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Unlocking Growth: How Knowledge Absorption Drives Innovation in Bali's Creative Small and Medium Enterprises

Ni Made Satya Utami[1]*, Putu Ari Pertiwi Sanjiwani[1], A. A. Sagung Istri Pramanaswari[2], Gusman Nawanir[3]

[1]Faculty of Economics and Business, Management Study Program, Universitas Mahasaraswati Denpasar, Denpasar, Indonesia, [2]Faculty of Economics and Business, Accounting Study Program, Universitas Mahasaraswati Denpasar, Denpasar, Indonesia, [3]Faculty of Economics and Business, Universitas Islam Riau, Pekanbaru, Indonesia. *Email: satyakesawa@unmas.ac.id

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ABSTRACT

Research objective: To develop an ACap framework specifically designed for developing countries, MSMEs must master knowledge absorption to drive innovation and transform knowledge into business performance, thereby remaining competitive in the market. This innovative study of 330 economically creative SMEs in Bali reveals an important fact: Realized knowledge absorption (RACAP) drives innovation performance 30% more effectively than potential knowledge absorption (PACAP). Using PLS-SEM, we found that superior knowledge absorption is directly associated with greater innovation and business performance. These findings address a critical research gap and provide practical insights for SMEs to enhance their knowledge assets, outperform competitors, and achieve sustainable growth. Conclusions and recommendations: Policymakers and business leaders must understand how SMEs in developing countries can leverage knowledge to achieve true competitive advantage. The impact will be a new paradigm in multidisciplinary research that bridges the gap between knowledge management and business innovation.

Keywords: Creative Industry Small and Medium Enterprises, Absorption Capacity, Innovative Performance, Performance of Small and Medium Enterprises, Potential Absorptive Capacity, Realized Absorptive Capacity
JEL Classifications: M21, E32, L25, L26

1. INTRODUCTION

Let us talk about the incredible role of small and medium-sized enterprises, or SMEs. Their impact is undeniable when you look at key economic drivers like a country's GDP, job creation, income levels, and the launch of new businesses (Dar and Mishra, 2020). It is no surprise that researchers globally, including Wahyudi et al. (2025) and Omar et al. (2020) Emphasize the vital role of SMEs in national economies. Because of this outsized importance, understanding and supporting SMEs has become a major focus of study worldwide (Costa and Pita, 2020). This is especially true in developing nations like Indonesia. Here, SMEs are a fundamental engine for economic growth (Anggadwita et al., 2023). The numbers tell a compelling story: As of 2019, a staggering 98.68% of all business entities in Indonesia were micro, small, or medium enterprises. Even more impressive, they employ about 75.33% of the nation's total workforce, highlighting their critical role as job creators (Susanto et al., 2023). However, it is important to look at the full picture. Despite this massive contribution to employment and the economy, the share of Indonesia's GDP accounted for by SMEs has declined slightly, from 61.41% in 2017 to 61.07% in 2020 (Wiwoho et al., 2020) This subtle shift points to underlying challenges and raises a crucial question: What factors influence an SME's capacity to learn, innovate, and adopt new technologies?

Today's business environment moves at the speed of technology. For small and medium enterprises (SMEs) in fast-paced markets like Bali and across Indonesia, this rapid innovation presents both

a tremendous opportunity and a significant challenge. To build a lasting competitive edge, innovation is essential. However, here is a key insight: Innovation rarely happens in a vacuum. It often springs from connecting with knowledge outside the company's walls. Think of it this way, as the extended resource-based view suggests, external knowledge is a powerful asset that can spark new ideas and drive innovation within a firm. Researchers such as Kathiravan (2019) and Duong et al. (2022) have highlighted the value of this outside-in perspective. Now, we all know knowledge is critical for growth and staying ahead of the competition (Kaur, 2019). It directly shapes how companies develop and roll out innovative strategies to fuel their expansion. However, it is not as simple as just having the information. The real challenge and the real opportunity lie in what you do with it. Simply possessing knowledge does not automatically give you an advantage. The journey from acquiring information to transforming it into practical insights and finally applying it to meet business goals is a complex process (Japhet et al., 2021). This is where a crucial concept comes in: Absorption capacity. To truly benefit from external knowledge, a company needs to absorb it, make sense of it, and apply it effectively. It is about innovating your own processes to integrate this new expertise in ways that drive technological progress and sustainable competitiveness. As Nguyen (2022) explains, this capacity enables businesses to turn understanding into tangible results, ultimately solidifying their market position. Understanding the dynamic between seeking external knowledge and the internal capacity to absorb it is fundamental to crafting strategies that boost the competitiveness and innovative strength of SMEs in our ever-evolving landscape.

Let us talk about a key ingredient for staying innovative and competitive: A company's ability to absorb knowledge. Think of it as an organizational learning muscle; the stronger it is, the better a firm can continuously innovate and keep its edge. Research, such as the study by Zhao et al. (2020) shows that when a company has high absorptive capacity, it not only innovates but also does so faster, more often, and more broadly, which directly boosts its innovation performance. How does this work in practice? Companies with strong knowledge-acquisition processes are better at spotting, evaluating, and strategically using external information. This allows them to develop new products more efficiently and shorten development cycles, giving their innovation efforts a real positive jolt (Nguyen, 2022). Especially since the COVID-19 pandemic, the push for transformation and innovation has become urgent across industries (Lyu et al., 2022). Innovation is now widely seen as essential to the success of companies, and even of entire regions and nations. While innovation is a broad phenomenon, it fundamentally takes root at the organizational level, meaning a company's own internal capabilities and strategies are what really drive results (Bjerke and Johansson, 2022). Of course, a major challenge lies in holding onto these vital, intangible assets; knowledge often walks out the door with your people. That's why success hinges on managing human capital effectively and ensuring that employees' skills align with company goals and processes (Vázquez et al., 2024). Investing in your team helps tackle daily operational hurdles and fuels innovation. Meanwhile, external knowledge remains crucial, but it requires internal capability to be woven into the company's own value creation (Randhawa et al., 2021). It is this integration that truly renews and expands an organization's knowledge base, paving the way for growth. This is particularly significant in the creative industry, where entrepreneurs often drive SMEs. Here, it is essential to understand how knowledge absorption affects performance, with innovation serving as the vital link between the two. (Agustina and Arganata, 2023) Getting this right is not just helpful; it is a cornerstone for growth and competitiveness.

Running a small or medium-sized business is no easy feat, especially in today's climate of market ups and downs and economic uncertainty. These challenges are real and significant, as noted by researchers like Khan et al. (2020). However, the way SMEs navigate these hurdles affects not just them but also the wider economy. That is why taking proactive, innovative approaches is not just a nice-to-have; it is essential for long-term resilience and survival (Kim et al., 2024). Why does innovation matter so much? Because businesses that embrace it tend to adapt faster to market changes, create new services more readily, and seize opportunities more effectively. It is really about building on creativity and discovery to improve how things work and boost the value an organization delivers (Al-kalouti et al., 2020). Moreover, this drive for innovation is often fuelled by creative, forward-thinking individuals, supported by the right organizational and social structures, who turn ideas into knowledge and competitive advantage (Rajapathirana and Hui, 2018). In this study, we examine how SMEs, particularly in Bali's vibrant creative sector, can enhance their innovation performance. We are looking closely at a concept called absorptive capacity, that is, a firm's ability to acquire, make sense of, and apply new knowledge, and how it relates to greater innovation and competitiveness (Zhao et al., 2020). There seems to be a gap between where knowledge comes from, how well it is absorbed, and how it ultimately becomes innovation. It is a dynamic mix of technology, creativity, and change. So, what do we mean by "innovation performance"? In simple terms, it is about how much a company's new products, services, or improved processes actually contribute to its overall success (Kaya et al., 2020). This can show up in different ways: Through research and development efforts, through patents, or by launching offers that are new to the business or entirely new to the market, each a sign of a company's capacity to innovate (Arsawan et al., 2020). This research aims to shed light on these connections through a survey-based approach. The goal is to offer a practical, theory-backed perspective that can help SME leaders and policymakers foster innovation, manage challenges more effectively, and ultimately support the sustainable growth of small businesses in Bali and beyond.

When we measure innovation, patents are a common go-to metric. However, it is helpful to remember they have their limits. Not every patent turns into a marketable product, and many valuable innovations are never patented. This can sometimes give us an incomplete picture of true innovative activity (Montani and Staglianò, 2022). Similarly, while research and development (R&D) spending is closely linked to innovation success, it is important to think of R&D as an input, the fuel for the process, rather than a direct output of innovation itself (Seo, 2020). Another nuance lies in how we understand a firm's absorptive capacity, its

ability to take in and use new knowledge. Often, research treats this as a single, broad concept. However, this can oversimplify what is, in fact, a dynamic, multi-stage capability (Aliasghar et al., 2023). To capture this complexity, our study breaks absorptive capacity into two distinct dimensions: Potential absorptive capacity (the ability to acquire and understand new knowledge) and realized absorptive capacity (the ability actually to apply that knowledge to create something new). To ground these ideas, we draw on two foundational theories: The Resource-based view (RBV) and the Knowledge-Based View (KBV). These lenses are particularly useful for understanding how SMEs, with their unique resources and constraints, build the capabilities to absorb knowledge and drive innovation. We believe that strengthening these capacities ultimately boosts innovation performance and keeps SMEs competitive. In fact, differences in how entrepreneurs absorb and apply knowledge might explain some of the variation we see in business success. With this in mind, our research focuses on Bali's creative industry. We aim to analyse how a firm's potential absorptive capacity influences its realized absorptive capacity, and how this, in turn, impacts both innovation performance and overall business success. By doing so, we hope to deepen understanding of knowledge absorption in the Indonesian context and offer practical insights for SMEs seeking to enhance their innovative capabilities. The structure of this paper will follow a clear path: We will begin with a review of the relevant literature on RBV, KBV, and the relationship between absorptive capacity and innovation. From there, we will outline our methodology, present the findings, and conclude with a discussion of what it all means for theory and practice.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT: RBV AND KBV VIEWS

At the heart of this study lie two complementary theories: The Resource-Based View (RBV) and the knowledge-based view (KBV). Think of them as a pair of lenses we use to understand how companies, especially small, creative ones, leverage what they have and what they know to build a lasting edge. As Maijanen (2020) notes, the quest to explain competitive advantage is like a "long story," told through different but connected perspectives. RBV and KBV are key chapters in that story. Simply put, RBV focuses on a company's unique, hard-to-copy resources, such as a special process or a strong brand reputation (Kellermanns et al., 2016). KBV, meanwhile, zooms in more specifically on knowledge itself as the most critical strategic asset, examining how it creates value (Russ, 2009). For players in the creative industry, this combined framework is especially useful. It helps explain why some businesses thrive in a dynamic environment while others struggle. The insight here is that success is not just about what you own but also about how well you learn, adapt, and evolve. While past studies have examined small firms through a resource lens, they often note their deep reliance on the owner's personal skills (Lerner and Almor, 2002). Our approach integrates the crucial role of knowledge. In our research, these theories directly shape the variables we explore: Absorptive Capacity represents the KBV, the ability to acquire and use new knowledge. Innovative Performance and SME Performance reflect the RBV, tangible outcomes, and resulting competitive gains. Together, RBV and KBV provide the foundation for the hypotheses we will present next, guiding our investigation into how knowledge transforms into resources, and resources into success for Bali's creative SMEs.

2.1. Entrepreneurship and Innovation

Let us talk about innovation and entrepreneurship, two concepts that are deeply intertwined. As Hölzle (2022) aptly puts it, "There is no innovation without entrepreneurship, from passion to practice." On the other hand, scholars like Bessant and Tidd (2018) remind us that innovation is not just a spark of creativity; it is a process that can be structured, managed, and nurtured. Think of it this way: Entrepreneurship brings the human element, the passion, the courage to take risks, the drive to make things happen. Innovation, in turn, is the tangible outcome of that energy, something that can be carefully guided from idea to reality. Rather than treating them as separate ideas, it is more useful to see them as interconnected parts of the same system (Rathidevi et al., 2022). One fuels the other: Innovation opens doors for new ventures, while entrepreneurship turns those innovations into social and economic value (Schmitz et al., 2017). This relationship is not new; it goes back to Schumpeter's early work in 1934. Over time, both concepts have evolved across different fields, yet they still share a core belief: That change and value creation go hand in hand (Landström et al., 2012). What makes this all come alive is the people behind it. Successful entrepreneurship often starts with what we call an entrepreneurial mindset, a blend of curiosity, adaptability, and a willingness to challenge how things have always been done (Kuratko et al., 2021). This mindset is not just innate; it can be nurtured in schools, workplaces, and communities (Auernhammer and Roth, 2021; Sarooghi et al., 2019). And when someone truly adopts this way of thinking, something wonderful happens: Spotting opportunities becomes second nature, and the journey from idea to impact feels more natural and within reach (Haltiwanger, 2021). In short, entrepreneurship and innovation are not just linked; they are two sides of the same coin, driven by people who are curious, courageous, and ready to create.

2.2. Innovation Performance

When we talk about innovation performance, we are essentially looking at how much a company's new products, services, or improved processes contribute to its overall success and effectiveness (Kaya et al., 2020). Think of it as a measure of how well a business turns creative ideas into tangible value. On a practical level, companies typically focus on three core innovation activities: Research and Development (R&D), Patenting, and Launching new products or services, whether they are new to the company or entirely new to the market. However, each of these indicators has caveats. For instance, not every patent leads to a marketable product, and many meaningful innovations are never patented at all (Montani and Staglianò, 2022). So, while useful, these measures do not always tell the whole story. Researchers have explored a range of perspectives on how best to gauge innovation. Some, like Farida et al. (2022), highlight specific metrics, while others, such as Abdallah et al. (2019) point to indicators such as the speed of new product introductions, the timeliness of product launches, and the degree of product innovation, including updates and redesigns.

Similarly, Beyene et al. (2016) Focus on formal outputs like invention patents, utility models, and design registrations. In this study, we have chosen to build on a set of five key innovation performance indicators, drawn from the work of Ferreras-Méndez et al. (2015), Dongling and Lam (2019), and Farida et al. (2022). This selection is also well-supported by recent studies, including Yang and Wang (2024); and Kaya et al. (2020). These metrics help us capture innovation in a way that is both meaningful and applicable, especially for small and medium-sized enterprises in the creative industry, where formal R&D or patenting may not fully reflect their innovative efforts.

2.3. SME Performance

How do we measure the success of a small or medium-sized business? Scholars and experts often have different answers. Some view performance through a value-oriented lens, focusing on how well a company creates value for its stakeholders. Others define it more concretely as the achievement of specific organizational goals (Arshad et al., 2020). In modern management research, company performance has become a central concept, often serving as the key outcome variable in studies (Salfore et al., 2023). Increasingly, academics recognize that performance is multidimensional, involving various aspects and indicators. That said, some researchers still treat it as a single, unified concept, measured by a single scale or metric for simplicity (Pucci et al., 2017). When it comes to measurement, there are generally two paths: Objective methods, like financial statements and accounting data. Subjective methods, such as surveys that capture employees' or managers' perceptions (Singh et al., 2016). While objective indicators are usually preferred, gathering reliable, comparable financial data across SMEs can be surprisingly difficult, sometimes even impossible (Appiah-Kubi et al., 2024; Singh et al., 2016). Many business owners are understandably cautious about sharing sensitive performance details, which further complicates data collection (Soelton et al., 2021). Because of these real-world hurdles, several studies, including those by Singh et al. (2016) and Latifi et al. (2021), have successfully used subjective performance measures. These rely on informed perceptions, often from owners or managers, and can capture both financial and non-financial dimensions of success (Parrilli and Radicic, 2020). In simple terms, performance is a company's ability to use its resources effectively to achieve its goals (Hassani et al., 2023). Ultimately, whether a researcher chooses objective or subjective measures depends on the study's specific context and aims. For this research, we define SME performance as the capacity of a business to achieve results that align with its stated objectives, a practical and holistic approach suited to the realities of small and medium creative enterprises.

2.4. Absorption Capacity

The concept of absorptive capacity, first introduced by Cohen and Levinthal (990) has become increasingly important for understanding how organizations learn, innovate, and stay competitive. Over the years, researchers have refined this idea, particularly emphasizing the distinction between potential and realized capacities, especially in today's fast-paced business environments (Zahra and George, 2002; Leal-Rodríguez et al., 2014; Camisón and López, 2014; Müller et al., 2021; Machado et al., 2020). Think of it in two connected phases: Potential Absorptive Capacity (PACAP). This is a company's ability to recognize, acquire, and make sense of external knowledge, essentially, how well it "takes in" new ideas (Yuwono et al., 2020). This capacity is deeply influenced by factors such as an open organizational culture, a willingness to change, and strong ties with external partners, such as government bodies, universities, or other firms (Aliasghar and Haar, 2023; Distel, 2019). By strengthening PACAP, a firm can quickly adapt and reconfigure its internal processes, gaining strategic agility and boosting performance (Ahmed et al., 2020). While PACAP focuses on acquiring knowledge, RACAP focuses on applying it. This refers to the ability to transform and apply that knowledge to produce tangible results, such as new products, improved services, or better processes (Machado et al., 2020). Turning knowledge into innovation often depends on internal stability, effective management systems, and the capability to integrate new insights into everyday operations. In practice, both capacities are essential. Nurturing a culture of knowledge sharing, continuous learning, and strategic renewal helps strengthen a firm's overall absorptive capacity. It is this dynamic, two-part capability that enables SMEs, especially in creative industries, to turn external inspiration into real-world innovation and lasting competitive advantage.

2.5. The Two-Step Dance: Potential and Realized Absorptive Capacity

To understand how organizations learn and innovate, the concept of absorptive capacity (ACAP) is essential. At its heart, ACAP is a company's dynamic ability to learn from the world around it. We draw on the foundational work of Zahra and George (2002), who framed ACAP not as a static resource but as a vital process with four key steps: Acquiring, assimilating, transforming, and applying new knowledge. To make sense of this process, it is helpful to think of it in two connected phases: PACAP: This is the "scanning and understanding" phase. It encompasses a firm's ability to identify valuable external knowledge (acquisition) and to interpret and make sense of it internally (assimilation). Think of it as the organization's curiosity and learning agility. RACAP: This is the "doing and applying" phase. It involves the ability to refine, combine, and transform that newly understood knowledge with existing know-how (transformation) and to ultimately channel it into new products, processes, or business models (exploitation). It is crucial to see these as distinct yet deeply interdependent capabilities. A company can be excellent at gathering insights (high PACAP) but poor at executing on them (low RACAP). Simply knowing does not guarantee effective use, as the gap between acquisition and application can be significant (Limaj and Bernroider, 2019). However, they work in a powerful sequence. PACAP provides the essential raw material; RACAP builds the final product. You cannot apply knowledge you have not first acquired and understood. In this way, strong PACAP creates the necessary conditions for effective RACAP to follow (Smes et al., 2021). The better a firm is at absorbing new ideas, the more robust its foundation for acting on them successfully. This relationship is particularly critical for small and medium-sized enterprises (SMEs). Those with higher PACAP are better

positioned to integrate novel insights, combine them with their internal expertise, and ultimately deploy this fused knowledge to drive innovation (Lee and Wu, 2010; Khaksar et al., 2020). Therefore, we propose a core hypothesis for this dynamic: (H_1): PACAP positively affects RACAP.

2.6. The Spark of Innovation: Why Potential Absorptive Capacity Matters

Think of innovation less as a sudden "eureka!" moment and more like skilled cooking. A chef cannot create a masterpiece without first gathering high-quality, fresh ingredients. In the world of business, PACAP is exactly that: It is the organization's capability to scout, recognize, and understand valuable external knowledge, the essential ingredients for innovation. A company's own experience is vital, but it is the act of blending that internal know-how with new, external insights that truly ignites progress. This ability to "absorb" knowledge is not passive; it is an active, strategic skill. It determines whether a company merely sees information or truly comprehends its potential value. Here is where it gets interesting. The type of knowledge a company absorbs shapes the kind of innovation it can produce. For exploitative innovation, refining and improving existing offerings, the most useful external knowledge is often closely related to what the firm already knows. It is a comfortable, incremental learning process, like a software company using fresh user feedback to enhance its current app interface. However, for more exploratory or radical innovation, companies must venture further. They need to engage with knowledge that's further from their comfort zone, a concept scholars call greater "cognitive distance." Success here requires not just prior knowledge, but a genuine curiosity and the organizational agility to make sense of unfamiliar concepts. This challenging, boundary-stretching work is where PACAP proves critical, enabling the vital first step of acquisition and assimilation before any application can occur. Algarni et al. (2023) A supportive, inquisitive culture acts as a powerful catalyst in this phase, encouraging teams to look outward and delve into complex new domains. In essence, Potential ACAP is the indispensable gateway. It ensures a steady, rich pipeline of insights, setting the stage for all subsequent innovation activities. Without this strong capacity to identify and understand new knowledge, the engine of innovation cannot start. Therefore, we propose a fundamental hypothesis: (H_2): PACAP has a positive effect on Innovation Performance.

2.7. Bringing Knowledge to Life: How Realized Absorptive Capacity Drives Results

We have established that companies need to pursue two distinct types of innovation: Exploitative (refining and improving existing offerings for sustainable growth) and exploratory (pursuing radical, game-changing ideas). However, here is the catch: Simply having new knowledge is not enough. The true challenge and the real source of competitive advantage lie in successfully applying it to create tangible value. This is where the two facets of absorptive capacity (ACAP) work in concert. Think of Potential ACAP (PACAP) as the act of gathering and understanding new ingredients. It requires curiosity, openness, and a culture receptive to new ideas. Realized ACAP (RACAP), on the other hand, is the actual process of cooking, combining, and serving a transformative meal. It demands structured processes, control, and systematic execution to transform and utilize that valuable knowledge. Crucially, PACAP and RACAP are not independent; they are deeply complementary stages in a single innovation pipeline. An organization's overall ACAP strength depends entirely on this sequence: First acquiring and assimilating knowledge PACAP, and then transforming and exploiting it RACAP to generate results. As recent studies affirm, it is this full-cycle capability, the systematic journey from knowledge acquisition to its practical application, that directly enhances a firm's innovative output and market performance (Ferreras-Méndez et al., 2021; Khaksar et al., 2020). Therefore, while PACAP sets the stage, it is RACAP that brings the innovation performance to life. This leads us to our third hypothesis: (H_3): RACAP has a positive effect on Innovation Performance**.**

2.8. From Ideas to Impact: Linking Innovation Performance to SME Success

It is widely recognized that a company's ability to innovate is a powerful engine for growth and a key source of sustainable competitive advantage. For small and medium-sized enterprises (SMEs), this link between innovation performance and overall business performance is particularly crucial. However, measuring this relationship is not always straightforward. The challenge lies in the complexity of organizational life. Multiple factors, from internal resource constraints to shifting market conditions, can influence how effectively innovative ideas translate into tangible results. There is often a gap between innovative inputs (such as R&D efforts) and measurable outputs (such as profit or market share), making it difficult to pinpoint clear causation. Despite these complexities, a strong body of research suggests a positive correlation between innovation and organizational performance. Many studies find that companies that excel at innovation tend to enjoy stronger overall results. For instance, research continues to affirm that innovation positively influences various aspects of firm performance, including market responsiveness and long-term viability (Berraies et al., 2020). However, the story is not simple in every way. Some nuanced studies reveal that the impact can depend heavily on context, measurement methods, and the type of innovation. A notable study of SMEs in Harare, Zimbabwe, found that innovation did not show a significant direct impact on certain financial and non-financial performance measures, highlighting the role of environmental and structural factors (Mabenge et al., 2022) This does not necessarily negate the value of innovation; rather, it emphasizes that other variables, such as strategic alignment and execution capability, may mediate its benefits. This brings us to a pivotal question for SMEs: Does a strong track record of innovation improve business performance? Balancing the prevailing evidence with contextual nuances, this study proposes that effective innovation ultimately creates value for the organization. Therefore, we hypothesize: (H_4) There is a positive relationship between innovation performance and SME performance.

Based on the explanation above, the research framework of this study can be described as follows:

Figure 1: Research framework

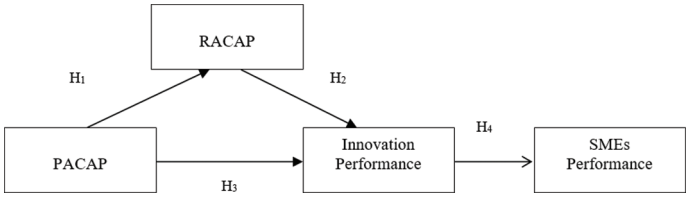


Figure 1. Above, it can be concluded that PACAP, as the initial stage, enables companies to acquire external knowledge. This knowledge is then developed through RACAP into applicable knowledge. Both PACAP and RACAP contribute to Innovation Performance, the primary determinant of SME performance. Thus, this model demonstrates a direct effect (PACAP to Innovation Performance) and an indirect (mediated) effect through RACAP and Innovation Performance. Therefore, the study's conceptual conclusion highlights that absorptive capacity is a strategic factor in enhancing innovation and serves as the primary mechanism linking a company's internal capabilities to business performance. This model is relevant for explaining how SMEs can improve performance through systematic knowledge and innovation management.

3. METHOD

This study uses a survey-based research Design. Data collection aims to analyse the impact of independent variables on dependent variables.

3.1. Population and Sample

This study focuses on small and medium enterprises (SMEs) within Bali's creative industry. Our research population is drawn from the 2024 Creative Economy Data, which lists 4,853 eligible creative SMEs across Bali's eight districts and one city. To give you a clearer picture, here is how these businesses are distributed: Bangli has the largest concentration with 3,580 units, followed by Buleleng (437), Denpasar (282), Badung (263), Klungkung (115), Jembrana (101), Karangasem (37), Gianyar (24), and Tabanan (14). Now, you might wonder, "Why Bali?" We chose this province deliberately for a few key reasons. First, the creative sector is at the heart of Bali's economic recovery strategy. It has shown remarkable resilience, even though the challenges of the COVID-19 pandemic. Second, this industry plays a crucial role in creating jobs for Balinese communities, offering a vital lifeline for those affected by pandemic-related unemployment. Third, we specifically focused on businesses with over 3 years of operation, ensuring we studied established ventures. This growth is further supported by initiatives such as the Bali Bangkit 2021 program, which has been instrumental in fostering sustainable development and economic resilience in the region. From this population of 4,853, we determined an optimal sample size using the Cochran formula for limited populations. This gave us a representative sample of 360 SMEs. The sample reflects the geographical distribution of the population, with the number of units selected from each area as follows: Bangli (275), Buleleng (31), Denpasar (20), Badung (16), Klungkung (7), Jembrana (6), Gianyar (2), Karangasem (2), and Tabanan (1).

3.2. Data Collection, Instruments, and Measurement

To ensure we captured the right insights, we specifically targeted top managers or staff directly involved in innovation at each SME. This approach gave us a reliable perspective on innovation practices and development needs, straight from the key decision-makers. Given the practical challenges of arranging in-person meetings, we relied on a questionnaire to collect data. We distributed 360 surveys and received 345 back, a strong response rate of 95.65%. After reviewing them, 330 questionnaires were fully completed and usable (91.67%), 5 did not meet our criteria (6.60%), and 10 were incomplete (3.30%). To measure our four main variables, we used a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). This tool was chosen to reliably and accurately capture the perceptions and attitudes relevant to our study's context.

3.3. Operational Definitions and Variable Indicators

This study identifies four basic variables: Small and medium enterprise performance (OP), INOP, PACAP, and RACAP. The operational definitions, dimensions, and indicators related to each construct are described in detail in Table 1.

3.4. Data Analysis Techniques

Descriptive analysis involves describing the characteristics of respondents and their responses to indicators generated from the research framework. In this study, data were processed using SPSS version 26. Inferential statistical methods were used to evaluate the measurement model, also known as the outlier model. To evaluate the structural model, several techniques were used, including: (a) R-square (R) value, (b) Q-square predictive relevance (Q), and (c) hypothesis testing through resampling methods such as bootstrapping, as explained by (Springer, 2010).

4. RESULTS

4.1. Characteristics of Respondents

Let us take a closer look at the people and businesses who took part in this study. The survey captured key characteristics, including gender, age, education level, business field, years in operation, and number of employees, providing a clear demographic snapshot of Bali's creative SME landscape. Gender and Age: Slightly more than half of respondents were male (189, 57.2%), and 141 (42.8%) were female. In terms of age, 51% of the 168 participants were under 30, reflecting a young, dynamic entrepreneurial base. Another 128 respondents (38.7%) fell into the 30-40 age bracket, while 34 (10.3%) were over 40. Education Background Among participants, 175 (53.1%) held a diploma. Bachelor's or postgraduate degrees were reported by 94 respondents (28.3%), and 61 (18.6%) had completed high school or vocational training. Fields of Business: The participating SMEs came from eight creative sub-sectors. The largest group was Culinary, with 100 respondents (30.3%), followed by Visual Communication and Advertising (50, or 15.2%) and Fashion (46, or 13.9%). The remaining fields included: Interior design and architecture (9.7%), animation, video and photography (9.7%), Music and performance (8.3%), fine arts and crafts (7.6%), and Applications (5.4%), as well as business experience and size. In terms of longevity, the businesses were fairly evenly distributed: 109 (33.1%) had

Table 1: Operational definitions, dimensions, indicators, and source

Construct (variable)	Operational definition	Dimensions and number of indicators	Source
OP	Small and medium-sized enterprises (SMEs) demonstrate their performance by achieving goals through effective and efficient use of resources. This involves optimizing the use of available assets to maximize output and achieve strategic objectives, reflecting overall operational competence and market effectiveness.	To measure the performance of SMEs, using six indicators, namely: OP1, OP2, OP3, OP4, OP5, and OP6	(Changalima et al., 2025; Matloob et al., 2025; Halik et al., 2024; Halik et al., 2023; Halik et al., 2021)
INOP	Innovation performance is the successful implementation of new ideas and concepts.	The number of indicators is five: INOP1, INOP2, INOP3, INOP4, INOP5	(Ferreras-Méndez et al., 2015; Dongling and Lam, 2019; Farida et al., 2022; Yang and Wang, 2024; Kaya et al., 2020)
PACAP	Represents the acquisition and assimilation of knowledge. The mastery of an organization's ability to recognize and obtain information from external sources, and to assimilate it, refers to the organisation's capacity to interpret and process the knowledge it has acquired.	The number of indicators is twelve: PACAP1, PACAP2, PACAP3, PACAP4, PACAP5, PACAP6, PACAP7, PACAP8, PACAP9, PACAP10, PACAP11, PACAP12	(Aliasghar et al., 2023; Ferreras-Méndez et al., 2015)
RACAP	An organisation's ability to transform and exploit knowledge.	The number of indicators is six: RACAP1, RACAP2, RACAP3, RACAP4, RACAP5, RACAP6	(Aliasghar et al., 2023; Ferreras-Méndez et al., 2015)

been operating for <5 years, 114 (34.5%) for 5-10 years, and 107 (32.4%) for more than 10 years. As for size, most were small-scale: 180 (54.5%) had 5-10 employees, 111 (33.5%) had fewer than 5, and 39 (12%) had more than 10 employees. This profile highlights the diversity and youthfulness of Bali's creative SME sector, with a strong presence of recently established small-scale enterprises across a variety of creative fields.

4.2. Outer Model

As Ramadhana and Hussein (2022) Note in their article, a crucial first step in any PLS-SEM analysis is evaluating the measurement model. Think of this model as the blueprint that defines how the questions we ask in a survey (the observed indicators) connect to the broader, unseen concepts we are trying to study (the latent variables), a relationship Hair and Alamer (2022) also emphasize. To trust our blueprint, we check it against two main types of validity. First, convergent validity asks: "Do all my questions that are supposed to measure the same concept actually agree with each other?" We look for strong, consistent correlations and high factor loadings. Second, discriminant validity asks: "Are my different concepts truly distinct?" This ensures we're not accidentally measuring the same thing with two different sets of questions. At their core, factor loadings are the statistical bridges that enable this. They are the weights that link our raw, numerical data back to the abstract ideas we care about. By analyzing them, we transform a simple list of questionnaire scores into a coherent, evidence-based story about what is really driving the responses we see. It is how a researcher moves from just collecting data to genuinely understanding the structure of the phenomenon they are studying. You can see this process in action in Table 2, which presents the factor loadings we calculated from our primary data.

Table 2 shows that after eliminating indicators that did not meet the required threshold, all remaining indicators now score above 0.7, indicating they are valid. Factor loadings indicate how well each item measures the underlying construct; values of 0.7 or higher are considered acceptable, indicating a robust association.

Table 2: Factor loading

Indicator	Outer loadings
INOP2 <- INOP	0.829
INOP3 <- INOP	0.902
INOP4 <- INOP	0.886
INOP5 <- INOP	0.908
OP1 <- OP	0.766
OP4 <- OP	0.888
OP5 <- OP	0.917
OP6 <- OP	0.812
PACAP10 <- PACAP	0.879
PACAP11 <- PACAP	0.886
PACAP12 <- PACAP	0.896
PACAP4 <- PACAP	0.921
PACAP5 <- PACAP	0.941
PACAP6 <- PACAP	0.933
PACAP7 <- PACAP	0.932
PACAP8 <- PACAP	0.947
PACAP9 <- PACAP	0.948
RACAP3 <- RACAP	0.944
RACAP4 <- RACAP	0.960
RACAP5 <- RACAP	0.957
RACAP6 <- RACAP	0.950

Source: Primary data processing 2025

Table 3: Cronbach's alpha, composite reliability, average variance extracted (AVE)

Construct	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
INOP	0.904	0.909	0.933	0.778
OP	0.867	0.872	0.91	0.719
PACAP	0.977	0.978	0.98	0.847
RACAP	0.966	0.972	0.975	0.908

Source: Primary data processing 2025

4.3. Measurement Model Results: Reliability, AVE

This validity was evaluated using average variance extracted (AVE), Fornell-Larcker criteria, and composite reliability. Although conceptually different, AVE and discriminant validity are interrelated and together ensure the overall validity of the model, as shown in Table 3.

Based on the results presented in Table 3, the questionnaire used in this study demonstrates strong reliability and convergent validity. In simpler terms, this means our survey instrument consistently measures what it is intended to measure. Let us break this down: First, we look at Composite Reliability, which assesses the internal consistency of our measurement, such as whether all the questions for a single concept work together reliably. All our constructs comfortably exceed the recommended threshold of 0.700, confirming the questionnaire's reliability. We also evaluated convergent validity, which asks: "Do all the items that are supposed to measure the same underlying concept actually agree with each other?" We used two key metrics here: Factor Loadings, which indicate each question's strong correlation with its own construct. Average variance extracted (AVE): These measures how much of the variation in the answers is explained by the underlying concept under study, rather than by random error. All constructs had AVEs above 0.5, which is the standard benchmark. In practical terms, a higher AVE indicates that the questions for each concept are well-aligned and collectively capture a significant portion of what we intend to measure. Furthermore, the data show that, for each construct, the correlation among its own items is stronger than the correlation with items from other constructs. This is a good sign that we are clearly measuring distinct concepts. In summary, because both the factor loadings and AVE values meet the established statistical criteria, we can confidently conclude that our questionnaire is a valid and robust tool for measuring the key concepts in this study. This careful validation ensures the accuracy and credibility of our subsequent findings.

4.4. Discriminant Validity

Discriminant validity helps us verify that the constructs or concepts in our study are truly distinct rather than merely mirroring one another. In simpler terms, it checks whether our questionnaire items measure different things, rather than accidentally measuring the same underlying idea in multiple ways. One established method to assess this is the Fornell-Larcker criterion. Here is how it works in practice: The core principle: For each construct, we compare two values: The square root of its Average Variance Extracted (AVE) (which represents how well its own items capture it). It is correlated with all other constructs in the model. The Rule: A model demonstrates good discriminant validity if, for every construct, the square root of its AVE is greater than its correlation with any other construct. What does this look like? You can see this comparison clearly in Table 4. The table 4 presents a matrix in which the diagonal values (from top-left to bottom-right) are the square roots of the AVE for each construct. The values off the diagonal are the correlations between different constructs. Why is this important? If the diagonal value for a construct is the largest number in its row and column, it confirms that the construct shares more variance with its own indicators than with any other construct in the model. This is strong evidence that each construct is unique and that our measurement model is sound. In essence, passing the Fornell-Larcker test gives us confidence that we are studying separate, well-defined concepts, which is fundamental for drawing meaningful and accurate conclusions from our research.

Table 4: Discriminant validity

Construct	INOP	OP	PACAP	RACAP
INOP	0.882			
OP	0.706	0.848		
PACAP	−0.642	−0.589	0.921	
RACAP	0.545	0.773	−0.599	0.953

Source: Primary data processing 2025

Table 5: Adjusted R-squared, F-square, and Q-square

Construct	Adjusted R-square	F-square	Q-square
Organization performance	0,497	0,992	0,355

Source: Primary data processing 2025

4.5. Inner Model

The assessment of structural models in PLS-SEM focuses on evaluating the significance and relevance of path coefficients, as well as through adjusted R-squared, F-square, and Q-square, which can be observed in Table 5.

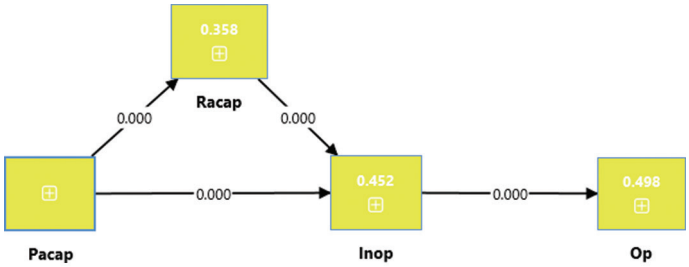
Adjusted R-squared describes how much of the variation in the endogenous variable can be explained by the exogenous (and mediator) variables in the structural model. The coefficient of determination of OP of 0.487 or 49.70% can be interpreted as PACAP, RACAP, and Innovation Performance variables being able to explain OP by 48.79% (moderate) (Hair et al., 2017) While other variables outside the model explain the remainder, the F-squared (f^2) is a measure of effect size, indicating how much a particular exogenous variable, in this case INOP, contributes to the R^2 of the endogenous variable OP, when that variable is included or excluded from the model. The analysis results show that the f-square for OP is 0.992 (>0.350), indicating a large/strong effect (Cohen and Levinthal, 1990). The Q^2 value for the OP variable is 0.355 (>0.350), indicating that the model has strong predictive relevance for explaining OP (Hair et al., 2017). Although the coefficient of determination (Adjusted R Square) is in the moderate range, the effect size evaluation results indicate a large f^2 on the main path, indicating that the key variables in the model make a substantive contribution to company performance. In addition, the high Q^2 value indicates strong predictive power. These findings

Table 6: Path coefficient results

Influence between variables	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P-values	Is
INOP→OP	0.706	0.707	0.030	23.191	0.000	Supported
PACAP→INOP	−0.492	−0.492	0.048	10.148	0.000	Supported
PACAP→RACAP	−0.599	−0.600	0.038	15.870	0.000	Supported
RACAP→INOP	0.251	0.252	0.051	4.954	0.000	Supported

Source: Smart PLS data processing results, 2025

Figure 2: Path coefficient results



confirm that the model is not only theoretically relevant but also has good predictive validity.

4.6. Hypothesis Testing

Hypothesis testing involves examining the original sample (O) value to determine whether the relationship is positive or negative, and using the t-statistic or P-value to assess whether the relationship is statistically significant. The t-statistics are also shown in Figure 2.

Figure 2 shows the path coefficient results, which can be explained in Table 6 as follows:

Based on the results in Table 6, we can summarize the hypothesis-testing outcomes as follows: The first hypothesis (H_1) posited a positive relationship between PACAP and RACAP. The data strongly support this, with an original sample estimate of 0.599, a t-statistic of 15.870 (>1.96), and a P = 0.000 (<0.05). Therefore, PACAP has a significant and positive influence on RACAP. The second hypothesis (H_2), which suggested a positive effect of PACAP on INOP, is also supported. The analysis shows an original sample estimate of 0.492, a t-statistic of 10.148 (>1.96), and a P = 0.000 (<0.05). This confirms a significant positive impact. For the third hypothesis (H_3), the path from RACAP to INOP was examined. With an original sample estimate of 0.251, a t-statistic of 4.954 (>1.96), and a P = 0.000 (<0.05), the results confirm that RACAP also exerts a significant and positive influence on innovation performance. Finally, the fourth hypothesis (H_4), positing a positive effect of INOP on OP, is strongly supported by the data. The original sample estimate is 0.706, the t-statistic is 23.191 (>1.96), and the P = 0.000 (<0.05), indicating a highly significant positive relationship. All reported original sample (O) values above are treated as positive based on the concluding statements in your original text, which indicated positive relationships. If the negative signs in the initial description were intended, the interpretation of the direction of the relationships would be reversed. The statistical significance, however, remains unchanged.

5. DISCUSSION

In this section, we explore the research hypotheses that address our core question: How can knowledge absorption capacity and innovation enhance SME performance? Our findings align with recent studies (Cheah et al., 2023) moreover, they are grounded in two key theoretical lenses: The resource-based view (RBV) and the Knowledge-Based View (KBV). The Knowledge-Based View emphasizes that knowledge itself is a strategic asset that creates real value and competitive advantage (Farzaneh et al., 2022). For creative industry SMEs in Bali, this perspective offers a useful framework to understand why some businesses thrive while others struggle in today's dynamic environment. It highlights the importance of learning, adaptability, and changing a mindset that enables creative SMEs to evolve alongside shifting market conditions. Similarly, the Resource-Based View Barney, (1991) reminds us that innovation can be seen as a VRIN resource: Valuable, rare, inimitable, and non-substitutable. Even small, resource-constrained SMEs can achieve stronger performance by leveraging such capabilities (Zastempowski, 2024). What does this mean in practice? Essentially, our research underscores the criticality of SME managers actively cultivating and managing their capacity to absorb new knowledge. When properly nurtured, this capacity fuels innovation and, in turn, drives better business outcomes. By embracing this approach, creative SMEs in Bali and beyond can build a sustainable path to growth and resilience.

Let us break down the fascinating relationship between a firm's potential and realized capacity to absorb knowledge, and why it matters so much for innovation. Recent research confirms that a company's potential to absorb new knowledge significantly influences its ability to realize that potential in practice (Smes et al., 2021). This realized capacity, in turn, is crucial for driving innovation and improving overall organizational performance (Antonio Davila et al., 2019). In fact, studies indicate that this realized absorptive capacity has a stronger direct impact on innovation performance than potential capacity alone (Yuwono, 2021). This brings us to two key components: PACAP and RACAP. Think of PACAP as comprising the acquisition and assimilation of the organization's ability to identify and gather valuable external knowledge. However, acquiring knowledge is not the same as using it effectively (Cuevas-Vargas et al., 2022.; Limaj and Bernroider, 2019). Knowledge alone is not enough; it must be embedded in new products and processes (Ali & Park, 2016). That is where RACAP transformation and exploitation come in. This is the organization's capability to refine, combine with existing knowledge, and apply what it has learned in a commercial context. It is the crucial "so what?" after the initial discovery. While PACAP provides new insights, RACAP converts them into tangible value (Smes et al., 2021). Here is the key takeaway: These two capacities are deeply interconnected and mutually reinforcing (Aliasghar and Haar, 2023). The new perspectives gained through PACAP make an organization better at spotting and seizing opportunities through RACAP. They work in a continuous cycle, each strengthening the other (Saad et al., 2017). For SMEs, this is particularly powerful. Firms with a stronger overall absorptive capacity are better equipped to integrate new knowledge, blend it with experience, and leverage it throughout their innovation processes (Ahmed et al., 2020). Ultimately, mastering both the potential to learn and the realized ability to apply that learning is what turns knowledge into a sustainable competitive advantage.

These findings align with a growing body of research highlighting the positive role of absorptive capacity in fostering innovation.

Our results are consistent with Nguyen (2022) conclusion that a firm's absorptive capacity positively impacts innovation performance. This relationship is further supported by earlier work from Antonio Davila et al. (2019), which found that PACAP positively influences innovative outcomes. Similar evidence comes from Mubarik et al. (2021), whose study in Malaysia's Electrical and Electronics sector demonstrated PACAP's positive effect on R&D performance. Similarly, Smes et al. (2021) observed a significant positive relationship between PACAP and SMEs' innovative performance in Jordan. In essence, absorptive capacity equips organizations to overcome common barriers to innovation (Aliasghar et al., 2019). It fosters an internal environment of openness to new ideas and develops the crucial ability to adopt new processes or products successfully, key factors for building a sustainable competitive advantage (Liu et al., 2021). More specifically, absorptive capacity provides firms with strategic flexibility, allowing them to reconfigure operations and remain competitive in changing markets (Rehman et al., 2020). It is important to note, however, that this relationship is not universal across all contexts. An interesting contrast comes from Yuwono et al. (2020), who found that RACAP had no significant positive effect on innovation in Batam City's tourism sector. This discrepancy underscores a key point of our discussion: The influence of absorptive capacity may vary across organizational contexts and types of innovation. It suggests that the mechanisms through which potential and realized capacities translate into performance can differ, highlighting the need for a nuanced application of these concepts.

This study reveals a practical insight: When SMEs actively engage in the daily routines of seeking and assimilating industry-relevant information, a core part of their PACAP, they remain well informed and agile. This consistent flow of external knowledge reshapes the company's knowledge base, enabling it to align internal strategies with external opportunities and thereby strengthening its innovation performance.

Our findings thus reinforce the significant role of RACAP in promoting innovation. This is well-supported by recent research. For instance, Novino (2023), Smes et al., (2021) in Jordan, Mubarik et al. (2021) in Malaysia's Electrical and Electronics sector, and Yuwono et al. (2020) In Batam's tourism industry, all reports a positive and significant relationship between RACAP and innovation outcomes. Earlier work by Antonio Davila et al. (2019) aligns with this view. What this tells us is that, in today's open innovation landscape, the ability not only to acquire but also to use external knowledge effectively is a vital strategy for companies to complement their internal capabilities and drive innovation (Leal-Rodríguez et al., 2014). Therefore, for sustainable growth, firms should focus on developing this practical, realized absorptive capacity to transform knowledge into tangible results (Duong et al., 2022). This leads to a final, important consideration highlighted in prior literature: Innovation is not a single path. Firms often pursue two complementary types of innovation: Exploratory and exploitative (Zhao et al., 2020). Exploitative innovation focuses on incremental, continuous improvements to existing products and services. In contrast, exploratory innovation involves more radical rethinking and the development of entirely new offerings (Delgado-Verde et al., 2016). A strong absorptive capacity equips SMEs to refine what they already do well while also exploring new frontiers for future growth.

These findings reinforce a central idea in business: Innovative companies tend to perform better in the marketplace because they are more adept at responding to shifting customer demands and evolving market requirements. (Le et al., 2023; Lee et al., 2019). In today's fast-paced world, innovation is widely recognized as a cornerstone of organizational success (Urban and Verachia, 2019). Our study adds to this understanding by showing that innovation performance has a significant, positive effect on SME performance in Bali, Indonesia. This result is consistent with international evidence. For example, Antonio Davila et al. (2019) found a direct positive link between innovation performance and organizational performance in Brazilian firms. Similarly, Almeida and Wasim (2023) observed that green innovation positively influences sustainable business performance among Portuguese SMEs, and Bashir (2023) reported that innovation strategies boost SME performance in Saudi Arabia. Here is the core idea: The knowledge a company absorbs is ultimately applied by its people, its human capital, to develop innovations, which in turn drive superior performance and competitive advantage (Pradana et al., 2020). In contrast, businesses that fail to integrate innovation into their strategy risk falling behind due to obsolete products and processes. Simply put, in a dynamic economy, innovation is not a luxury; it is a requirement for staying relevant (Almeida and Wasim., 2023). This connects directly to the Knowledge-Based View (KBV), which sees the firm's key role as integrating specialized knowledge from individuals into marketable goods and services. From this perspective, a company's innovation output is essentially the result of how well it integrates knowledge (Antonio Davila et al., 2019). It is no surprise, then, that so much research continues to underscore the powerful, fundamental link between knowledge and innovation.

6. CONCLUSION

This study tested and confirmed hypotheses based on the Resource-Based View (RBV) and Knowledge-Based View (KBV), using survey data from small and medium-sized enterprises (SMEs) in Bali's creative industry. Four main hypotheses were examined, and the results offer clear, practical insights. First, the data show that PACAP has a significant positive influence on RACAP**.** This means that a firm's ability to acquire and understand new external knowledge strongly enhances its capacity to apply that knowledge internally. Furthermore, both forms of absorptive capacity, PACAP and RACAP, had a positive and significant impact on innovation performance among Bali's creative SMEs. Interestingly, RACAP has a stronger effect on innovation performance than PACAP. In simpler terms, while recognizing valuable knowledge is important, the real driver of innovation is actually putting that knowledge to work. Finally, and crucially, the study confirms a direct, positive link between innovation performance and overall SME business performance**.** This reinforces a powerful idea: When SME leaders believe their unique and valuable human capital is being used to

drive innovation, it leads to higher performance and a stronger competitive edge. In essence, the journey from learning to doing to innovating is what ultimately fuels success for these creative businesses.

This study has certain limitations that are worth acknowledging and sheds light on how absorptive capacity shapes innovation within creative SMEs in Bali. We found that PACAP significantly strengthens RACAP, and interestingly, RACAP has a stronger direct impact on innovation outcomes. This really underscores a key point: It is not enough to acquire new knowledge; the real value lies in effectively translating it into actionable insights and applications. At the heart of this process is human capital. The people within these SMEs play a crucial role in transforming absorbed knowledge into tangible innovations and, ultimately, a sustainable competitive edge. It is important to note that this study focused specifically on PACAP and RACAP among creative SMEs in Denpasar. Looking ahead, future research could broaden the scope both geographically and conceptually and explore additional variables that may influence innovation performance. Doing so would provide an even richer understanding of how small creative firms learn, adapt, and thrive. Expanding the analysis to include SMEs of different sizes may also reveal useful variations. Conceptually, exploring the prerequisites of absorptive capacity through a second-order model could yield deeper theoretical insights. Understanding what truly enables SMEs to absorb knowledge effectively would help them optimize learning, sustain innovation, and maintain a competitive edge, ultimately providing practical value for both policymakers and business practitioners.

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