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Knowledge Sharing and Learning Culture in Driving Employee Innovation Through Adaptive Competence as a Mediating Variable

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ABSTRACT
Public sector organizations are increasingly required to be adaptive, collaborative, and innovative in responding to technological advancements and the growing complexity of societal needs. This study aims to examine the role of knowledge sharing and learning culture in enhancing employee innovation, with adaptive competence as a mediating variable at the Badan Pendapatan Daerah (Bapenda) of Badung Regency. A quantitative approach was employed using a saturated sampling technique involving all 378 employees. Data were collected through a Likert-scale questionnaire and analyzed using Structural Equation Modeling–Partial Least Squares (SEM-PLS). The results reveal that knowledge sharing has a positive and significant effect on employee innovation, indicating that stronger knowledge-sharing practices lead to greater innovative behavior. Learning culture positively and significantly influences employee innovation, indicating that a supportive learning environment enhances employees' innovative capacity. Knowledge sharing also strengthens adaptive competence, while a learning culture similarly improves employees' adaptability. Adaptive competence itself has a significant positive effect on employee innovation, showing that more adaptable employees tend to be more innovative. Mediation results confirm that adaptive competence partially mediates the effects of both knowledge sharing and learning culture on employee innovation. Thus, these factors enhance innovation not only directly but also indirectly through improved adaptive capabilities. These findings highlight the strategic importance of strengthening learning culture, facilitating knowledge sharing, and enhancing adaptive competence as key enablers of employee innovation in the public sector context.

Keywords: knowledge sharing, learning culture, adaptive competence, employee innovation, public sector, SEM-PLS.

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INTRODUCTION
Public sector organizations today face increasing pressure for change due to technological advancement, globalization, and the growing complexity of societal needs. Government institutions are required not only to function administratively but also to innovate and adapt to digital transformation, data transparency, and demands for efficient public services. Innovation has become essential to maintaining the relevance of bureaucracy, which requires human resources with strong learning culture and collaborative capabilities. Formal training alone is no longer sufficient; values such as continuous learning and knowledge sharing have become fundamental in building an innovative work environment. Huang and Mou (2021) emphasize that knowledge exchange strengthens creativity and organizational responsiveness in the public sector, although such practices often encounter obstacles from bureaucratic hierarchy and weak reward systems.
Learning culture also plays a key role in enhancing organizational resilience to disruption by cultivating a learning mindset that encourages employees to grow through experience (Chughtai et al., 2024). However, the effectiveness of knowledge sharing and learning culture strongly depends

on adaptive competence, defined as the ability to adjust behavior and skills in response to change (Mokhchy et al., 2025). This aligns with Organizational Learning Theory (Argyris & Schön, 1978), which highlights that the success of organizational learning depends on the readiness of individuals to translate learning outcomes into real innovative behavior.

This research focuses on the Badan Pendapatan Daerah (Bapenda) of Badung Regency, a strategic institution that successfully recorded local revenue (PAD) of IDR 4.07 trillion in 2022 (APBD Badung, 2022). To improve service innovation, Bapenda implemented the digital tax system E-Palapa on April 1, 2023 (Letter No. 973/2341/BAPENDA). The system has recorded 10,475 users, with villas (4,389) and restaurants (3,132) as the dominant sectors. However, some sectors, such as glamping, exhibitions, and beauty contests, have no registered users, indicating unequal digital adoption. Additionally, although PAD achievement increased significantly in 2022–2023, reaching 97%, the first semester of 2024 only achieved 88.4%, signaling challenges in HR readiness and technological implementation.

Moreover, the Renstra Semesta Berencana Bapenda Badung 2021–2026 identifies weaknesses in HR quality and employee placement, reinforcing the urgency of enhancing knowledge sharing and learning culture to support innovation. Empirically, prior studies demonstrate the influence of knowledge sharing on innovation (Huang & Mou, 2021; Akram et al., 2020) as well as learning culture on innovative behavior (Chughtai et al., 2024; Song et al., 2019). However, most of these studies focus on the private sector, and very few examine the public sector, particularly regional tax agencies. Furthermore, limited research has incorporated adaptive competence as a mediating variable, despite its growing recognition as a critical bridge between organizational learning and innovation (Mokhchy et al., 2025).

Therefore, this study addresses these research gaps by examining the role of knowledge sharing and learning culture in promoting employee innovation through adaptive competence as a mediating variable. Bapenda Badung is selected due to its strategic role and ongoing implementation of digital innovations such as E-Palapa, making it an appropriate context for understanding learning and innovation dynamics in regional government bureaucracy.

Based on Organizational Learning Theory (Argyris & Schön, 1978), knowledge sharing is a key process in building collective learning that serves as a foundation for organizational innovation. When employees actively share information, ideas, and work experiences, they create a learning cycle that facilitates creative solutions and system improvements. A work environment that encourages open information exchange enables the accumulation of knowledge and exploration of new approaches that stimulate innovation. Recent studies support this positive relationship. Azeem et al. (2021) found that knowledge sharing significantly enhances innovative capacity through greater team collaboration. Yasir et al. (2021) emphasize that innovative work behavior is highly dependent on the intensity of knowledge sharing. Prasetyo et al. (2024) further show that knowledge sharing in continuous learning environments leads to creativity and innovation. In the public sector context, Ahmad et al. (2025) argue that knowledge sharing accelerates organizational transformation, and Al-Bashayreh et al. (2022) confirm its importance in boosting digital innovation within government services undergoing technological transition.

H1**:** Knowledge sharing has a positive effect on employee innovation at Bapenda Badung Regency.

Learning culture represents an organization's willingness to grow through reflection, experience, and continuous improvement. A work environment that supports learning from mistakes and embraces change enhances organizational resilience against disruptions.

Nugroho (2024) reports that organizational openness increases employee freedom to propose new ideas. Chughtai et al. (2024) and Flores-Bello et al. (2024) also show that a strong learning culture leads to innovative behavior by establishing psychological safety for experimentation. Nurhayati et al. (2023) find that learning culture reinforces innovation in response to digital transformation. In the public sector, Imran et al. (2021) identify a learning-oriented culture as a key driver of innovation, while Amankwah-Amoah (2022) highlights its role in enhancing adaptability to technological change.

H2**:** Learning culture has a positive effect on employee innovation at Bapenda Badung Regency.

Knowledge sharing not only enriches organizational knowledge but also strengthens employees' adaptive competence. Through active knowledge exchange, employees gain new insights and relevant skills needed to respond to workplace changes. Ahmad et al. (2025) assert that knowledge sharing directly contributes to developing adaptive capabilities in the public sector, as social interaction accelerates new ways of thinking. Murtiningsih et al. (2024) note that it builds new general competencies and sharpens existing ones. Harandi et al. (2024) reveal that knowledge-exchange involvement increases readiness for uncertainty. Nuraini & Sumampouw (2024) confirm that more effective knowledge sharing leads to greater competency levels among employees.

H3: Knowledge sharing positively affects adaptive competence at Bapenda Badung Regency.

A strong learning culture encourages exploration, experiential learning, and self-development. Within Organizational Learning Theory, this acts as a catalyst for developing individuals who can quickly adjust to structural and technological changes. Espinosa & Martinez-Lozada (2025) identify learning culture as essential for adaptive workforce development. Iman et al. (2025) highlight that a learning culture facilitates idea and knowledge exchange, thus strengthening competencies. Chughtai et al. (2024) further confirm that a learning culture increases self-awareness and openness to challenges.

H4**:** Learning culture positively affects adaptive competence at Bapenda Badung Regency.

Adaptive competence refers to one's ability to adjust behaviors, attitudes, and work skills to organizational demands. Adaptive employees are more likely to explore solutions, adopt technologies, and manage risks — essential characteristics for innovation. Darmayanti (2025) identifies competence as a driver of innovation and organizational efficiency. Georgiou & Maksymenko (2025) reinforce that highly adaptive employees often become sources of innovative ideas. Harandi et al. (2024) support the idea that adaptability bridges organizational learning and service innovation.

H5: Adaptive competence positively affects employee innovation at Bapenda Badung Regency.

For knowledge sharing to translate into innovation, employees must be able to absorb and transform information into actionable new practices. Therefore, adaptive competence acts as a mediating mechanism. Ahmad et al. (2025) confirm a stronger influence of knowledge sharing on innovation when employees display high adaptability. Harandi et al. (2024) state that adaptive employees can convert shared knowledge into creative solutions.

H6: Adaptive competence mediates the effect of knowledge sharing on employee innovation.

Learning culture fosters continuous learning; however, its impact on innovation becomes optimal when employees are adaptive enough to apply new knowledge to real practices. Hruška et al. (2024) argue that a learning culture can only produce innovation when internalized by adaptive individuals. Espinosa & Martinez-Lozada (2025) identify adaptive competence as a bridge between learning environment and innovative outcomes.

H7**:** Adaptive competence mediates the effect of learning culture on employee innovation.

METHOD

This research was conducted at the Regional Revenue Agency (Bapenda) of Badung Regency, located on Jalan Raya Sempidi, Mengwi, Badung. The research site was selected because Bapenda is actively promoting digital transformation through the "E-Palapa" e-government service, a web-based tax system for registration, reporting, and payment that has been implemented since April 1, 2023 (Letter No. 973/2341/BAPENDA). Preliminary observations indicated that some employees were still passive, less engaged in knowledge sharing, and had not yet maximized the use of digital work tools. This aligns with the Renstra Semesta Berencana Bapenda 2021–2026, which highlights the limitations of human resource quality and suboptimal employee placement, indicating a gap between organizational potential and employee capabilities in managing learning and driving innovation.

The research population consists of all 378 Bapenda employees working across various divisions and regional offices (UPTD). A saturated sampling technique was used, meaning that the entire population was included as the sample, ensuring that the collected data accurately reflect the actual conditions regarding knowledge sharing, learning culture, adaptive competence, and employee

innovation. The data used in this study are quantitative and obtained through a structured questionnaire using a four-point Likert scale (1 = strongly disagree to 4 = strongly agree), selected to reduce central tendency bias and encourage more decisive responses (Sekaran & Bougie, 2016). The questionnaire was distributed both directly and digitally after pilot testing to ensure the validity and reliability of the instruments. In addition to primary data, secondary data such as organizational structure, annual reports, and employee records were also collected to support descriptive analysis.

Data analysis was performed using Partial Least Squares–Structural Equation Modeling (PLS-SEM) with SmartPLS 4.0 software. This method was chosen because it accommodates complex latent variable models without requiring assumptions of normal data distribution (Ghozali & Latan, 2022). The analysis proceeded in two main stages: evaluation of the outer model and the inner model. The outer model evaluation included testing convergent validity through outer loading values (> 0.70), discriminant validity through cross-loading and the Average Variance Extracted (AVE > 0.50), and instrument reliability through composite reliability and Cronbach's alpha (> 0.70) (Hair et al., 2021).

Meanwhile, the inner model evaluation assessed R-square values to determine the predictive power of endogenous variables and Q-square values to measure predictive relevance ($Q^2 > 0$ indicates predictive relevance). The significance of relationships among variables was tested using bootstrapping, and hypotheses were accepted if the p-value < 0.05.

The mediating role of adaptive competence was examined following Hair et al. (2021) by evaluating direct and indirect effects through the significance of pathways A, B, C, and D. Additionally, the mediation strength was measured using the Variance Accounted For (VAF) by comparing the magnitude of the indirect effect against the total effect. A VAF value < 0.20 indicates no mediation, 0.20–0.80 indicates partial mediation, and > 0.80 indicates full mediation. All analytical procedures were designed to comprehensively examine the influence of knowledge sharing and learning culture on employee innovation through adaptive competence as a mediating variable.

FINDING AND DISCUSSION

Respondent Characteristics

Based on the questionnaire responses from 311 employees at the Regional Revenue Agency (Bapenda) of Badung Regency, respondent characteristics are presented according to position, gender, educational background, and age, as shown below:

Table 1. Respondent Characteristics by Position

No	Position	Number (persons)	Percentage (%)
1	Head of Agency	1	0.3
2	Division Head	3	1.0
3	Sub-Division Head	7	2.3
4	Staff	300	96.5
Total		**311**	**100**

Source: Processed Data, 2025

Most respondents were staff members, totaling 300 persons or 96.5%, while only a small proportion occupied structural positions such as Head of Agency, Division Head, and Sub-Division Head. This indicates that the majority of respondents are involved in operational and public service functions at Bapenda Badung.

Table 2. Respondent Characteristics by Gender

No	Gender	Number (persons)	Percentage (%)
1	Male	175	56.3
2	Female	136	43.7
Total		**311**	**100**

Source: Processed Data, 2025

The majority of respondents were male, amounting to 175 persons (56.3%), while female respondents accounted for 136 persons (43.7%). This suggests a higher proportion of male

employees, which may indicate that tasks requiring greater mobility are predominantly performed by male staff.

Table 3. Respondent Characteristics by Educational Background

No	Education	Number (persons)	Percentage (%)
1	Senior High School	28	9.0
2	Diploma	19	6.1
3	Bachelor's Degree	204	65.6
4	Master's Degree	58	18.6
5	Doctoral Degree	2	0.6
Total		**311**	**100**

Source: Processed Data, 2025

Most respondents held a Bachelor's degree (65.6%), followed by Master's degree holders (18.6%). This indicates that employees at Bapenda Badung have a relatively high educational background supporting professionalism in administrative and public service functions.

Table 4. Respondent Characteristics by Age

No	Age	Number (persons)	Percentage (%)
1	21–30 years	53	17.0
2	31–40 years	69	22.2
3	41–50 years	105	33.8
4	> 50 years	84	27.0
Total		**311**	**100**

Source: Processed Data, 2025

The dominant age group was 41–50 years (33.8%), followed by employees aged above 50 years (27%). This shows that most employees are within productive age categories and possess substantial work experience, which contributes to effective task performance.

Inner Model Evaluation

Evaluation of the inner model was performed using the coefficient of determination (R-square), which reflects the goodness of fit and explains how well endogenous constructs can be predicted by exogenous variables.

R-Square Results

According to Chin (1998), R-square values of 0.67, 0.33, and 0.19 indicate substantial, moderate, and weak predictive power, respectively.

Table 5. R-Square Values

Variable	R-Square
Adaptive Competence	0.458
Employee Innovation	0.361

Source: Processed Data, 2025

The R-square value for Adaptive Competence is 0.458, meaning that 45.8% of its variance is explained by knowledge sharing and learning culture, indicating moderate predictive power. Meanwhile, Employee Innovation has an R-square value of 0.361, meaning that 36.1% of the variance is explained by knowledge sharing, learning culture, and adaptive competence, also indicating moderate predictive power.

Q-Square Predictive Relevance

Q-square (Q^2) measures the predictive relevance of the model. A value of $Q^2 > 0$ indicates predictive relevance.

The Q-square value is calculated as follows:

$$Q^2 = 1 - (1 - R^2_1)(1 - R^2_2)$$
$$= 1 - (1\text{-}0{,}458)(1\text{-}0{,}361)$$
$$= 1 - (0{,}542)(0{,}639)$$
$$= 1 - 0{,}346 = 0{,}654$$

A Q-square value of 0.654 indicates that 65.4% of the model has predictive relevance—classified as strong—while the remaining 34.6% is influenced by variables not included in the model.

Hypothesis Testing

Hypothesis testing was performed using the p-value criterion. A hypothesis is supported when p-value < 0.05 (Hair et al., 2021). The analysis was conducted through bootstrapping in SmartPLS 4.1 on the relationships among variables. This study tested seven hypotheses, including five direct effects and two indirect (mediated) effects. Hypothesis testing results are further illustrated in the structural model output (SmartPLS bootstrapping figure), which can be explained in the subsequent section.

Table 6. Direct Effect Hypothesis Testing Results

Hypothesis	Path	Original Sample	T-Statistics	P-Values	Result
H1	Knowledge Sharing → Employee Innovation	0.166	2.618	0.009	Supported
H2	Learning Culture → Employee Innovation	0.235	3.508	0.001	Supported
H3	Knowledge Sharing → Adaptive Competence	0.429	7.735	0.000	Supported
H4	Learning Culture → Adaptive Competence	0.336	5.288	0.000	Supported
H5	Adaptive Competence → Employee Innovation	0.302	4.756	0.000	Supported

Source: Processed Data, 2025

The effect of knowledge sharing on employee innovation, as shown in Table 6, obtained an original sample value of 0.166 with a p-value of 0.009 < 0.05 and a T-statistic of 2.618 > 1.96. This indicates that knowledge sharing has a positive and significant effect on employee innovation. Therefore, the first hypothesis (H1) is supported.

The effect of learning culture on employee innovation obtained an original sample value of 0.235 with a p-value of 0.001 < 0.05 and a T-statistic of 3.508 > 1.96. These results indicate that learning culture has a positive and significant effect on employee innovation. Thus, the second hypothesis (H2) is supported.

The effect of knowledge sharing on adaptive competence obtained an original sample value of 0.429 with a p-value of 0.000 < 0.05 and a T-statistic of 7.735 > 1.96. This demonstrates that knowledge sharing has a positive and significant effect on adaptive competence. Therefore, the third hypothesis (H3) is supported.

The effect of learning culture on adaptive competence obtained an original sample value of 0.336 with a p-value of 0.000 < 0.05 and a T-statistic of 5.288 > 1.96. This indicates that learning culture has a positive and significant effect on adaptive competence. Therefore, the fourth hypothesis (H4) is supported.

The effect of adaptive competence on employee innovation obtained an original sample value of 0.302 with a p-value of 0.000 < 0.05 and a T-statistic of 4.756 > 1.96. This indicates that adaptive competence has a positive and significant effect on employee innovation. Thus, the fifth hypothesis (H5) is supported.

Table 7. Indirect Effect Hypothesis Testing Results

Hypothesis	Path	Original Sample	T-Statistics	P-Values	Result
H6	Knowledge Sharing → Adaptive Competence → Employee Innovation	0.129	3.520	0.000	Supported
H7	Learning Culture → Adaptive Competence → Employee Innovation	0.101	4.027	0.000	Supported

Source: Processed Data, 2025

The effect of knowledge sharing on employee innovation through adaptive competence as a mediating variable, as shown in Table 7, obtained an original sample value of 0.129 with a p-value of 0.000 < 0.05 and a T-statistic of 3.520 > 1.96. These results indicate that adaptive competence

significantly mediates the relationship between knowledge sharing and employee innovation. Therefore, the sixth hypothesis (H6) is supported.

The effect of learning culture on employee innovation through adaptive competence as a mediating variable obtained an original sample value of 0.101 with a p-value of 0.000 < 0.05 and a T-statistic of 3.520 > 1.96. This demonstrates that adaptive competence significantly mediates the effect of learning culture on employee innovation. Thus, the seventh hypothesis (H7) is supported.

Mediation Role Test (VAF)

Variance Accounted For (VAF) is an indicator used to determine the extent to which the mediating variable absorbs the effect of the independent variable on the dependent variable. The VAF value is calculated by comparing the magnitude of the indirect effect with the total effect. The formula for calculating VAF is:

$$VAF = \frac{Indirect\ Effect}{Total\ Effect}$$

The basis for decision-making from the VAF value results is: full mediation if the VAF value ≥ 80%, partial mediation if 20% ≤ VAF ≤ 80%, and no mediation if the VAF value ≤ 20%. The VAF calculation results on the effect of knowledge sharing on employee innovation mediated by adaptive competence are as follows:

$$VAF = \frac{0{,}129}{0{,}295}$$

VAF = 0,4381 (43,81%)

Based on the VAF test with a calculated value of 43.81%, which lies between 20%–80%, it can be categorized as partial mediation. Therefore, it can be concluded that adaptive competence partially mediates the influence of knowledge sharing on employee innovation. The VAF calculation results on the effect of learning culture on employee innovation mediated by adaptive competence are as follows:

$$VAF = \frac{0{,}101}{0{,}337}$$

VAF = 0,3014 (30,14%)

Based on the VAF test with a calculated value of 30.14%, which lies between 20%–80%, it can be categorized as partial mediation. Therefore, it can be concluded that adaptive competence partially mediates the influence of learning culture on employee innovation.

Discussion

The Effect of Knowledge Sharing on Employee Innovation at the Badung Regency Revenue Agency

The hypothesis testing for H1 regarding the effect of knowledge sharing on employee innovation produced an original sample value of 0.101 with a p-value of 0.009 < 0.05 and a T-statistic of 2,618 > 1.96, indicating that knowledge sharing has a positive and significant effect on employee innovation at the Badung Regency Revenue Agency. This means that the higher the level of knowledge sharing among employees, the higher their ability to generate innovative ideas in accomplishing tasks. Thus, the first hypothesis (H1) is accepted.

Knowledge sharing refers to a process in which individuals voluntarily exchange knowledge, information, and work experience with others in the organization to improve collective effectiveness. The results show that employees willingly exchange work-related information with colleagues to enhance team performance. This indicates that the presence of a knowledge-sharing culture — involving both technical information and experiential insights — helps broaden employees' perspectives and equips them with new problem-solving approaches. Knowledge gained through this process can be translated into creative and innovative ideas in daily work activities.

Theoretically, these findings align with Organizational Learning Theory (Argyris & Schön, 1978), where knowledge sharing reflects knowledge transfer as part of organizational learning. When employees share information to support team effectiveness, such processes enrich organizational knowledge and drive the emergence of new ideas, thereby enhancing employee innovation.

These findings are also supported by previous studies. Azeem et al. (2021) found that knowledge sharing significantly influences innovative capacity. Yasir et al. (2021) emphasized that

innovative work behavior depends heavily on the intensity of knowledge sharing. Prasetyo et al. (2024) explained that knowledge sharing in continuous learning stimulates creativity and innovative solutions. Al-Bashayreh et al. (2022) also highlighted that knowledge sharing improves employee innovation.

The Effect of Learning Culture on Employee Innovation at the Badung Regency Revenue Agency

The hypothesis testing for H2 yielded an original sample value of 0.235 with a p-value of 0.001 < 0.05 and a T-statistic of 3.508 > 1.96, indicating that learning culture has a positive and significant effect on employee innovation at the Badung Regency Revenue Agency. This implies that a stronger learning culture leads to better employee capability in generating innovative ideas. Therefore, hypothesis H2 is accepted.

A supportive learning culture strengthens organizational resilience in facing disruptions. It shapes a learning mindset that motivates employees to grow from their experiences—both successes and failures. The results indicate that employees possess strong internal motivation to continually improve their competencies through work experience, internal training, and self-learning initiatives. This environment encourages employees to adopt new and more creative work methods. Theoretically, this finding is in line with Organizational Learning Theory (Argyris & Schön, 1978), which states that learning culture is a fundamental dimension of organizational learning that stimulates continuous improvement and the emergence of new ideas. Employees driven by continuous learning will contribute to innovative problem-solving.

This is consistent with empirical findings: Nugroho (2024) found that open learning cultures enhance freedom in idea exploration. Chugthai et al. (2024) and Flores-Bello et al. (2024) confirmed that strong learning cultures generate innovative employees. Nurhayati et al. (2023) emphasized that learning culture strengthens employee innovation, while Imran et al. (2021) found that learning-oriented cultures are key factors in innovation within the public sector.

The Effect of Knowledge Sharing on Adaptive Competence at the Badung Regency Revenue Agency

The hypothesis testing for H3 produced an original sample value of 0.429 with a p-value of 0.000 < 0.05 and a T-statistic of 7.735 > 1.96, indicating that knowledge sharing has a positive and significant effect on adaptive competence. Thus, hypothesis H3 is accepted.

Knowledge sharing not only enriches organizational knowledge but also plays a fundamental role in shaping individual adaptive competence. The findings show that employees actively share information with colleagues to improve team effectiveness, which reflects openness and willingness to learn from each other. This shared learning process helps employees better adapt to technological changes, work procedures, and task demands. The results align with Organizational Learning Theory (Argyris & Schön, 1978), which explains that collective learning enhances individual competence. Knowledge exchange equips employees to rapidly comprehend changes and remain productive.

These findings support results from Ahmad et al. (2025), who emphasized that knowledge sharing strengthens adaptive capability in the public sector. Harandi et al. (2024) indicated that knowledge sharing fosters mental readiness in uncertain work situations, while Nuraini & Sumampouw (2024) stated that effective knowledge sharing enhances employee competencies.

The Effect of Learning Culture on Adaptive Competence at the Badung Regency Revenue Agency

The hypothesis testing for H4 produced an original sample value of 0.336 with a p-value of 0.000 < 0.05 and a T-statistic of 5.288 > 1.96, meaning learning culture has a positive and significant effect on adaptive competence. Thus, hypothesis H4 is accepted.

The results indicate that employees are motivated to continuously improve themselves. Organizational learning support—in the form of training, knowledge discussions, and access to information—encourages employees to adjust their capabilities according to job demands. This leads to faster adaptation to technological and procedural changes. The results are consistent with Organizational Learning Theory (Argyris & Schön, 1978), which explains that learning culture

influences not only knowledge improvement but also behavior transformation. A strong learning culture drives employees to become more adaptive.

These findings align with Espinosa & Martinez-Lozada (2025), who stated that learning culture forms the basis of adaptive development, and Chugthai et al. (2024), who found that learning culture strengthens awareness and open behavior toward challenges.

The Effect of Adaptive Competence on Employee Innovation at the Badung Regency Revenue Agency

The hypothesis testing for H5 yielded an original sample value of 0.302 with a p-value of 0.000 < 0.05 and a T-statistic of 4.756 > 1.96, indicating that adaptive competence significantly enhances employee innovation. Thus, hypothesis H5 is accepted.

The study found that employees at the agency are flexible and ready to adopt new skills needed in the evolving public sector environment. Adaptive competence allows employees not only to learn new knowledge but also to apply innovative ideas in problem-solving. This supports the emergence of creativity in developing improved work methods. The findings align with Organizational Learning Theory (Argyris & Schön, 1978), which states that adaptive capability is a product of effective learning and leads to innovation outcomes.

These results are supported by studies from Darmayanti (2025) showing that adaptive competence is crucial for enhancing innovation and efficiency, and Georgiou & Maksymenko (2025) confirming that highly adaptive employees are sources of innovative ideas. Harandi et al. (2024) also found that adaptiveness bridges organizational learning and service innovation.

The Mediating Role of Adaptive Competence in the Effect of Knowledge Sharing on Employee Innovation

The hypothesis testing for H6 produced an original sample value of 0.129 with a p-value of 0.000 < 0.05 and a T-statistic of 3.520 > 1.96, indicating that adaptive competence partially mediates the relationship between knowledge sharing and innovation. Thus, hypothesis H6 is accepted.

This suggests that knowledge sharing influences innovation both directly and indirectly through adaptive competence. When employees adapt to changes more effectively, they are more capable of applying new knowledge to innovative work practices. Theoretically, this finding aligns with Organizational Learning Theory (Argyris & Schön, 1978), which states that shared knowledge becomes organizational value when transformed into adaptive competence. Knowledge sharing alone is insufficient without employees' ability to adapt knowledge into innovative behavior.

These results support findings from Ahmad et al. (2025), which showed stronger innovation effects when adaptive competence is high, and Harandi et al. (2024), who confirmed the adaptive transformation of shared knowledge into new solutions.

The Mediating Role of Adaptive Competence in the Effect of Learning Culture on Employee Innovation

The hypothesis testing for H7 yielded an original sample value of 0.101 with a p-value of 0.000 < 0.05 and a T-statistic of 4.027 > 1.96, indicating that adaptive competence partially mediates the effect of learning culture on innovation. Thus, hypothesis H7 is accepted.

Learning culture promotes continuous learning in the organization, but its impact on innovation becomes stronger when employees possess adaptive competence. Such competence enables employees to turn knowledge into practical, innovative outcomes. These findings are theoretically aligned with Organizational Learning Theory (Argyris & Schön, 1978), which states that continuous learning drives behavioral adjustments necessary for innovation. The results are also supported by Hruška et al. (2024), who emphasized that learning culture becomes effective only when internalized by adaptive individuals, and Espinosa & Martinez-Lozada (2025), who identified adaptive competence as the key link between learning environment and innovative output.

CONCLUSIONS

The findings of this study indicate that both knowledge sharing and learning culture play a crucial role in enhancing employee innovation at the Regional Revenue Agency of Badung Regency. Stronger knowledge-sharing practices are shown to significantly increase not only employee innovation but also employees' adaptive competence. Similarly, a well-established learning culture positively contributes to higher levels of innovation and strengthens adaptive competence within the organization. Furthermore, adaptive competence itself positively influences employee innovation, highlighting its essential role in enabling employees to respond effectively to change and generate innovative ideas. The mediation analysis demonstrates that adaptive competence partially mediates the effects of both knowledge sharing and learning culture on employee innovation. This means that improvements in knowledge sharing and learning culture enhance adaptive competence, which in turn further boosts innovation. Overall, the study underscores the importance of fostering a supportive learning environment, promoting active knowledge sharing, and strengthening adaptive competence as strategic pathways for improving employee innovation in the public sector context of Badung Regency.

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