational culture for knowledge management involves understanding how the values, norms, and beliefs embedded in organizational culture can influence the process and success of knowledge management within an entity (Alavi et al., 2005; Ahmady et

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al., 2016; Dash and Padhy, 2021). Some theories and concepts that serve as a foundation for comprehending the relationship between organizational culture and knowledge management include: This theory emphasizes that organizational culture constitutes a set of shared values, norms, and practices among members of an organization (Schein, 2018). Organizational culture plays a crucial role in shaping behavior, decisions, and interactions within the organization. The relationship between organizational culture and knowledge management is evident in the extent to which the culture supports or inhibits knowledge sharing, learning, and innovation.

The influence of organizational culture on green innovation in private universities is a crucial element in comprehending how sustainability and innovation practices can be integrated into the higher education context supporting research (Martins et al., 2004; Büschgens et al., 2013; Krishnakumar, 2017). But decades of research have been more impressive (Roespoedji et al., 2019; Nassani et al., 2022). The problems observed in private universities' organizational culture can significantly influence green innovation: An organizational culture that emphasizes the values of sustainability and environmental awareness will stimulate university members to create and support green innovation.

A culture that encourages participation and collaboration among faculty, staff, and students can pave the way for green innovation involving various parties. The influence of green innovation on knowledge management in private universities can establish a mutually reinforcing relationship between sustainability practices and knowledge management, supporting research Li et al., (2022). Green innovation can serve as a mediating mechanism between organizational culture and knowledge management in private universities. This implies that green innovation plays a crucial role in bridging the influence of organizational culture on the development and application of management knowledge, supporting research (Imran et al., 2021; Sahoo et al., 2023). The fundamental background of the research raises the topic: "(The Role of Green Innovations as a Mediator of Organizational Culture in Knowledge Management of LLDIKTI Region II Private Universities)". This research is poised to contribute valuable insights into the dynamics of organizational culture, green innovation, and knowledge management within the unique context of private higher education institutions in LLDIKTI Region II.

## LITERATURE REVIEW

Knowledge management (KM) is the process of capturing, organizing, storing, and utilizing an organization's collective knowledge to achieve its objectives. It involves the systematic management of information and expertise to enhance decision-making, innovation, and overall performance (Nonaka, 1991; Wiig, 1993). The concept of knowledge management has an important role in supporting the development and sustainability of private universities. The application of this knowledge management concept in private universities can help increase competitiveness, quality of education, and contribution to the development of society and industry, context supporting research (Shahzad et al., 2020; Allameh et al., 2011; Al Saifi, 2015; Dash & Padhy, 2021).

### Organizational Culture

The organizational culture within a private university is a critical aspect that significantly influences various aspects of its operations. Organizational culture encompasses the shared values, beliefs, norms, and behaviors that shape how members of the institution interact and work together. Understanding and actively managing the organizational culture in a private university is crucial for fostering a positive and effective academic environment. A well-defined and aligned culture contributes to the institution's reputation, the success of its educational mission, and the satisfaction of its stakeholders, supported by theory (Cameron and Quinn, 2011; Schein, 2018) and several studies of various organizations, (Adeinat and Abdulfatah, 2019; Imran et al., 2021). Based

on the explanation above, the first hypothesis was built, the researcher concluded that: Hypothesis (H1): Organizational culture has a positive effect on knowledge management in private university

### Green Innovation

Organizational culture refers to the shared values, beliefs, and practices that shape the behavior and decisions of individuals within an organization. Organizational culture plays a crucial role in fostering or hindering green innovation. A culture that values sustainability, environmental consciousness, and openness to change is more likely to support and encourage green innovation initiatives, context supporting research (Ather & Awan, 2021; Lam et al., 2021; Allameh et al., 2011), other research (Sadeh Sharifirad and Ataei, 2012; Chang and Chen, 2013; Büschgens et al., 2013; Tepe Küçüköğlü and Pınar, 2016; Roespinoedji et al., 2019; Wang et al., 2022). Based on this explanation, the second hypothesis is built as follows: Hypothesis (H2): Organizational culture has a positive effect on green innovation in private universities.

Green innovation involves the development and implementation of environmentally sustainable solutions, products, or practices. Green innovation contributes to the creation of new knowledge within an organization. The process of researching, developing, and implementing green solutions generates valuable insights and expertise. Knowledge management practices help capture, share, and leverage this newly created knowledge for organizational benefit, context supporting research (Ahmed, 2017; Gürlek and Tuna, 2018; Newell et al., 2009; Naveed et al., 2022; Maldonado et al., 2021; Shahzad et al., 2020; Sahoo et al., 2023). Based on this explanation, the third hypothesis is built as follows: Hypothesis (H3): Green Innovation has a positive effect on Knowledge management in Private University.

Mediation in this context refers to the moderating effect that organizational culture has on the relationship between green innovation and knowledge management. The organizational culture influences how knowledge is managed within the context of green innovation (Gürlek and Tuna, 2018; Ullah et al., 2023), other research (Wang, 2019; Wang et al., 2022; Sunyoto et al., 2023; Fang et al., 2022; Imran et al., 2021), Based on this explanation, the fourth hypothesis is built as follows: Hypothesis (H4): Organizational culture has a positive effect on knowledge management as a mediator of Green innovation in private universities.

### RESEARCH METHODOLOGY

This conceptual thinking framework was prepared based on the theoretical and empirical studies described previously. Taking this into account, this research uses a quantitative method with non-probability sampling, using a purposive sampling technique. This technique is the determination of samples selected based on various considerations and certain criteria. The research sample consisted of 61 private universities that had good accreditation, taking into account data from a total of 305 respondents using a questionnaire using google forms (Sekaran, 2003).

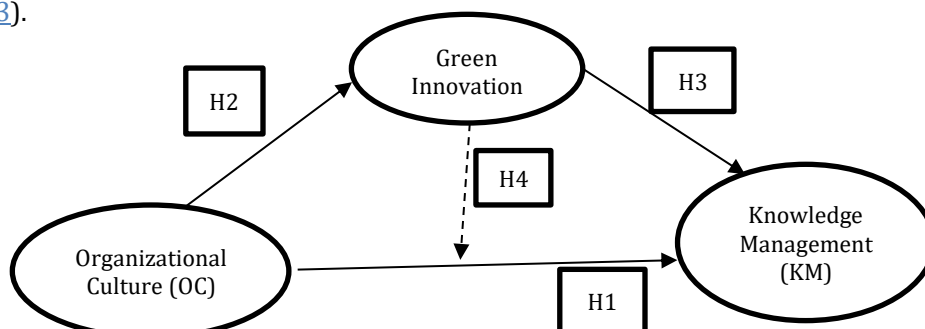


Figure 1. Research Framework

Measurements were carried out using online and offline questionnaires, we applied survey methods to collect data and test the proposed hypotheses. Data analysis was conducted using the Structural Equation Model (SEM) technique with Partial Least Square (PLS) to analyze the collected data. Multivariate data analysis was applied to draw conclusions. The validity of the model was assessed with loading values greater than 0.60, and reliability was determined with Cronbach's alpha and composite reliability, both exceeding 0.60, indicating reliable data (Baron and Kenny, 1986; Hayes, 2018; Hair et al., 2020).

## FINDINGS AND DISCUSSION

### Explain Validity and Reliability Estimation

The following section provides the results of research instrument tests, descriptive statistical analysis, and the analysis results using SEM-PLS. Additionally, validity tests for each item of the three variables were conducted, utilizing Average Variance Extracted (AVE) analysis.

**Table 1.** The Average Variance Extracted (AVE) Score

No	Item Variable	Number of items	AVE	Decision
1	Organizational Culture	12	0.615	Valid
2	Knowledge Management	11	0.587	Valid
3	Green Innovation	11	0.622	Valid

The results presented in Table 1 indicate that the three variables tested (flexible organizational culture, green innovation, and knowledge management) have satisfactory Average Variance Extracted (AVE) scores, each exceeding the threshold of 0.50. This suggests that the constructs have good convergent validity. Additionally, the loading factor values for the individual measures within each variable (OC.1–OC.12 for flexible organizational culture, GI.1–GI.11 for green innovation, and KM.1–KM.11 for knowledge management) are above the 0.6 threshold, indicating that each item is valid in measuring its respective construct. In summary, the results support the validity of the measurement model used in the research. Validity is crucial in ensuring that the measures accurately capture the intended constructs.

**Table 2.** The Reliability Calculation

No	Item Variable	Cronbach's Alpha	Composite Reliability	Decision
1	Organizational Culture	0.946	0.937	Reliable
2	Knowledge Management	0.940	0.930	Reliable
3	Green Innovation	0.952	0.945	Reliable

Next it was explained. The reliability construct for the variables studied in this study was shown in Table 3. The Cronbach's Alpha range was between 0.946 and 0.952, and the composite reliability was between 0.937 and 0.945, indicating this reliability in this study.

**Table 4.** The Summarize of Hypothesis Estimation

Variable	Direct	Indirect	Total	P-Value	Decision
Organizational Culture & Knowledge Management	0.555		0.555	0.001	H1: Accepted
Green Innovation & Knowledge Management	0.336		0.336	0.001	H2: Accepted
Organizational Culture & Green Innovation	0.886		0.886	0.001	H3: Accepted
Organizational Culture & Green Innovation & Knowledge Management		3.228		0.001	H4: Accepted

### **Based on Hypothesis Testing Results**

The hypothesis put forward in this research was confirmed and proven, as illustrated in Table 4. The influence between variables has been confirmed with a p-value of 0.001 (0.005) which shows that it meets the criteria.

## **CONCLUSIONS AND FURTHER RESEARCH**

### **Conclusion**

The research background shows the need to investigate the influence of organizational culture on knowledge management with the mediation of green innovation in private universities. Emphasizes that organizational culture is a set of values, norms, and practices shared by members of an organization. Organizational culture plays an important role in shaping behavior, decisions, and interactions within an organization. Testing the hypothesis H1 in this study was accepted, showing that organizational culture has an influence on knowledge management. These results also indicate that there is a significant influence of organizational culture on knowledge management according to the results shown. These findings provide evidence that this first hypothesis is proven and in line with the empirical wisdom of the research, (Alavi et al., 2005; Ahmady et al., 2016; Dash and Padhy, 2021).

Incorporate aspects of sustainability, environmental ethics and green innovation into the academic curriculum. This includes increasing students' understanding of environmental issues and innovative solutions. Testing the hypothesis H2 in this research was accepted, it was proven that organizational culture had an effect on green innovation. These results also show that the influence of organizational culture on green innovation has significant results as indicated. Furthermore, the results of his study (Schein, 2010; Chang and Chen, 2013). Study, it is proven that organizational culture towards green innovation regarding the organizational identity of the group will depend on the extent of the level of green innovation supporting research (Martins et al., 2004; Büschgens et al., 2013; Krishnakumar, 2017).

The influence of green innovation on knowledge management in private universities can form a mutually reinforcing relationship between sustainability practices and knowledge management. Testing the hypothesis H3 in this research was accepted, it was proven that green innovation had an effect on knowledge management. These results also show that the influence of organizational culture on knowledge management at private universities has significant results as indicated. Supported by Li et al., (2022).

Green innovation can function as a mediating mechanism between organizational culture and knowledge management in private universities. This means that green innovation can play an important role in bridging the influence of organizational culture on the development and application of management knowledge. Based on the empirical tests carried out, the hypothesis H4 has been accepted which states that organizational culture influences knowledge management to mediate green innovation at LLDIKTI Region II Private Universities. These results also show the influence of organizational culture on knowledge management at private universities in LLDIKTI Region II. These results prove that this fourth hypothesis is proven and in line with empirical policies (Imran et al., 2021; Sahoo et al., 2023) which support this research.

### **Research Limitations and Further Research Directions**

The following are several issues concerned with this study:

1. This research faces several problems, one of which is the use of a small sample and a complex model. Therefore, this research sample cannot meet the required data requirements. In the future, it is recommended to use a larger sample size to meet the assumptions required by this study.

2. In this research, there were shortcomings such as limited research funds which prevented a wider sample from being obtained. These limitations need to be addressed in the future so that research can be conducted better.

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