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Enhancing Innovation Performance by Utilizing Knowledge Management, Strategic Flexibility, and Organizational Creativity

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ABSTRACT

Market turbulence compels SMEs to innovate through strategic flexibility and organizational creativity to maintain a competitive advantage. In Bali, SMEs face challenges such as a lack of organizational creativity, limited understanding of knowledge management, and the pressing need for innovation in a competitive landscape. This study aims to investigate the relationship between innovation performance and factors such as knowledge management, strategic flexibility, and organizational creativity in Bali's SMEs during the COVID-19 pandemic. While dynamic capability is crucial for organizational sustainability, research connecting strategic flexibility and organizational creativity to innovation performance remains scarce. Adopting a quantitative approach, data will be collected through questionnaires distributed to 431 SMEs managers. The findings suggest that SMEs that leverage performance standards, engage in effective strategic planning, and embrace diverse ideas can make significant contributions to their industry and effectively meet customer needs.

Keyword: dynamic capabilities theory; innovation performance; knowledge management; organizational creativity; strategic flexibility

INTRODUCTION

Innovation plays a crucial role for organizations seeking to thrive in the face of intense global competition while ensuring the long-term sustainability of their business (Murswieck, 2021). The concept of innovation performance refers to how companies generate, disseminate, and adapt ideas to create new or improved economic and social products and services (Zizka & Rydvalova, 2021). According to the Global Innovation Index (GII), Indonesia ranks 87th out of 132 economies in the 2021 GII, indicating that the nation produces less innovation output relative to its level of investment in innovation (Intellectual Property Organization, 2021). Therefore, it is essential for Indonesia to enhance its innovation efforts to achieve greater innovative output. Innovation is vital for driving economic development (Hartono & Rafik, 2021). Indonesia is home to various regions with significant creative potential, with Bali Province standing out as a prominent example. Renowned for its creativity and innovation, Bali's economy significantly relies on the tourism sector, the primary contributor to its economic landscape. However, this sector has been severely affected by the Covid-19 pandemic, which has brought tourism activities in Bali to a virtual standstill (Pemerintah

Provinsi Bali, 2020).

The development of creative and innovative tourism products rooted in the culture of Bali Province's districts and cities, along with the enhancement of creative industries focused on folk crafts, are vital strategies for boosting Balinese tourism. Additionally, increasing exports of these creative industries and elevating economic value through innovation are essential for fostering the Balinese economy. To achieve this, fresh ideas and innovations are necessary. Innovation has emerged as a core aspect of organizational success across various dimensions, including strategic planning, concept development, customer engagement, market analysis, organizational learning, knowledge management, and the cultivation of organizational culture and leadership (Saunila, 2017). It plays a vital role for organizations aiming to thrive in the competitive global marketplace, thereby ensuring their long-term sustainability. Assessing innovation performance is critical for organizations to effectively manage innovation and improve overall business performance (Murswieck, 2021).

The notion of innovation performance pertains to the methodologies employed by companies to generate, disseminate, and modify ideas aimed at producing new or enhanced economic or social products and services. This principle is vital for translating innovation potential into market realization, which results from either product or process innovation (Zizka & Rydvalova, 2021). It is imperative to evaluate a company's innovation performance prior to its market introduction, as this assessment significantly impacts its overall innovation performance (Murswieck, 2021).

Innovation is essential for organizations, encompassing strategic innovation, market dynamics, and cultural influences (Saunila, 2017). Enhancing culture-based tourism, advancing local crafts, increasing creative industry exports, and elevating economic value through the creative sector are viable solutions. Small and medium enterprises (SMEs) exemplify this scenario. SMEs face numerous challenges due to limited resources (Baral et al., 2021). This predicament poses a threat to the profitability of their profitability and performance (Brahmana et al., 2022). Thus, fostering innovation is vital from various perspectives, including strategic innovation and the influence of organizational culture and leadership (Saunila, 2017).

Organizations must adopt innovation as a core strategy to tackle internal and external challenges for economic development (Hartono & Rafik, 2021). Moreover, prioritizing innovation can improve organizational productivity (Ndzana et al., 2021). Evaluating innovation is essential for identifying improvement areas related to organizational values and actions (Saunila, 2017). However, the factors underlying innovation are not fully understood, indicating a need for further research into the key drivers that enhance organizational innovation performance.

A crucial factor enhancing innovation performance is knowledge management, enabling organizations to discern innovation sources while addressing challenges (Nasution et al., 2021; Usman et al., 2020). Additionally, strategic flexibility serves as a crucial predictor of innovation performance and organizational success (Nyuur et al., 2018). The interplay between knowledge management and strategic efficiency fosters innovation performance, thereby creating sustainable competitive advantages (Aggarwal & Kapoor, 2021). They also enhance subordinate creativity through transformational leadership (Xiao & Wang, 2021). Knowledge management is essential for promoting organizational creativity, particularly within the SME sector, thus enhancing performance (Arsawan et al., 2020). It also plays a significant mediating role between organizational creativity and resources (Nasution et al.,

2021). The combination of effective knowledge management and strategic flexibility leads to positive innovation performance (Gonzalez & Melo, 2017; Sadeghi Boroujerdi et al., 2020; Usman et al., 2020).

This study targeted SMEs in Bali Province for several reasons: Firstly, Balinese SMEs actively participate in significant global markets, including the EU, South Asia, the Middle East, and the Americas. Secondly, there is a market demand for value-added, high-quality products and services that meet established standards, necessitating innovation. Thirdly, SMEs must innovate to navigate environmental uncertainties and market fluctuations (Dinas Koperasi Usaha Kecil dan Menengah Provinsi Bali, 2021). Fourthly, promoting innovation necessitates the integration of flexibility and creativity (Puriwat & Hoonsopon, 2022; Sadeghi Boroujerdi et al., 2020). In this context, SMEs should adopt knowledge management, suitable strategic flexibility, and organizational creativity to foster innovation. This aligns with dynamic capabilities theory, which underscores the importance of dynamic capabilities in sustaining business model innovation for enduring success (Schiavon et al., 2022). Therefore, assessing innovation performance in relation to knowledge management, strategic flexibility, and organizational creativity is both rational and relevant.

This highly volatile environment necessitates the dissolution of the concept of routine-based dynamic capabilities. In a rapidly changing market marked by unpredictable shifts and unclear boundaries, traditional learning routines are ineffective. This ineffectiveness stems from the inadequacy of existing knowledge to fully comprehend and analyze situations, potentially leading to negative outcomes (Andresen, 2021). The way strategic organizational planning can influence the relationship between the board's decisions to adopt developmental objectives and the subsequent organizational planning of those objectives exemplifies the company's dynamic capabilities (Sanchez et al., 2018).

Dynamic capabilities represent a significant factor influencing an organization’s capacity to assimilate, construct, and reconfigure resources and processes aimed at sustainable value generation and competitive superiority across various market contexts (Wenzel et al., 2021). When assessing a corporation's dynamic capabilities, three perspectives warrant consideration. Firstly, organizations must ascertain the identities of employees and managers who are engaged in the transformation process and analyze their interactions. Secondly, it is imperative for practitioners to seek out "dependable outcomes." Lastly, practitioners ought to comprehend the origins of information pertaining to the change (whether opportunities or threats) and the manner in which it is processed (Wenzel et al., 2021).

Knowledge management encompasses an amalgamation of strategies, tools, and methodologies, including approaches for acquiring structured knowledge and technologies that can enhance the efficacy of individual workforces, teams, or entire organizations (Conway, 2020). In essence, knowledge management can be articulated as the undertaking of requisite actions to optimize the utilization of knowledge resources, which provide numerous advantages such as essential business competencies, expedited innovation, reduced time-to-market, invigorated workforce engagement, the development and provision of superior quality products, enhancement of cycle time and decision-making, reinforcement of organizational commitment, and the establishment of a sustainable competitive work environment (Fernandez & Sabherwal, 2015).

Research indicates that knowledge management serves a pivotal function in the processes of knowledge generation, dissemination, and application, which profoundly influences organizational sustainability (Demir et al., 2021). Moreover, the significance of

knowledge management may manifest in its effects on business models and overall business performance, particularly in the context of implementing innovation and facilitating collaborative efforts that can nurture global and inclusive growth in the contemporary digital landscape (Di Vaio et al., 2021). In essence, effective knowledge management positions organizations to better navigate and compete in an increasingly demanding environment.

Knowledge management constitutes a critical determinant in assessing the efficacy of strategic flexibility implementation (Bamel & Bamel, 2018; Kafetzopoulos, 2022). Additionally, knowledge management has the potential to enhance innovation performance by equipping organizations with essential knowledge processes conducive to innovation (Gürlek & Çemberci, 2020; Nazari et al., 2020; Yusr et al., 2017). Ultimately, the adoption of knowledge management practices may bolster organizational creativity, serving as a vital mechanism for survival and fostering organizational development amidst a volatile and ever-changing environment (Islam & Asad, 2021; Patwary et al., 2022). Consequently, the following hypothesis may be formulated:

H1. Knowledge management has a significant positive effect on strategic flexibility.
H2. Knowledge management has a significant positive effect on innovation performance.
H3. Knowledge management has a significant positive effect on organizational creativity.

The concept of strategy typically entails the establishment of objectives, the identification of actions necessary to attain these objectives, and the mobilization of resources to execute these actions. A strategy delineates the manner in which objectives ought to be accomplished utilizing the resources that are currently available. The significance of strategy is underscored by the fact that the resources accessible for the attainment of these objectives are frequently constrained and may be intentional or may evolve as a pattern of activity as the organization adjusts to its environment or engages in competition. Generally, strategy encompasses two principal processes: formulation and implementation. Formulation encompasses the analysis of the environment or situation, the conduction of a diagnosis, and the development of a guiding policy. Conversely, implementation pertains to the action plan devised to realize the objectives established by the guiding policy (Barad, 2018).

The term flexibility possesses various interpretations within the academic literature pertaining to problem-solving, particularly within the domains of educational research and psychology. Certain strategies are categorized as tension flexibility, while others are classified as representational, and additional strategies involve transitioning from one stimulus to another or from one task to another (Clement, 2022).

Strategic flexibility refers to an organization's capacity to react to significant alterations in its external environment by allocating the requisite resources necessary to address these changes (Barad, 2018; Clement, 2022). Strategic flexibility enhances the efficacy of innovation, including analytical and exploitative innovation, technological innovation, management innovation, among others (Xu et al., 2021). This capability is particularly imperative when an organization confronts unforeseen changes, which may yield extensive ramifications, thereby necessitating prompt adaptation (Andersen, Torp, Linder, 2019).

Furthermore, strategic flexibility possesses the capacity to enhance a corporation's potential in the establishment of new markets and the engagement in innovative endeavors (Guo & Cao, 2014; Kafetzopoulos, 2022). The significance of flexibility within

organizations may serve as a catalyst for the generation of novel creative concepts through the adaptability of their strategy, structure, and operations to foster innovation (Saeed et al., 2021). In light of this, the hypothesis may be articulated as follows:

H4. Strategic flexibility has a significant positive effect on innovation performance.

Creativity is typically linked to the generation of novel and beneficial concepts pertaining to products and service practices or protocols that are both innovative and advantageous for organizations, facilitating the extraction of value in either the short or long term, thus contributing to positive sustainability. Consequently, in order to be deemed creative, ideas must deliver business value by engendering new products and services, capitalizing on business opportunities, and/or enhancing organizational efficacy (Islam & Asad, 2021; Sigala & Chalkiti, 2015; Souto, 2022).

Organizational creativity plays a significant mediating role in the relationship between knowledge management and innovation performance. This is exemplified by organizations that harness organizational learning and creativity, which are more likely to experience enhanced innovation outcomes as a result of effective knowledge management practices (Patwary et al., 2022). Investigations indicate that if an organization is capable of providing a work environment conducive to creativity, organizational creativity will be augmented (Chaubey & Sahoo, 2021).

Creativity and innovative solutions are imperative in the management of change and renewal (Patwary et al., 2022). Moreover, it is essential to optimize both the direct and indirect impacts of organizational creativity on sustainability-oriented innovation (Souto, 2022). Accordingly, the hypothesis may be delineated as follows:

H5. Organizational creativity has a significant positive effect on innovation performance.

Innovation performance represents the extent to which a corporation realizes its innovation potential and its capacity to convert such potential into market realization as a result of product or process innovation. The notion of the pressure innovation framework specifically pertains to the process of generating, disseminating, and altering ideas to yield new or improved economic or social outcomes, such as products and services (Zizka & Rydvalova, 2021).

Evaluating innovation performance prior to market introduction is particularly crucial for corporate leaders who manage finite financial, human, and other pertinent business resources. It is vital to comprehend the determinants that influence innovation performance if one aims to enhance the efficiency of the innovation process and the corresponding ultimate performance (Murswieck, 2021).

It is essential to comprehend the determinants that influence innovation performance if one seeks to augment the efficacy of the innovation process and the resultant ultimate performance (Murswieck, 2021). Consistent innovation performance in ongoing innovation audit metrics provides management with control information pertaining to both historical and prospective contexts (Friedl & Kayser, 2018).

Research reveals that strategic flexibility is a crucial competitive advantage linked to organizational resources and knowledge management capabilities (Bamel & Bamel, 2018; Kafetzopoulos, 2022). Additionally, knowledge management significantly enhances innovation performance by providing essential processes for innovation. These improvements result in innovations that elevate organizational performance (Gürlek & Çemberci, 2020; Nazari et al., 2020; Yusr et al., 2017). Conversely, strategic flexibility

primarily drives company performance in innovation by enabling the creation of new products or services and expanding market potential (Guo & Cao, 2014; Kafetzopoulos, 2022). The importance of flexibility within organizations may generate new creative ideas through adaptable strategies, structures, and operations to promote innovation (Saeed et al., 2021). The essential role of knowledge management is to foster strategic flexibility, thereby improving innovation performance. Accordingly, the hypothesis can be stated as follows:

H6. Strategic flexibility mediates the relationship between knowledge management and innovation performance.

Knowledge management can enhance innovation performance by providing necessary knowledge processes for facilitating innovation and ensuring organizational sustainability (Gürlek & Çemberci, 2020; Nazari et al., 2020; Yusr et al., 2017). Furthermore, organizational creativity is vital for the survival and progress of organizations in a complex and unstable environment. Knowledge management practices that stimulate creativity and promote innovation are critical for achieving organizational creativity and improving innovation performance (Islam & Asad, 2021; Patwary et al., 2022; Souto, 2022). Organizational creativity shows a significant positive mediating effect between knowledge management practices and innovation performance, with knowledge management practices identified as the primary determinant of both organizational creativity and innovation performance (Patwary et al., 2022). The role of knowledge management is to enhance organizational creativity, which subsequently boosts innovation performance. Therefore, the seventh hypothesis can be articulated as follows:

H7. Organizational creativity mediates the relationship between knowledge management and innovation performance.

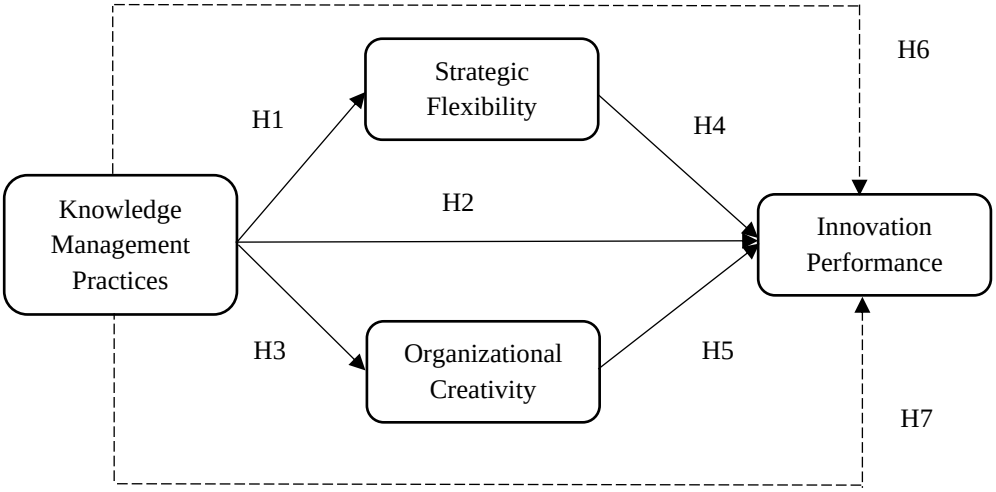

Figure 1. Research Conceptual Model
Source: Author, 2022

METHODS

The research design used is quantitative research, where a group of interrelated constructs or variables are formed into propositions, or hypotheses, which determine the relationship between variables as arguments, discussions, or causes to explain phenomena

that occur in the world (Creswell & David Creswell, 2018). In this study, the phenomena discussed include innovation performance in SMEs in the Province of Bali.

This study aims to investigate the impact of knowledge management, strategic flexibility, and organizational creativity on the innovation performance of Small Trade SMEs, particularly in Bali. The research focuses on a population of 18,838 Small Trade Businesses situated in Bali Province, Indonesia, as documented by the Bali Province Cooperatives and Small and Medium Enterprises Office in 2022 (Dinas Koperasi Usaha Kecil dan Menengah Provinsi Bali, 2022). According to Law Number 20 of 2008, a Small Business is defined as an independent and productive economic entity operated by individuals or business entities that are neither subsidiaries nor branches of larger corporations. These small enterprises must not be owned, controlled, or otherwise connected—either directly or indirectly— to Medium or Large Enterprises, and they must adhere to the criteria specified in this legislation (Pemerintah Indonesia, 2008).

The minimum sample of respondents was selected by the snowball sampling method using the Slovin's formula (1960) with a margin of error of 5%. In this study, the sample data of respondents successfully obtained were 431 SMEs. The data collection method that in this study is distributing questionnaires to 431 Small Trade Business Managers in Bali, Indonesia. Data collection techniques through questionnaires will be carried out by providing pre-determined questions by the researcher and distributing to the respondents. The research questionnaire uses a Likert scale of 1 to 5 (1-strongly disagree to 5-strongly agree) and uses simple and easy-to-understand language so that the research objectives can be achieved. Questionnaires will be distributed to SMEs in Bali Province.

The knowledge management variable is measured by measuring 6 dimensions consisting of knowledge management technology, knowledge management structure, knowledge management culture, knowledge management acquisition, knowledge management conversion process, and knowledge management application process adopted from the study of Hock-Doepgen, Clauss, Kraus, Cheng (2021) and Gold et al. (2001).

The measurement of the strategic flexibility variable uses six indicators adopted from the study of Guo & Cao (2014) which refers to the research of Zahra, Hayton, Neubaum, Dibrell, Craig (2008). Meanwhile, the organizational creativity variable uses five indicators adopted from Souto (2022) which refers to the research of Amabile (1997), Reiter-Palmon and Illies (2004), Borghini (2005), Kraft (2005), and Mitchell and Walinga (2017).

Finally, the measurement of the innovation performance variable uses seven indicators adopted from Wang, Wang, Horng (2010). In measuring this dimension, the author adopted, modified, and elaborated on measurements that best suit the research subject.

The data processing technique used in this study is partial least square–structural equation modeling (PLS-SEM). PLS-SEM is a causal model that aims to maximize the variance explained by the dependent variable (Hair et al., 2017). Additionaly, PLS-SEM can be applied to complex models with multiple indicators, constructs, and relationships, can model formative and reflective variables, and does not require multivariate normality assumptions (D. S. Kumar & Purani, 2018). The data processing technique used in this research is partial least squares-structural equation modeling (PLS-SEM) to estimate the proposed innovation performance model and assess the relationship between variables, both directly and indirectly.

The questionnaire includes a section that requests the respondent's demographic details, such as their tenure at the company, age, company age, and size. The analysis of the demographic data is presented in Table 1, with the following outcomes:

Table 1. Respondent Demographic Data

Characteristics of Respondents	Classification	Frequency	Percentage (%)
Respondent's tenure at the company	Less than 1 year	33	7.7
	1-5 years	152	35.3
	6-10 years	154	35.7
	More than 10 years	92	21.3
Respondent's age	Younger than 20 years	7	1.6
	21-30 years	130	30.2
	31-40 years	174	40.4
	Older than 40 years	120	27.8
Company age	Less than 5 years	62	14.4
	6-10 years	135	31.3
	11-20 years	154	35.7
	More than 20 years	80	18.6
Company size	Less than 50 employees	111	25.8
	50-100 employees	149	34.6
	101-200 employees	128	29.7
	201-500 employees	43	10.0

Source: Author Data Processing Results, 2022

RESULT AND DISCUSSION

The evaluation method utilized in this assessment utilizes SmartPLS to assess the measurement model through reflective indicators. These indicators are deemed to be of high quality if they exhibit a correlation of over 0.70 with the construct under scrutiny. The dataset was derived from the feedback of 431 individuals.

This study applies the bootstrap method with 500 samples to evaluate the significance of the indicators and path coefficients. The results show that the saturated value of the SRMR model is 0.067, and the estimated value of the SRMR model is 0.069. It can be concluded that the observed and expected correlations as an absolute measure of the model are considered suitable.

In addition, testing on the r-square value of the innovation performance variable was obtained at 0.835. This illustrates that 83.5% of the variable innovation performance can be influenced by the variables of knowledge management, organizational creativity, and strategic flexibility.

On the other hand, the r-square value for the organizational creativity variable is 0.658. This illustrates that 65.8% of organizational creativity variables can be influenced by knowledge management variables.

Finally, the r-square value for the strategic flexibility variable is 0.725. This illustrates that 72.5% of the strategic flexibility variable can be influenced by the knowledge management variable. Finally, all variables have positive values, indicating that all variables have good predictive relevance. The following table displays the outcomes of the research instrument's validity test, using a loading factor threshold of 0.70.

Table 2. Measurement Outer Model Variabel Knowledge Management

Variable	Dimensions	Indicator Code	Outer Loading Instrument	Outer Loading Dimensions
Knowledge management	Knowledge management technology	KMT1	0,853	0,846
		KMT2	0,824	
		KMT3	0,823	
	Knowledge management structure	KMS1	0,780	0,837
		KMS2	0,756	
		KMS3	0,820	
		KMS4	0,841	
	Knowledge management culture	KMC1	0,849	0,828
		KMC2	0,836	
		KMC3	0,796	
		KMC4	0,759	
	Knowledge management acquisition process	KMA1	0,802	0,895
		KMA2	0,769	
		KMA3	0,751	
		KMA4	0,802	
		KMA5	0,783	
	Knowledge management conversion process	KMCP1	0,797	0,878
		KMCP2	0,782	
		KMCP3	0,751	
		KMCP4	0,768	
		KMCP5	0,800	
	Knowledge management application process	KMAP1	0,785	0,901
		KMAP2	0,765	
		KMAP3	0,771	
		KMAP4	0,768	
		KMAP5	0,743	
		KMAP6	0,773	
Strategy Flexibility		SF1	0,839	
		SF2	0,781	
		SF3	0,737	
		SF4	0,779	
		SF5	0,719	
		SF6	0,761	
Organizational Creativity		OC1	0,840	
		OC2	0,773	
		OC3	0,770	
		OC4	0,764	
		OC5	0,778	
Innovation Performance		IP1	0,827	
		IP2	0,779	
		IP3	0,748	
		IP4	0,781	
		IP5	0,731	
		IP6	0,725	
		IP7	0,812	

Source: Author Data Processing Results, 2022

Table 3 confirms the five direct relationship hypotheses, according to the analysis results. Firstly, knowledge management and strategic flexibility are significantly related (β= 0.851, STDEV= 0.026, T Statistics= 32.282). Secondly, knowledge management and innovation performance are significantly related (β= 0.207, STDEV= 0.057, T Statistics= 3.663). Thirdly, knowledge management and organizational creativity are significantly related (β= 0.811, STDEV= 0.031, T Statistics= 26.235). Fourthly, there is a significant relationship between strategic flexibility and innovation performance (β= 0.431, STDEV= 0.073, T Statistics= 5.937). Finally, there is a significant relationship between organizational creativity and innovation performance (β= 0.323, STDEV= 0.052, T Statistics= 6.234).

Table 3. Path Coefficients

	Original Sample (O)	**Sample Mean (M)**	**Standard Deviation (STDEV)**	**T-Statistic (|O/STDEV|)**	**P-Values**
KM -> SF	0.851	0.851	0.026	32.282	0.000
KM -> IP	0.207	0.205	0.057	3.663	0.000
KM -> OC	0.811	0.810	0.031	26.235	0.000
SF -> IP	0.431	0.438	0.073	5.937	0.000
OC -> IP	0.323	0.317	0.052	6.234	0.000

Note: KM – *knowledge management*, SF – *strategic flexibility*, OC – *organizational creativity*, IP – *innovation performance*.
Source: Author Data Processing Results, 2022

According to the analysis results displayed in Table 4, the two hypotheses regarding the mediation relationship have been confirmed. The first hypothesis suggests that strategic flexibility has a considerably positive impact on innovation performance by mediating the influence of knowledge management (β= 0.262, STDEV= 0.045, T Statistics= 5.871). The second hypothesis indicates that the mediation of organizational creativity on the influence of knowledge management on innovation performance is also significantly positive (β= 0.367, STDEV= 0.064, T Statistics= 5.716).

Table 4. Mediation Analysis

	***Original Sample* (O)**	***Sample Mean* (M)**	***Standard Deviation* (STDEV)**	***T-Statistic* (|O/STDEV|)**	***P-Values***
KM -> SF -> IP	0.262	0.257	0.045	5.871	0.000
KM -> OC -> IP	0.367	0.373	0.064	5.716	0.000

Note: KM – *knowledge management*, SF – *strategic flexibility*, OC – *organizational creativity*, IP – *innovation performance*.
Source: Author Data Processing Results, 2022

Based on the explanation above, there are seven hypotheses accepted in the results of this study. This is consistent with the theoretical hypothesis that has been previously addressed. Within the theoretical hypothesis, it is demonstrated that there exists a positive correlation between the variables pertaining to both direct and indirect influence hypotheses.

Initially, a significant correlation is observed between knowledge management and strategic flexibility. This assertion is corroborated by research indicating that knowledge management serves as a critical determinant of the efficacy of strategic flexibility implementation (Bamel & Bamel, 2018; Kafetzopoulos, 2022). The highest outer loading

value within the knowledge management dimension is identified in the knowledge management application process dimension, which stands at 0.901. In this dimension, the instrument exhibiting the highest outer loading value is ascribed to the KMAP1 indicator code, described as "Our organization has a process for using knowledge in solving new problems". Furthermore, strategic flexibility, represented by the indicator code SF1, displays the highest outer loading value of 0.839 with the description "Business strategy planning can capture business opportunities according to economic conditions". Based on the outer loading values, it can be inferred that small and medium-sized enterprises (SMEs) possessing processes for leveraging knowledge in addressing new challenges are capable of formulating business strategy plans that adeptly respond to business opportunities according to economic fluctuations.

Subsequently, a noteworthy influence is evident between knowledge management and innovation performance. This assertion is supported by research that emphasizes the indispensable role of knowledge management in enhancing innovation performance (Gürlek & Çemberci, 2020; Nazari et al., 2020). The direct effect of the knowledge management process as a pivotal determinant of key innovation performance is essential for organizational success and the sustenance of organizational viability within the marketplace (Yusr et al., 2017). The highest outer loading value within the knowledge management dimension is again found in the knowledge management application process dimension, which is quantified at 0.901. Within this dimension, the instrument with the greatest outer loading value is linked to the KMAP1 indicator code, characterized by the statement "Our organization has a process for using knowledge in solving new problems". Additionally, performance, represented by the IP1 indicator code, boasts the highest outer loading value of 0.827 with the assertion "Our new product makes a big contribution to the industry". Based on the outer loading values, it can be concluded that SMEs equipped with processes for utilizing knowledge in addressing new challenges yield products that substantially contribute to the industry.

Thirdly, there exists a substantial impact of knowledge management on organizational creativity. This finding aligns with scholarly research indicating that organizational creativity is deemed essential for sustaining operational viability and fostering innovation within enterprises via knowledge management practices (Islam & Asad, 2021; Patwary et al., 2022). The highest outer loading value within the knowledge management dimension is identified in the knowledge management application process dimension, recorded at 0.901. Within this dimension, the indicator exhibiting the most significant outer loading value is the KMAP1 code, which is defined as "Our organization has a process for using knowledge in solving new problems". Moreover, organizational creativity represented by the OC1 indicator code also holds the largest outer loading value of 0.840, characterized by the statement "There are quite a variety of useful ideas". Consequently, based on the outer loading value, it may be deduced that small and medium-sized enterprises (SMEs) that implement a process for employing knowledge to tackle new challenges generate a diverse array of valuable ideas.

Fourthly, there is a considerable influence of strategic flexibility on innovation performance. This assertion is corroborated by research illustrating that strategic flexibility serves as a principal catalyst for enhancing a company's innovation performance through facilitation of the development of new products or services (Guo & Cao, 2014; Kafetzopoulos, 2022; Saeed et al., 2021). The strategic flexibility indicator, designated as SF1, exhibits the largest outer loading value of 0.839, accompanied by the description "Strategic business planning can attract business opportunities according to economic conditions". Additionally,

the performance indicator coded as IP1 reveals the largest outer loading value of 0.827, articulated by the statement "Our new product makes a big contribution to the industry". Thus, based on the outer loading value, it can be interpreted that SMEs possessing a business strategy that adeptly responds to market opportunities in alignment with economic conditions create products that substantially impact the industry.

Fifthly, a significant influence is observed between organizational creativity and innovation performance. This is substantiated by research indicating that both direct and indirect effects of creativity within a business context can influence the performance and success of innovative enterprises (Patwary et al., 2022; Souto, 2022). The organizational creativity indicator, labeled as OC1, demonstrates the largest outer loading value of 0.840, characterized by the description "There are quite several useful ideas". Furthermore, the performance indicator coded as IP1 also reveals the largest outer loading value of 0.827, supported by the statement "Our new product makes a big contribution to the industry". Accordingly, based on the outer loading value, it can be inferred that SMEs exhibit a diverse range of valuable ideas that facilitate the production of products which significantly contribute to the industry.

Sixth, the mediation of strategic flexibility concerning the effect of knowledge management on innovation performance exhibits a significant positive correlation. This assertion is substantiated by scholarly research which indicates that strategic flexibility is regarded as a source of competitive advantage that is intrinsically linked to organizational resources and the capabilities of the knowledge management process (Bamel & Bamel, 2018; Kafetzopoulos, 2022). The significance of flexibility within organizations serves as a wellspring of innovative ideas by virtue of the adaptability of their strategies, structures, and operations, thereby fostering innovation (Saeed et al., 2021). Strategic flexibility, as denoted by the indicator code SF1, possesses the highest outer loading value of 0.839, accompanied by the description "Business strategy planning can respond to business opportunities according to economic conditions". Furthermore, the highest outer loading value within the knowledge management dimension is identified in the knowledge management application process dimension, which stands at 0.901. Within this dimension, the KMAP1 indicator code is attributed the highest outer loading value, described as "Our organization has a process for using knowledge in solving new problems". Ultimately, innovation performance, as represented by the IP1 indicator code, exhibits the largest outer loading value of 0.827, with the caption "Our new product makes a big contribution to the industry". Based on the outer loading values, one may conclude that SMEs possessing processes for utilizing knowledge to address new challenges yield products that substantially contribute to the industry through the formulation of business strategies that can effectively respond to prevailing economic conditions.

Finally, the mediation of organizational creativity regarding the effect of knowledge management on innovation performance reveals a significant positive correlation. This is affirmed by research which posits that knowledge management practices constitute the most pertinent determinants of organizational creativity and innovation performance (Patwary et al., 2022). The function of knowledge management will enhance organizational creativity, which in turn leads to an augmentation of innovation performance. Organizational creativity, as indicated by the code OC1, exhibits the highest outer loading value of 0.840, accompanied by the description "There are quite a variety of useful ideas". In addition, the highest outer loading value in the knowledge management dimension is again found in the knowledge

management application process dimension, recorded at 0.901. Within this dimension, the KMAP1 indicator code is recognized for possessing the highest outer loading value, with the description "Our organization has a process for using knowledge in solving new problems". Ultimately, innovation performance, denoted by the IP1 indicator code, showcases the largest outer loading value of 0.827, with the caption "Our new product makes a big contribution to the industry". From the outer loading values, it can be concluded that SMEs that implement processes for utilizing knowledge in solving new challenges generate products that make a substantial contribution to the industry, drawing from a considerable variety of valuable ideas.

The implementation of effective knowledge management in product development can enhance organizational creativity, particularly in the context of Small and Medium Enterprises (SMEs) in Bali Province, known for their notable creativity in offerings. The findings of this study may also be applicable to other SMEs in the province that demonstrate high levels of creativity. It is important to recognize that creativity is significant for established companies as well. The results indicate that a majority of respondent companies fall within the 11–20 year age range, highlighting the necessity for established companies to continue innovating to ensure operational continuity.

This study aims to provide insights that can aid managers and practitioners in optimizing knowledge management, strategic flexibility, and organizational creativity to build innovation performance within the SME sector. Several managerial implications arise from the results of this study.

First, concerning knowledge management, it is essential for managers to identify the requirements for maximizing the benefits derived from knowledge resources. This includes ensuring that the company has established procedures for problem-solving, defined operational standards, and processes that adapt to market conditions. Regular discussions among employees about their work and the exchange of information related to business opportunities and conditions with partners are also important.

Second, in the context of strategic flexibility, managers should possess the capability to respond to significant changes in the external environment by allocating appropriate resources. This involves planning business strategies that align with market opportunities and customer needs, as well as developing strategies to address competition and technological advancements.

Third, regarding organizational creativity, managers are encouraged to foster creativity in developing new products or services that contribute to business sustainability. This includes generating unique ideas that are advantageous to the organization and applying these ideas to address emerging challenges.

Lastly, in terms of innovation performance, it is critical for managers to effectively convert innovation potential into marketable outcomes. This entails producing products that meet customer needs and have viable market opportunities, along with the ability to compete with established brands within the industry.

CONCLUSIONS

This study analyzes the relationship between knowledge management, strategic flexibility, and organizational creativity in relation to innovation performance within the SME sector. It identifies strategic flexibility and organizational creativity as intermediary factors in this framework. The study presents three primary conclusions.

First, it confirms that knowledge management, strategic flexibility, and organizational creativity have a positive effect on innovation performance in SMEs. SMEs that possess the necessary knowledge to navigate challenges, adapt strategies to market opportunities, and generate innovative ideas are likely to enhance their contributions to the industry. Second, knowledge management positively influences both strategic flexibility and organizational creativity in SMEs. This suggests that SMEs that leverage knowledge to address challenges are better positioned to develop strategic initiatives and generate ideas essential for capitalizing on market opportunities. Third, strategic flexibility and organizational creativity serve as effective mediators in the relationship between knowledge management and innovation performance in the SME sector. As a result, SMEs that utilize knowledge to tackle new challenges can develop products that significantly enhance their contributions to the industry through responsive strategic planning and valuable ideas.

The researcher also offers several recommendations for future research related to innovation performance in the SME sector. First, in light of the limitations regarding the variables examined in this study, it is suggested to incorporate additional factors that may impact innovation performance, such as leadership. Second, to address limitations in the respondent demographics, research could benefit from including perspectives from various management levels to better represent the organization's current state. Third, due to potential constraints of time, distance, and financial resources that may influence study outcomes, it is recommended to allocate adequate time, maintain proximity, and secure appropriate funding for research efforts to minimize bias. Finally, it should be noted that this study focused exclusively on the Small Trade Business sector, recognizing that regulatory differences across various business sectors could impact the findings.

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