Intrapreneurship as a Driver of Business Innovation

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Abstract

he need for constant renewal with new capabilities and valuable assets in an increasingly complex context represents an extraordinary challenge for companies. One of the most relevant sources is hidden internal resources in the form of the entrepreneurial initiatives of personnel - intrapreneurship. Interest in this new type of entrepreneurship has been growing steadily over the last decade. This article contributes to the understanding of the factors influencing its development using the example of manufacturing enterprises

in the most developed states of India. The role of key prerequisites such as individual entrepreneurial ability and acquired competencies (strategic thinking and proactive behavior) as well as the art of cultivating a unique innovation-friendly climate is revealed. The author's findings strengthen the case for new formats of economic development in addition to classical entrepreneurship. These findings may be useful for decision-makers deciding how to renew and build competitive advantage in a dynamic business environment.

Keywords: new strategies; entrepreneurship; business; intrapreneurship; working climate; innovation; development of entrepreneurship; new opportunities; realization of potential; transformations

Citation: Vivek V., Chandrasekhar K. (2024) Intrapreneurship as a Driver of Business Innovation *Foresight and STI Governance*, 18(2), pp. 97–105. DOI: 10.17323/2500-2597.2024.2.97.105



Introduction

Entrepreneurship plays an important role in the transition of the economy to new technological structures, ensures job growth (Parker, 2011; Gawke et al., 2019), and improves the overall economic situation (Yang et al., 2009). Finding new business models in today's increasingly complex context requires a strong ability to balance multiple factors with multidirectional influences and higher level competencies (Mom et al., 2015). One of the new strategies is intrapreneurship: internal entrepreneurship in which innovations are generated and the company is constantly updated. Intrapreneurship is a type of entrepreneurship in which new enterprises are created by employees and are part of the parent company (Antoncic, Hisrich, 2003). If in traditional entrepreneurship, the founder of the company, as an independent entity, assumes all the risks associated with its survival and development, then the intrapreneur receives full support from their employer, including risks coverage (Bosma et al., 2013; Klofsten et al., 2021; Kuratko, Audretsch, 2013). Interest in such a business development mechanism is growing steadily among academic researchers (Hornsby et al., 2013). Intrapreneurship can be seen as a safe space that allows for the cultivation of new business projects for the constant renewal and sustainability of the company. The creation of such a space is a complex problem, since high-order management competencies are required. Work climate is often perceived as an objective characteristic of an organization. However, it is largely determined by tacit hard-to-access knowledge due to the fact that it is a strategic competitive advantage.

Among the unique components of the creative process is the provision of free time within the work schedule for entrepreneurially oriented personnel to implement such projects. The absence of a strict framework requiring compliance with the official content of the job functions gives employees the opportunity launch new ventures and motivates them to experiment with new ideas (Menzel et al., 2007). This combination of free-spiritedness and commitment to the organization is the basic element of a unique corporate philosophy (Bolino et al., 2003; Schneider, Bowen, 1993). The factors that determine the development of intrapreneurship have not yet received sufficient coverage in the research. The purpose of our article is to fill this gap. Our goal is to study the relationship between entrepreneurial competencies and the development of intrapreneurship, and to assess the contribution of the working climate at manufacturing companies to this process.

The article begins with a literature review of the theoretical foundations of intrapreneurship and its practices in the global and Indian contexts. It then reveals the regularities helping or hindering its development, illustrated by the authors' empirical research based on a survey of employees at leading industrial companies in India. The conclusion summarizes the key findings and substantiates their significance for cultivating new formats of innovative development.

Literature Review

The phenomenon of intrapreneurship has been discussed in the academic literature since the mid-1980s. (Pinchot, 1985; Drucker, 1986; Pinchot, Pellman, 1999). At the start of the development of this research (1985– 2007), mainly narrow specialists showed interest in it. The turning point came in 2008, as the global financial crisis prompted a rethinking of business models and the search for new renewal strategies. In this context, this new format of entrepreneurship began to be perceived as an attractive and reliable alternative to risky endeavors. As a result, experts from different fields began to be involved in the study of this phenomenon (Valencia et al., 2016). Intrapreneurship is seen as one of the key mechanisms for generating the innovations that companies need in order to achieve sustainability on dynamic markets. The annual increase in the number of works on this topic has grown exponentially and reached its maximum in 2020. Thus, despite its relatively young age, intrapreneurship research is already "overgrown" with many publications (Hernández-Perlines et al., 2022). In the process of development, intrapreneurship acquired synonymous terms that, although they had a connection with corporate entrepreneurship, they nevertheless had different connotations. Some researchers differentiate between corporate entrepreneurship, entrepreneurial orientation, and intrapreneurship, elaborating on the last from an individual perspective (Amo, 2010). Entrepreneurial orientation, as one of the aspects of entrepreneurship, is disclosed in the works of (Wahyudi et al., 2021a, 2021b). Intrapreneurship involves several players, whose roles depend on different characteristics, backgrounds, and personality traits (Mudambi et al., 2007; Reuber et al., 2018). Entrepreneurship involves seeking emerging opportunities and creating new economic value to enhance competitiveness (Drucker, 1986; Pinchot, 1985). Various classifications are proposed, both for the types of intrapreneurship themselves and the areas of its research. For example, (Blanca, 2018) identifies five research areas in terms of their focus: individuals, organizations, context, factors, and outcomes. In turn, the authors of the study (Gawke et al., 2017) identified three types of intrapreneurship. The first relates to entrepreneurial orientation and is a higher order factor in which employees take initiative, develop innovations, and share risks (Felício et al., 2012; Rigtering, Weitzel, 2013; De Jong et al., 2013; Valsania et al., 2013; Valsania et al., 2012). The second focuses on results, analyzing the contribution of staff to the company's development (Hornsby et al., 2009, Matthews et al., 2009, Bager et al., 2010; Camelo-Ordaz et al., 2011; Urbano, Turró, 2013; Belousova, Gailly, 2013). The third focuses on employee behavior that fosters a culture of intrapreneurship. It synthesizes concepts of entrepreneurial behavior (Edquist et al., 2001; Park et al., 2014) and the strategic renewal of companies in response to external and internal changes (Zampetakis et al., 2009; Mustafa et al., 2016; Gawke et al., 2017; Woo, 2018). It is this type that

looks most promising in terms of the development of intrapreneurship research.

The potential of intrapreneurship is determined by two interrelated groups of factors (Antoncic, Hisrich, 2000). The first of these relates to the external environment and includes: dynamism, technological base, industrial growth rates, and demand for new products. The second concerns the intra-corporate aspects, including: freedom and reward (De Villiers-Schipers, 2012; Galván-Vela, Sánchez-Limón, 2017), social norms and character traits of employees (Ajzen, 1991, Neessen et al., 2019), job design (Bakker, Demerouti, 2014), proactive behavior (Parker et al., 2010), openness to new ideas, creativity, tolerance for mistakes, and innovativeness (Santos-Vijande et al., 2022). When creating new business projects, there is a requirement that they be consistent with the main profile of the company. Despite the fact that intrapreneurship in general is considered more secure and prosperous compared to classical entrepreneurship (Buekens, 2014), the internal corporate environment has an ambiguous influence upon it. In some cases, this can become a limiting factor, for example, if the company is unreceptive to new development formats and has a strict internal bureaucracy.

The success or failure of intrapreneurship projects largely depends on having a holistic vision and sensitivity to complex dynamics (De Keyser, Vandenbempt, 2023; Glinyanova et al., 2021), which requires a combination of difficult-to-combine contradictions in at least four directions: altruism with personal interests, freedom of action with subordination, theory with practice, and openness with personal boundaries. The most significant abilities in this regard relate to the search for new opportunities.

Search for New Opportunities

In the context of intrapreneurship, the focus is on identifying opportunities (Neessen et al., 2019) and their various combinations. Opportunities do not arise randomly or in isolation, but appear as a result of the acquisition of high competencies, effort, consistency in action, and adjustments in strategy. Different types of opportunities are revealed by corresponding management approaches (Verbecke, Yuan, 2022). Within the framework of intrapreneurship, new relationships are identified between goals and possible means of achieving them, which are then tested in practice, creating conditions for the profitable implementation of new products, services, and organizational methods (Shane, Venkataraman, 2000).

New combinations of resources can arise through the coordinated actions of participants in a joint venture, alliance (Sun et al., 2021), or an international platform (Nambisan et al., 2019). Combining assets, whether in the areas of new markets, products, processes, ways of organizing and sources of supply, can represent either a radical new balance of means and ends, or a slight modification of the existing alignment (Shane, 2012; O' Brien et al., 2019).

Among the internal corporate sources of innovation emergence are the ability to establish partner networks inside and outside the company, an open and creative type of thinking, skillful interactions with complexity and risks, ingenuity, commitment to high standards, and empathy. However, the ability to search for opportunities outside the organization is equally important (Pett, Wolff, 2016).

Impact of Work Climate on Opportunity-Seeking and Intrapreneurship in General

Intraorganizational interactions are largely determined by the company's identity and values. As successful practices of intrapreneurship show, companies actively practicing this type of entrepreneurship skillfully create an atmosphere of prosperity (Hornsby et al., 2017). This will facilitate design innovation by combining design thinking, user-centricity, and innovation strategies. Combining a creative corporate climate with intrapreneurship is fundamental to the success of such projects, where innovation, proactivity, and self-renewal play a large role.

The influence of age on the choice between classical entrepreneurship and intrapreneurship has also been studied (Parker, 2009). It has been established that employees aged 24 to 44 years, if they have appropriate internal potential, are highly likely to decide to leave their current job and implement their ideas at an independent startup, that is, they will choose classic entrepreneurship. In turn, able-bodied individuals whose age is below or above the specified age range are significantly more likely to participate in intrapreneurship.

The Move from Intrapreneurship to Classical Entrepreneurship

Such precedents are also being explored. For example, Verma (2016) examines the factors that led employees to not become intrapreneurs but successful external, "classic" entrepreneurs. Their innovations were rejected by their parent companies or were not suitable for these companies due to a lack of support, so they decided to start their own business in a high-risk environment. If employees with entrepreneurial skills are not fully supported by management to position themselves as intrapreneurs, they are forced to leave the parent company and start their own venture. More specific factors that can hinder intrapreneurship and stimulate classic entrepreneurship include:

- · Employees' desire for individual achievement and recognition
- The foreignness of their innovative and creative qualities for the corporate environment
- Management's unresponsiveness to renewal efforts and the proactive employee's disappointment with this attitude

- Unwillingness of colleagues to get involved in intrapreneurial initiatives
- Reduction of internal corporate financial support due to previous failures and direct fines
- Lack of remuneration and profit distribution at the organization
- The excessive unconventionality and radical nature of the proposed ideas in the eyes of the company management
- Long wait for project approval from management

Global Practices for Successful Intrapreneurship

There are several real-world examples that illustrate the connection between entrepreneurial competencies and intrapreneurship.

Google's «20% Time» Policy: Google encourages its employees to dedicate 20% of their work hours to pursue personal projects. This policy has led to the development of innovative products like Gmail and Google Maps, showcasing how intrapreneurial behavior, fueled by employees' entrepreneurial competencies, can drive significant innovations within a corporate setting.

3M's Innovation Time Off (ITO) Program: 3M allows its employees to spend up to 15% of their working time on projects of their choice. This initiative has resulted in numerous successful products, including Post-it Notes. By empowering employees to apply their entrepreneurial skills, 3M fosters a culture of intrapreneurship, leading to continuous innovation.

Apple's Internal Incubator: Apple has a history of encouraging intrapreneurship through projects like the App Store. Employees are given the autonomy to develop and launch their apps, leveraging their entrepreneurial competencies to create successful applications that contribute to Apple's ecosystem and revenue.

Amazon's Customer Obsession: Amazon's focus on customer needs and its drive for innovation are deeply rooted in entrepreneurial competencies. The company's intrapreneurial initiatives, such as the development of Amazon Echo and Alexa, exemplify how understanding customer demands and innovative thinking can lead to disruptive products and services within a corporate environment.

Adobe Kickbox: Adobe provides its employees with a physical «Kickbox» that contains resources and instructions for developing new ideas. This intrapreneurial toolkit empowers employees to explore their entrepreneurial competencies, fostering a culture of innovation and experimentation within the organization.

These examples highlight how entrepreneurial competencies, such as creativity, opportunity recognition, risk-taking, and customer focus, drive intrapreneurial initiatives within well-established companies, leading to groundbreaking products and services.

Indian Context

Many Indian entrepreneurs, who started as intrapreneurs, have already contributed greatly to the industrial development of the country. In general, India has developed a culture of support for intrapreneurship and certain success stories have emerged. So the ITC company, within the framework of the concept intrapreneurship, provides wide autonomy to staff for creative initiatives. For example, a company purchases agricultural products directly from farmers, while providing them with online access to foreign markets, increasing their productivity and strengthening the competitiveness of the national market. SAP Labs, a subsidiary of SAP operating on the Indian market runs a program called InnVent, short for innovation and venture challenges, that encourages out-of-the-box thinking. At Hindustan Unilever, the result of intrapreneurship initiatives was the formation of new routes for the distribution of products to remote areas. The success of intrapreneurial cases is based on a causeand-effect chain: legitimized freedom of action, guarantees of remuneration, tolerance for mistakes, and comprehensive resource support develop a sense of ownership and enthusiasm among employees, which creates a favorable, unique creative climate. In turn, incentives for cooperation expand, innovative activity intensifies, and the level of emotional and psychological attachment to the organization increases (Stander, Rothmann, 2010). Many of these companies practice action learning using the latest audiovisual aids and other educational technologies. They are exponentially increasing investment in infrastructure to create innovation. Employees are provided with mentoring, financial and infrastructural support, upward communication is encouraged, and workers go beyond their specific responsibilities, which increases their motivation, engagement, and sharing of unique corporate values (Srivastava, Bhatnagar, 2008). Horizontal communication, coordination of interactions, and cross-support between departments are also practiced.

Setting up the Hypotheses

Based on the literature review, the following hypotheses have been framed.

H1: There is a relationship between entrepreneurial competencies and intrapreneurship development.

This hypothesis posits an overlap in the skill set and mindset required for entrepreneurial competency and intrapreneurship. Both roles demand the ability to recognize opportunities, manage risks associated with new ventures, and foster innovation and creativity. Entrepreneurs and intrapreneurs alike need to identify market gaps and innovative prospects, navigate risks effectively, and employ creative problem-solving within their organizational contexts, highlighting the shared competencies between the two roles.

H2: Working climate mediates the relationship between entrepreneurial competencies and intrapreneurship development.

The working climate, encapsulating the psychological environment within an organization, acts as a pivotal mediator between entrepreneurial competencies and intrapreneurship development. Within this climate, psychological safety cultivates trust, empowering employees to utilize their entrepreneurial skills freely, fostering a culture of intrapreneurial behavior. Autonomy further drives innovation, enabling employees to initiate and innovate, while the climate fostering risk-taking influences intrapreneurial endeavors, encouraging calculated risks. Collaboration nurtures teamwork and the exchange of ideas, translating entrepreneurial skills into actionable intrapreneurial projects. Recognition and rewards reinforce the link between competency and intrapreneurship, emphasizing the importance of acknowledgment in promoting a culture of innovation and initiative.

Methodology

An empirical research study was carried out using a survey with a standardized questionnaire as the research tool. It contained questions about intrapreneurial development, working climate, and entrepreneurial competencies. Entrepreneurial competencies included the ability to recognize opportunities, emotional intelligence, an understanding of abstract concepts, organizational skills, strategic aptitude, and the ability to commit. Intrapreneurial development includes new business venturing, innovativeness, self-renewal, and proactiveness. The measures were studied using a five-point Likert scale (Joshi et al., 2015).

Manufacturing firms in the five most industrialized states in India (Tamil Nadu, Maharastra, Gujarat, Uttar Pradesh, and Andra Pradesh) were considered for the study. Employees on the research and development teams of the manufacturing firms are the target population. A questionnaire was emailed to the Human Resource departments of the companies and asked to circulate it among the workers. A total of 426 responses were received. Out of this, 418 responses were found fit for the study. The reliability and validity of the constructs were measured, and a mediation analysis is done using SPSS Macros.

A detailed description of the components studied is shown in Table 1.

Results

Measurement Model Evaluation

The validity of the measurement model was examined using confirmatory factor analysis (CFA). The average variance extracted, composite reliability, and Cronbach's alpha were derived as defined in a similar study (Bjornali, Støren, 2012) and the constructs are validated. Table 2 provides Cronbach's alpha, which according to (Singh, Smith, 2006) is good as the value exceeds

Table 1. Questionnaire Statements Posed to the Respondents to Evaluate Intrapreneurship Entrepreneurial Competencies

Entrepreneurial Competency

I possess creative thinking skills that help in problem-solving and innovation

I am comfortable with taking calculated risks to explore new opportunities

I excel in generating innovative ideas that contribute to business growth.

I am skilled in optimizing supply chains and managing resources efficiently.

I demonstrate financial acumen in decision-making and resource allocation.

I effectively network and build relationships to facilitate business opportunities.

Intrapreneurship Development

I actively engage in new business venturing within my organization.

I contribute to innovativeness by proposing and implementing new ideas.

I am proactive in seeking opportunities for self-renewal and personal growth.

I demonstrate a proactive approach to problem-solving and decision-making.

Working Climate

My organization encourages a culture of creativity and innovation.

Employees are empowered to take initiative and make decisions independently.

There is a supportive environment that values and rewards risk-taking and experimentation.

Collaboration and teamwork are encouraged to foster idea exchange and innovation.

Note: based on the respondents' assessment using a 5-point Likert scale: (1) Strongly Disagree; (2) Disagree; (3) Neither Agree nor Disagree; (4) Agree; (5) Strongly Agree). An additional question relates to the Overall Evaluation: "How would you rate the overall entrepreneurial culture within your organization?" (answer options: Poor; Fair; Good; Very Good; Excellent).

Source hereinafter: authors, based on survey results.

0.80 and is found to be reliable. Discriminant validity and congruent validity were assessed using average variance extracted. Table 3 shows that the AVE values are above 0.5 and the correlated factors are above 0.5, which is said to be satisfactory according to (Singh, Smith, 2006).

The Evaluation of the Structural Model

The relationship between the investigated constructs is assessed using regression values derived from AMOS path analysis.

H1: There is a relationship between entrepreneurial competencies and intrapreneurship development.

The fit indices of the CFA and SEM conducted in AMOS 23 are shown in Table 4. According to (Byrne, 2004), the values of CFA and SEM were determined to fit.

According to the study's findings in Table 5, there is a significant association between entrepreneurial competencies and intrapreneurship development (p<0.05).

Entrepreneurship competencies can explain 86% of the difference in intrapreneurship development. The results were similar to those in (Boon et al., 2013a).

Entrepreneurial competencies play an important role in aiding intrapreneurship development. Strategic and organizing factors are strongly related to intrapreneurship development.

Evaluation of Mediation

H2: Working climate mediates the relationship between entrepreneurial competencies and intrapreneurship development.

The mediating role of the working climate toward the relationship between entrepreneurial competencies and intrapreneurship development is analyzed using Hayes process Macros (Hayes, 2012).

This study investigated the function of the working climate as a moderator in the link between entrepreneurial competencies and intrapreneurship development. The findings supported H2 by revealing a substantial indirect influence of entrepreneurial competencies on intrapreneurship development (b= 0.268, t = 5.496). Furthermore, in the presence of the mediator, the direct effect of entrepreneurial competencies on intrapreneurship development was shown to be significant (b = 0.289, p < 0.001). As a result, the working climate moderated the association to some extent. Table 5 summarizes the mediation analysis.

Discussion

Firstly, the study results showed that there is a relationship between entrepreneurial competencies and intrapreneurship development in Indian manufacturing firms. These results are similar to the results of (Bjornali, Støren, 2012; Boon et al., 2013b), however, in the manufacturing context, the conceptual and strategic factors of the entrepreneurial commitment were found to be strongly related to entrepreneurship development. Several studies have emphasized training, corporate culture, and organizational work models (González-Tejero, Molina, 2022; Rasca et al., 2018) that were also considered in this study and the relationships were highlighted.

Secondly, the results from the mediation analysis showed that the working climate partially moderates the relationship between entrepreneurial competencies and intrapreneurship. Several studies were done in similar areas (Gelade, Ivery, 2003; Salanova et al., 2005; Zarefard, Jeong, 2019), however the mediating effect of theworking climate in relation to entrepreneurial competencies and intrapreneurship development has not been analyzed. Manufacturing industries more often develop intrapreneurship by pursuing entrepreneurship. The findings from the survey data provide valuable information about the relationship between entrepre-

Table 2. Measurement Model Evaluation (CFA)					
Latent construct	CA	AVE	CR	Corr	
Entrepreneurial competency					
Opportunity	0.812	0.723	0.821	0.723	
Relationship	0.836	0.711	0.878	0.705	
Conceptual	0.924	0.703	0.816	0.748	
Organizing	0.817	0.719	0.806	0.789	
Strategic	0.856	0.752	0.863	0.764	
Commitment	0.803	0.741	0.841	0.748	
Intrapreneurial development					
Business Venturing	0.834	0.729	0.874	0.814	
Innovativeness	0.867	0.815	0.816	0.748	
Self-renewal	0.851	0.836	0.857	0.761	
Proactiveness	0.829	0.841	0.803	0.709	
Working climate	0.816	0.869	0.856	0.736	
Note: CA – Cronbach's Alpha; AVE – Average Variance Extracted; CR –					

vote: CA – Cronoachs Alpha; Ave – Average variance extracted; CR – Composite Reliability; Corr – Correlation	

Table 3. The Goodness of Fit Measures					
The goodness of fit measures	CFA Model	SEM Model			
The basic goodness of fit					
Chi-square	232.789	245.268			
Degrees of freedom	145	145			
Absolute fit index					
Chi-square/degrees of freedom	1.426	1.502			
RMSEA	0.043	0.044			
GFI	0.861	0.856			
AGFI	0.906	0.917			
CFI	0.962	0.978			
RMR	0.046	0.038			
SRMR	0.024	0.003			
Note: RMR < 0.08. RMSEA < 0.08. CFI > 0.95. GFI > 0.90. AGFI > 0.90. SRMR < 0.05.					

Table 4. Evaluation of the Structural Equation Model (SEM))				
Relationship	EC→ID			
Standardized regression weight	0.796			
Standardized estimates	0.189			
p-value	0.00*			
Squared multiple correlation coefficient	0.864			
Hypothesis test result	Accept hypothesis			
* Significance at p<0.05.				

Table 5. Mediation Analysis Summary				
Relationship	EC→WC→ID			
Total Effect	0.542 (0.000)			
Direct Effect	0.289 (0.000)			
Indirect Effect	0.268			
Confidence Interval (lower to upper band)	0.186 to 0.367			
t-statistics	5.496			
Conclusion	Partial Mediation			

neurial competencies and intrapreneurship development within Indian manufacturing firms. Confirmatory factor analysis (CFA) confirmed the validity of the measurement model, with Cronbach's alpha values exceeding 0.80, indicating reliability. The structural equation model (SEM) further supported the relationship, revealing a significant association between entrepreneurial competencies and intrapreneurship development (p < 0.05). Notably, strategic and organizing factors exhibited strong correlations with intrapreneurship development. Mediation analysis, employing the Hayes process Macros, demonstrated the moderating role of the working climate. The findings revealed a substantial indirect influence of entrepreneurial competencies on intrapreneurship development (b = 0.268, t = 5.496). Additionally, the direct effect of entrepreneurial competencies on intrapreneurship development remained significant (b = 0.289, p < 0.001) in the presence of the mediator, indicating partial mediation. Furthermore, the study illuminated the underexplored area of working climate's mediating effect, showcasing its pivotal role in fostering intrapreneurship development alongside entrepreneurial competencies in manufacturing industries. This research underscores the crucial interplay between entrepreneurial competencies, intrapreneurship, and the working climate, emphasizing their collective importance in enhancing innovation and competitiveness within manufacturing businesses.

Conclusion

This research explored how entrepreneurial competencies, including strategic and organizing factors, influence intrapreneurship development. The study involved 418 respondents from manufacturing firms in five industrialized states in India. Confirmatory fac-

tor analysis validated the measurement model, demonstrating the reliability of the constructs. Structural equation modeling revealed a significant association between entrepreneurial competencies and intrapreneurship development. Notably, the study found that the working climate partially mediates that relationship, emphasizing the importance of a supportive workplace environment in fostering intrapreneurial behavior.

Firstly, the research underscored the pivotal role of entrepreneurial competencies in driving intrapreneurship within manufacturing firms, emphasizing the significance of strategic thinking and organizational skills in fostering innovative initiatives within corporate boundaries. Secondly, the study highlighted the nuanced influence of the working climate as a mediating factor, indicating that a positive and supportive workplace environment significantly amplifies the impact of entrepreneurial competencies on intrapreneurship development. Organizations with conducive working climates are more likely to witness the effective utilization of entrepreneurial skills among their employees, leading to enhanced intrapreneurial activities. This insight is particularly vital for business leaders and policymakers, emphasizing the need to invest in creating supportive work environments that nurture creativity, risk-taking, and entrepreneurial spirit. Furthermore, the findings also imply that training programs and interventions focusing on enhancing entrepreneurial competencies, when coupled with a favorable working climate, can substantially contribute to a culture of innovation and intrapreneurship within manufacturing firms. Overall, this research provides actionable insights for businesses aiming to foster intrapreneurship, improve organizational performance, and maintain a competitive edge in a dynamic business landscape.

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