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STRATEGIC MANAGEMENT AND INNOVATION IN MEXICALI SMES: IMPLICATIONS FOR PROFITABILITY

GESTÃO ESTRATÉGICA E INOVAÇÃO EM PMEs MEXICANAS: IMPLICAÇÕES PARA A LUCRATIVIDADE

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Abstract
Small and medium-sized enterprises (SMEs) in Mexicali, Baja California, play a fundamental role in the economic and social progress of the area. These companies are an important source of employment and contribute significantly to the revival of the local economy. The purpose of this study is to contribute to SMEs in Mexicali, Baja California, by discovering how strategic management and innovation can positively impact the profitability of small and medium-sized enterprises. The research has a quantitative, non-experimental, correlational, and cross-sectional design. A structured questionnaire on a 5-point Likert scale was administered to a representative sample of 361 establishments determined by probabilistic sampling. The study includes a validation of the relationships between the variables Strategic Management, Innovation, and Profitability using the Structural Equation Modeling (SEM).

Keywords: Strategic Management. Innovation. Profitability. SMEs. SEM.

Resumo
As pequenas e médias empresas (PMEs) em Mexicali, Baja California, desempenham um papel fundamental no progresso econômico e social da região. Essas empresas são uma importante fonte de emprego e contribuem significativamente para a revitalização da economia local. O objetivo deste estudo é contribuir para o desenvolvimento das PMEs em Mexicali, Baja California, investigando como a gestão estratégica e a inovação podem impactar positivamente a rentabilidade dessas empresas. A pesquisa tem um delineamento quantitativo, não experimental, correlacional e transversal. Um questionário estruturado, com escala Likert de 5 pontos, foi aplicado a uma amostra representativa de 361 estabelecimentos, selecionados por amostragem probabilística. O estudo inclui a validação das relações entre as variáveis Gestão Estratégica, Inovação e Rentabilidade, utilizando a Modelagem de Equações Estruturais (MEE).

Palavras-chave: *Gestão Estratégica. Inovação. Rentabilidade. PMEs. SEM.*

1 INTRODUCTION

In Mexico, the economy is made up of 4.9 million companies, including micro, small, and medium-sized enterprises (MSMEs), which account for 72% of employment and contribute approximately 52% of the national GDP. Despite their importance, these companies' ability to compete in the local market is limited, with a success rate of only 35 to 40%, according to the National Institute of Statistics and Geography (INEGI, 2023). This context raises the need to further investigate the dynamics that affect the viability and growth of SMEs in Mexico. It should be noted that Baja California accounts for 8.2% of the country's constant GDP, with 8,700 registered SMEs, of which 1,000 are manufacturing companies that generate $73,726,000, equivalent to 54.6% of the state's GDP (INEGI, 2021). For this reason, SMEs should be given due emphasis and importance, as they are fundamental to the economic growth of the region and the state, as well as a source of employment for its inhabitants.

Strategic management has been a topic of interest for decades in the business and academic worlds. This approach involves not only the creation of strategies, but also their execution and evaluation, promoting a corporate culture that favors adaptability. According to Hambrick and Fredrickson (2005), strategic management combines analytical and emergent components to develop effective strategies. Thompson *et al.* (2020) emphasize that strategic management encompasses the planning, creation, and implementation of strategies that impact the direction of the company and decision-making. Strategic management continues to evolve in response to rapid changes in the business environment, sustainability, and the growing importance of corporate social responsibility. Strategic management is not only fundamental to the planning and execution of long-term actions, but has also become an essential pillar for the adaptability and competitiveness of companies in a constantly changing market. These key references represent milestones in the history of strategic management, but it is important to note that this field is dynamic and continues to evolve as business and economic circumstances change. For this reason, strategic management was considered a crucial variable to be taken into account in this study. Innovation is defined by the OECD (2021) as the introduction of significantly improved products or processes, which is crucial for business performance. The importance of innovation today lies in its ability to generate economic

and social value, as well as in the successful implementation of new ideas and knowledge. In a constantly changing business and social context, innovation becomes a key factor in addressing challenges and meeting the needs of companies. This implies that companies must not only adapt to market transformations but also anticipate them by creating innovative solutions that enable organizations to be competitive and relevant. Promoting an environment that values innovation is essential to maximize performance and ensure the sustainable growth of organizations. Innovation is key to business success, as it improves products and processes, positively impacting the company's performance. In a changing environment, it not only creates economic value but also benefits society. Organizations must adapt and anticipate market transformations through innovative solutions to remain competitive. Fostering an environment that values innovation is essential for the sustainable growth of organizations.

Brealey *et al*. (2017) add that profitability is the result of efficient management and a strong culture of innovation. A profitable company not only generates profits but also manages its resources effectively, seeking not only short-term benefits but also creating long-term value for all stakeholders, including shareholders, employees, and the community. The objective of this research is to determine the relationships between strategic management, innovation, and profitability in small and medium-sized enterprises (SMEs) in Mexicali, Baja California. How does the relationship between strategic management and innovation impact the profitability of SMEs in Mexicali, B.C.?

The findings suggest that companies in Mexicali should prioritize their strategic management practices with innovative initiatives to maximize their performance and competitiveness in the market. The research focuses on the role of strategic management and innovation in increasing the profitability of small and medium-sized enterprises (SMEs) in Mexicali, Baja California. It highlights the importance of these elements in the local economy, where small and medium-sized enterprises are essential for job creation and economic recovery. This article is organized into several key sections that systematically address the study, which covers strategic management and innovation in SMEs in Mexicali, Baja California. It consists of an introduction, which sets the stage by discussing the importance of strategic management and innovation in today's

business sector, as well as establishing the objective and research question. The second step is a literature review section, which includes the theoretical framework,

historical context, previous research, and research hypotheses. The third section covers the methodology, describing the research design and the analytical techniques used. The fourth section presents the results obtained from the analysis of the data collected. The fifth section is the discussion, where the findings are interpreted and contrasted with the existing literature. The sixth section is the conclusions, which summarizes the key findings and their relevance to the study.

2 LITERATURE REVIEW

The literature review aims to analyze and identify previous research that deals with the same relationships addressed in this study, which covers the relationship between strategic management and innovation in the profitability of the three economic sectors that comprise SMEs, as well as the relationship between strategic management and innovation, which allows us to link the contributions of previous research with this study. The common theme among the reviewed literature is that strategic management serves as an essential tool for increasing the profitability of companies in various sectors, whether in the restaurant industry, elevator installation companies, or even in times of crisis such as the COVID-19 pandemic (Meza 2013, Suclupe 2022, Cedeño 2020, and Lesníková *et al*. 2022). Lesníková *et al*. (2022), despite focusing on crises (such as the COVID-19 pandemic), emphasize the importance of strategic management for the survival and success of companies, even in times of adversity. This is linked to Meza (2023), Suclupe (2022), and Cedeño (2022) in stating that strategic management continues to be an essential element in preserving or increasing profitability, even in unfavorable circumstances. All articles agree that proper strategic management has a positive impact on the profitability of organizations, whether through cost management (as in elevator assembly companies), management innovation (as in restaurants), or strategic direction in times of crisis (as in research on the effect of the pandemic).

Lizárraga (2017), Valdez-Juárez *et al*. (2019), López-Lemus and Garza (2020), Valdez-Juárez *et al*. (2017), and Wan *et al*. (2024) explore how innovation (whether in products, processes, or business models) significantly influences the profitability of companies, specifically in different contexts, such as medical technology, SMEs, and dairy companies. These articles confirm that innovation has a positive influence on

company profitability. However, both the type of innovation (product, process, technological) and the particular conditions of the sector (such as Corporate Social Responsibility in the dairy industry) can have different impacts. The most obvious link is that innovation, in its various forms, increases company profitability. However, in certain situations, elements such as entrepreneurial orientation, knowledge, and sustainability of profitability also play important roles in this process. Several studies, such as those conducted by Valdez-Juárez *et al*. (2017) and Pérez (2019), focus on SMEs, demonstrating that strategic management and innovation are essential elements for these companies to increase their profitability and remain competitive in their respective markets. In general, all studies acknowledge that small and medium-sized enterprises face more challenges in terms of resources and skills to manage these components efficiently.

Egoavil and Meza (2022), together with Núñez (2013) and Pérez (2019), argue that strategic management has a considerable effect on company innovation, although with differences depending on the sector. In small and medium-sized textile companies, strategic management and innovation are closely related and considered essential for competitiveness. On the other hand, in the field of higher education, the connection between strategic management and innovation is not as direct, indicating that additional elements (such as intangible resources) play a more significant role. The articles agree that strategic management and innovation must be adapted to the specific sector of the company in order to be effective and optimally integrated. The hypotheses in this study highlight the importance of determining the positive significance of Strategic Management and Innovation practices to ensure sustainable growth and profitability in SMEs in Mexicali, B.C., as well as the relationship that may exist between Strategic Management and Innovation.

3 METHODOLOGY

3.1 Population and sample

Mexicali, Baja California has 127,915 registered formal companies, representing the total number of companies in the locality across all economic sectors (DENUE, 2024). This analysis focuses on small and medium-sized enterprises in the industrial, commercial, and service sectors.

Table 1

SMEs in Mexicali, Baja California (DENUE, 2024)

SMEs	Numbers	Small	Percentage	Medium	Percentage
Industry	330	233	7%	97	17%
Commerce	972	719	23%	253	44%
Service	2417	2189	70%	228	39%
Total SMEs	3719	3141	84%	578	16%

The table above shows the figures for 3,719 small and medium-sized enterprises in the three sectors, with 3,141 belonging to the small enterprise category and 578 to the medium-sized enterprise category. On the other hand, 233 companies are in the industrial sector, 729 in the commercial sector, and 2,189 in the service sector. Continuing with the list of 578 companies, 97 are part of the medium-sized enterprise segment, 253 are in the industrial sector, and 228 are in the commercial sector (DENUE, 2024). The following are the selection criteria used in the study (DENUE, 2024): Small and medium-sized enterprises.

Table 2

Criteria for small and medium-sized enterprises. Own elaboration

		Small businesses	Medium-sized enterprises
Industry sector	- Manufacturing Industries	233	97
Trade sector	- Wholesale Trade	238	64
	- Retail trade	481	189
Service Sector	- Electricity generation, transmission, and distribution; water and gas supply to end consumers	25	29
	- Construction	105	17
	- Transportation, mail, and storage	117	28

- Mass media information	32	8
- Financial and insurance services	71	4
- Real estate and rental services for movable and immovable property	57	3
- Professional, scientific, and technical services	112	7
- Corporate	0	0
- Business support services, waste management, and remediation services	71	13
- Educational services	637	72
- Health and social services	195	18
- Cultural, sports, and other recreational services	60	6
- Temporary accommodation and food and beverage preparation services	409	21
Other services except government activities	298	2
Total	3141	578

These options were considered to determine the population of SMEs in Mexica, Baja California, as stated on the official website (DENUE, 2024).

The sections that were excluded from the research, which are presented on the DENUE platform (2024), were as follows:

- Agriculture, animal husbandry and exploitation, forestry, fishing, and hunting
- Mining
- Legislative, governmental, judicial, and international and extraterritorial activities

These sections were excluded because agriculture and mining belong to the primary sector, while government activities do not seek remuneration or profit.

To determine the sample size, we used the following formula from Murray and Larry (2009):

n = Desired sample size.

N = Size of the universe to be studied. 3,719 companies

σ = Standard deviation of the population. When this data is unknown, a constant equivalent to 0.5 is used

Z = Value obtained through confidence levels. This is a constant number, which generally takes two values depending on the desired confidence level. 99% is the highest value (equivalent to 2.58) and 95% (equivalent to 1.96) is the minimum value accepted for the research to be considered reliable. The value of 1.96 is used.

e = Sampling error. 5%

n= 349

Probability sampling is a method of selecting a sample that accurately represents a population, with a known and non-zero probability of being selected. In this type of sampling, random techniques are used to ensure that each individual in the population has the same chance of being selected, which helps to reduce bias and facilitates the drawing of accurate conclusions about the population based on the sample (Lohr, 2019). Probability sampling was used because all individuals have the same chance of being selected.

Probability stratified sampling segments the population into uniform and mutually exclusive subgroups. These subsets are called strata. A random sample is then selected from each stratum so that the proportion of each stratum in the sample represents the proportion of that stratum in the population as a whole. This procedure, by ensuring that all relevant subpopulations are adequately represented, enhances the accuracy and representativeness of the sample (Cochran, 1977).

A finite population sample is defined as a selection of elements from a population whose total size is restricted and known. In this context, a finite population implies that the total number of units or elements cannot be infinitely large, but rather constant. The accuracy of the estimates, as well as the calculations of the sample mean and variance, are adjusted due to the limitations of the population size. Below is a table with specific data for each sector and the number of small and medium-sized enterprises, which represent the numbers for the total sample and for each sector.

Table 3

Sample of small and medium-sized enterprises by sector. Own elaboration

SMEs	Numbers	Small	Percentage	Medium	Percentage
Industry	31	21	7%	10	17%
Commerce	92	67	23%	25	44%
Service	226	205	70%	21	39%
Total SMEs	349	293	84%	56	16%

3.2 Instrument construction process

Aiken's V is a statistical coefficient used to assess the content validity of items in a measurement instrument, such as surveys or exams. This indicator makes it possible to

evaluate the extent to which specialists agree on the importance or relevance of each component of the instrument (Aiken, 1980).

The following findings were obtained in this procedure:

Table 4

Aiken V results. Own elaboration

Variable	Dimension 1	Dimension 2	Dimension 3	Dimension 4	Dimension 5	Dimension 6	Variable Average
Strategic Management	0.95	0.93	0.95	0.96	0.94	0.95	0.95
Innovation	0.98						0.98
Profitability	0.86						0.86

Escurra Mayuate (1998) indicates that coefficients ranging between 0 and 1, with values exceeding 0.80, are considered positive and can therefore be used in the instrument to be evaluated.

The pilot test included 34 questionnaires aimed at small and medium-sized enterprises in Mexicali, Baja California. It was sent by email to the different companies via an online form (survey), which was completed by the selected person. In the field of scientific research, the purpose of the study is to understand, interpret, and sometimes anticipate phenomena that occur in the real world. Creswell and Creswell (2022) detail the description of various research methods, including non-experimental research, and examine their use in the context of scientific research. Non-experimental research prevents the intentional alteration of independent variables. Instead, information about the variables is examined and collected in their natural environment. This type of study focuses on the observation, description, and interpretation of real events without intervening to modify or regulate circumstances (Creswell and Creswell, 2022). To understand its particularities, key elements, and possible consequences, this analysis will focus on examining the connection between strategic management, innovation, and profitability. The selection of this approach is based on the essence of the phenomenon being analyzed. The purpose of this non-experimental research is to offer a new perspective on the connection between strategic management and innovation in the profitability of small and medium-sized enterprises in Mexicali, Baja California, thereby

increasing existing knowledge and providing valuable data for decision-making and professional practice.

Quantitative research is a methodology that uses the collection and study of numerical data to offer an explanation, an explanation, or a prediction of events. This type of study uses standardized tools such as questionnaires, measurement scales, or objective tests to collect information organized in a systematic way. The findings are extended to a larger population by detecting patterns, links, and regularities in the phenomena analyzed through statistical analysis of the collected data (Babbie, 2020). Quantitative research is fundamental in both social science and numerous fields of science. To examine the correlation between the aforementioned variables, this analysis will use a quantitative method. It is essential to collect numerical data because it allows for a precise and objective understanding of the elements studied, thus justifying the strategy used.

Explanatory research is a type of study that focuses on discovering and understanding the causes and consequences of phenomena, defining causal links between the variables involved. The main purpose is to clarify why a phenomenon occurs and the development of its underlying mechanisms, which involves the formulation and testing of specific hypotheses to establish causal relationships between various factors (Saunders *et al*., 2019). The study analyzed the link between the variables of Strategic Management, innovation, and profitability using a correlation method. Interest in this method arises from the need to understand how these variables interact with each other in a natural environment without experimental alteration. In the field of scientific research, cross-sectional study is a research methodology that is carried out at a single point in time and collects information from a representative sample of a population at a specific moment. This type of analysis is used to detail the particularities of a population or to explore the interaction between variables at a given moment. Cross-sectional research focuses on collecting data at a single specific moment, as opposed to longitudinal designs, where participants are tracked over time (Fraenkel *et al*., 2023). This determines that the research has a non-experimental, quantitative, explanatory, and cross-sectional design approach.

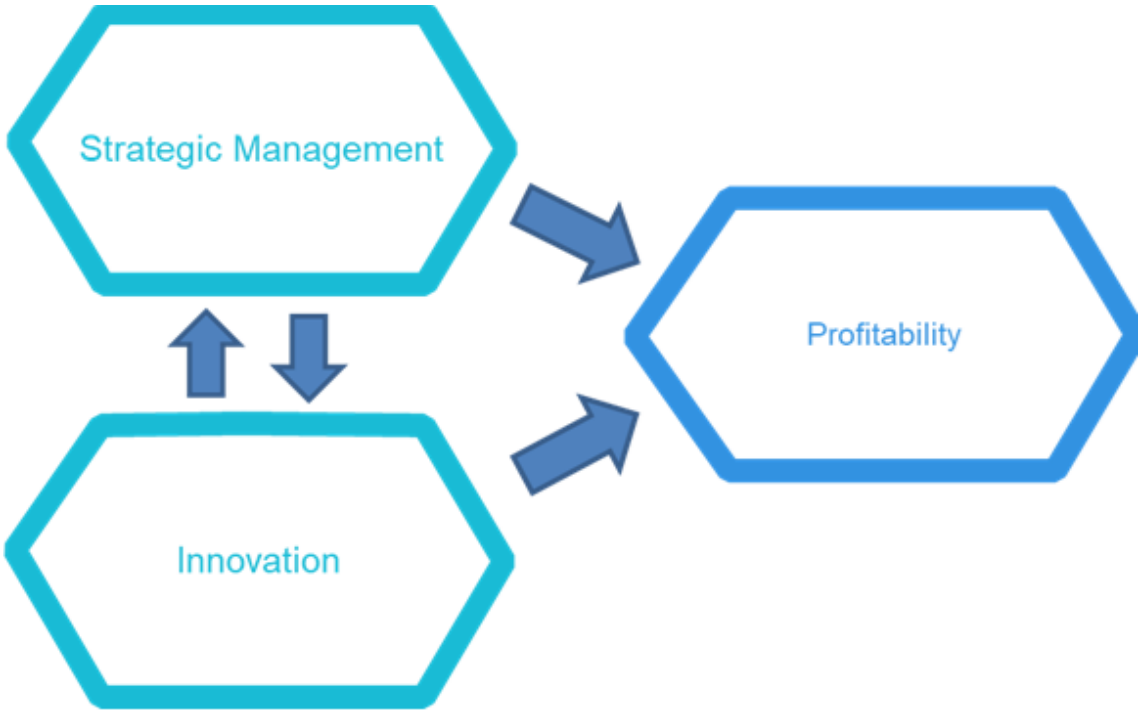
3.3 Measuring Profitability

A company's economic performance is evaluated using various indicators that assess its financial well-being and its ability to create value for shareholders.

1. Return on Investment (ROI): Return on Investment (ROI) refers to the relationship between net profit and the cost of investment (Kaplan and Norton, 2004).
2. Profit Margin (Net Profit as a Percentage of Sales): This is an estimate expressed as a percentage obtained by dividing a company's profit by its total revenue. This percentage indicates the amount of money a company earns after covering certain costs and expenses (Brigham and Houston, 2018).
3. Liquidity Ratio (such as the Current Ratio and Acid Ratio): This provides data on the company's ability to manage its short-term debts (Horngren *et al*., 2017).
4. Project Profitability Assessment (Net Present Value, Internal Rate of Return): These must be examined to determine whether they are profitable or have sufficient value to be maintained (Brealey *et al*., 2017).

Figure 1

Study variables. Own elaboration



According to the development bank Nacional Financiera (NAFIN, 2023), small and medium-sized enterprises are categorized into three fundamental categories: based on their staff, their sales volume in millions of pesos, and their highest combined level.

Table 5

Classification of companies (NAFIN, 2023). Own elaboration

Stratification by number of workers Sector/Size	Industry	Commerce	Services
Micro	1-10	1-10	1-10
Small	11-50	11-30	11-50
Medium	51-250	31-100	51-100

4 RESULTS AND DISCUSSION

4.1 Results

The software used in this study was ADANCO, as it is a program specialized in the analysis of structural equation models (SEM) using the partial least squares method (PLS-SEM). It is widely used by specialists and researchers in areas such as marketing, business management, social sciences, and data analysis due to its ease of use and advanced capabilities for modeling complex connections between latent variables and their indicators (Henseler *et al*., 2016).

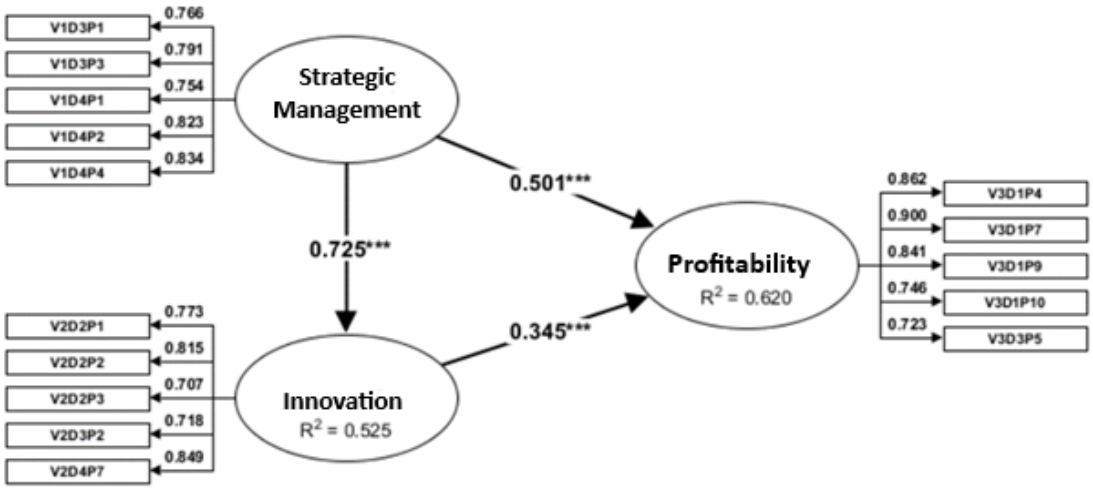
The study showed loadings that did not exceed 0.700, which is why they were eliminated. Hair *et al*. (2010) argue that factor loadings exceeding 0.70 are considered strong and are usually accepted to indicate that a variable has a positive relationship with the factor to which it is associated; these must have a factor loading (λ) that is equivalent to or greater than 0.700. In addition, they indicate that high factor loadings could indicate a lack of discrimination between factors. This implies that the variables may not be contributing unique and relevant information to the model, but rather that those exceeding 0.900 could present an excessive correlation. Therefore, it is recommended that they be removed as long as they do not damage the other weights of the remaining elements. Consequently, other components that met the above criteria but deteriorated the model were also discarded. In this context, the items from the Strategic Management construct were eliminated. A total of 24 items were eliminated. In the Innovation construct, it was

decided to eliminate the elements. A total of 24 items were eliminated, regarding the Profitability construct, the following items were discarded. A total of 22 items were eliminated.

The model was left as follows:

Figure 2

Final model. Own elaboration



After applying the PLS-SEM algorithm, projections for the structural model relationships (such as path coefficients) are obtained, representing the hypothetical relationships between the constructs. Path coefficients have normalized values ranging from -1 to +1 (these values can be lower or higher, but are generally within these limits). Estimated path coefficients close to +1 represent strong positive links (and vice versa for negative values) that are usually statistically significant (i.e., different from 0 in the group). When the projected coefficients are closer to 0, the relationships will be weaker. Normally, values that are ve ry low or close to 0 do not show notable fluctuations from 0 (Lohmoller, 1989).

Table 6

Hypothesis. Own elaboration

Effect	Beta	Indirect effects	Total effect	Cohen's f^2	Hypothesis
Strategic Management -> Profitability	0.5007	0.2497	0.7504	0.3130	H1: Accepted (Moderate Effect)
Innovation -> Profitability	0.3446		0.3446	0.1483	H2: Accepted (Weak Effect)
Strategic Management -> Innovation	0.7246		0.7246	1.1058	H3: Accepted (Strong effect)

The beta coefficient for the relationship between the constructs "Strategic Management" and "Profitability" is established at 0.5161, which exceeds the value of 0.2, indicating that the hypothesis is positive or favorable (Lohmoller, 1989). Although the Beta coefficient for the relationship between "Innovation" and "Profitability" has a value of 0.4363, considering the score of 0.2, it is established that the hypothesis is positive or favorable (Lohmoller, 1989). The relationship between the constructs "Strategic Management" and "Innovation" has a beta coefficient of 0.7246, which exceeds the score of 0.2 and is close to 1, implying that there is a very high relationship, which means that the hypothesis is positive or favorable (Lohmoller, 1989). Considering the weight of the constructs, it can be deduced that Strategic Management has a factor loading of 0.501 compared to Profitability. This implies that a significant increase in Strategic Management is positively linked to profitability. Therefore, it is clear that Strategic Management is essential to increase the Profitability of an SME in Mexicali, Baja California. Moving on to the next construct, Innovation, this has a loading of 0.345 in relation to Profitability, which indicates that Innovation, together with Strategic Management, are crucial elements to take into account if seeking to increase the Profitability of an SME in Mexicali, Baja California.

After analyzing the factor loadings of the constructs, it is crucial to take into account the coefficient of determination (R2) for the dependent variable, which is profitability, equivalent to a rating of 0.6196. This implies that about 62% of the variability in profitability could be attributed to strategic management and innovation. An R2 highlights the explanatory power of the model, indicating that these constructs are crucial to consider in order to understand the Profitability that can be produced in a small

and medium-sized enterprise in Mexico. This finding indicates that, with proper Strategic Management and Innovation, SMEs can influence the Profitability of their entities. This implies that the model has a good capacity to anticipate or interpret the independent variables (Strategic Management and Innovation) that impact the dependent variable (Profitability). Furthermore, taking into account the correlation between strategic management and innovation, an R2 of 0.5251 is achieved, indicating that strategic management directly influences innovation by 53%. Thus, we conclude that the proposed model is moderately positive.

4.2 Discussion

Strategic Management is fundamental to the Profitability of companies, as indicated by Meza (2013), Suclupe (2022), and Cedeño (2020). Strategic cost management is considered a key tool in competitive environments and is integrated into the overall strategy to increase profitability. Cedeño (2020) highlights that companies that implement strategic administrative management achieve better financial results. Lesníková *et al*. (2022) highlight the importance of strategic management for business survival, even in crises such as the COVID-19 pandemic. This is in line with the observations of Meza (2023), Suclupe (2022), and Cedeño (2022), who argue that strategic management is crucial for maintaining or increasing profitability in adverse conditions. The literature highlights that strategic management is a determining factor for business profitability, although research suggests a moderate effect, implying that other factors such as market conditions, competition, and operational efficiency also influence profitability. This positive relationship with a moderate effect may indicate that the benefits of strategic management are more clearly manifested in the long term. This determines that companies must not only implement strategic management practices, but also monitor and adapt these strategies to their specific circumstances and market dynamics, which could lead to a more analytical and cautious approach to their implementation.

In summary, this research recognizes the beneficial effect of strategic management on profitability, which varies slightly in the strength of this relationship and the focus on contextual factors. This is because the results achieved show a moderate

relationship rather than an intense one, as discussed in the literature. Understanding these details can help companies adjust their strategic management methods to effectively increase profitability. In studies conducted by Lizárraga (2017), Valdez-Juárez *et al*. (2019), López-Lemus and Garza (2020), Valdez-Juárez *et al*. (2017), and Wan *et al*. (2024) explore the significant influence of innovation (whether in products, processes, or business models) on the profitability of companies, particularly in the context of small and medium-sized enterprises (SMEs).

Lizárraga (2017) specifically examines the impact of technological innovation on private clinics, highlighting that such innovations directly enhance the economic performance of these health centers, emphasizing the importance of adopting new technologies in the health sector. Valdez-Juárez *et al*. (2019) and López-Lemus and Garza (2020) delve into how innovation within Mexican SMEs, driven by entrepreneurial orientation and improvements in products or services, leads to positive contributions to profitability. Their findings suggest that companies that actively seek to innovate and adapt to market changes tend to achieve higher profitability. According to Valdez-Juárez *et al*. (2017), knowledge is a crucial factor for innovation in SMEs. However, they also indicate that not all types of innovation have the same positive impact on profitability, as product innovation has a stronger effect than process innovation in this context. Wan *et al*. (2024) investigate the relationship between sustainable profitability, corporate social responsibility (CSR), and innovation in dairy companies. Their study indicates that stable and sustainable profitability can foster innovation, but the interaction between CSR and profitability plays a crucial role in enhancing or inhibiting this relationship. Overall, the articles confirm that innovation has a positive impact on company profitability. However, the type of innovation (product, process, technological) and specific sector conditions (such as CSR in the dairy industry) can influence this relationship in various ways. While the literature generally suggests a strong and conclusive impact of innovation on profitability, research findings indicate a weaker effect, suggesting that the influence of innovation may be less direct or more complex, potentially affected by external factors such as market responses, competition, and costs associated with implementing innovations. Each study focuses on different sectors (private clinics, Mexican SMEs, dairy companies), providing diverse perspectives on how innovation affects profitability in various industries.

Egoavil and Meza (2022), Núñez (2013), and Pérez (2019) analyze the relationship between Strategic Management and Innovation, highlighting its impact on the performance and competitiveness of companies, especially in the context of micro and small enterprises (SMEs). These authors agree that Strategic Management, through resource management, decision-making, and the implementation of organizational practices, is intrinsically linked to the ability to innovate and adapt to market changes. Innovation is identified as a key factor in improving competitiveness and business performance, becoming a necessity for SMEs to maintain their relevance in their sectors. Despite their common focus, the authors point out nuances in the relationship between Strategic Management and Innovation depending on the sector. In the case of textile SMEs, this relationship is particularly strong and essential for competitiveness. In contrast, in the higher education sector, the connection is less direct, suggesting that other factors, such as intangible resources, may play a more significant role. The research supports existing literature, showing a positive and strong relationship between Strategic Management and Innovation, considering them crucial elements for business competitiveness.

5 CONCLUSIONS

The findings of this research, collected through the PLS-SEM structural equation model, offer useful data on the connections between strategic management, innovation, and profitability in the context of [specify context if necessary, such as industry type or region]. The most relevant conclusions of the study are described below: Relationship between Strategic Management and Profitability: A significant correlation was found between Strategic Management and profitability, with a moderate influence. This indicates that companies that apply solidly organized strategies aligned with their long-term objectives tend to have positive economic performance. However, the moderate effect indicates that other elements, beyond strategic management, also have a significant impact on profitability. Relationship between Innovation and Profitability: The connection between innovation and profitability was accepted with a limited effect. This finding indicates that, although innovation can positively influence profitability, its impact is less direct or more complicated than that of Strategic Management. This could

be the result of external elements, such as market reaction, rivalry, or expenses related to the implementation of innovations. Relationship between Strategic Management and Innovation: The study revealed a strong relationship between strategic management and innovation. This finding suggests that companies that implement robust strategic management tend to promote an environment conducive to innovation. Strategic decisions play a key role in the development of innovative capabilities, which can be essential for future competitiveness and sustainability. The findings of this research have multiple implications for business practice. Entities should consider the importance of effective strategic management not only as a tool for achieving profitability, but also as a driver of innovation. Although innovation is a crucial element, its direct effect on profitability could be moderated by other factors, indicating that companies should be cautious when evaluating their investments in innovation and consider other strategic factors that could enhance their impact. This analysis also provides multiple avenues for future studies, such as delving deeper into the contextual elements that regulate the relationship between innovation and profitability, or examining how other organizational variables, such as corporate culture or leadership, may interact with strategic management and innovation to produce an effect on profitability.

Innovation is fundamental to the profitability of companies, but greater depth is still needed in the effective management of innovation in specific sectors. For example, technological innovation in the field of health requires a different approach than innovation in textiles or restaurant management. According to Valdez-Juárez *et al*. (2017), product innovation has a positive impact on profitability, while process innovation may not have the same effect and may even be negative in some cases. This suggests the need to investigate how to balance both types of innovation to maximize benefits. In addition, Lesníková *et al*. (2022) analyze how companies can manage profitability and strategy in times of crisis, such as the COVID-19 pandemic. However, it remains to be explored how innovation strategies should be adapted to crisis situations, both global and local.

Finally, it can be seen that few studies address innovation and strategic management in non-business organizations, such as educational institutions, NGOs, or government entities. It is necessary to investigate how these sectors can integrate innovation and strategic management to improve their social efficiency or profitability.

In general, the aim is for innovation to lead to significant improvements in processes or products. The research conducted in Mexicali faces several limitations. First, its geographic focus means that the findings cannot be generalized to the entire nation without comparative studies, although similar patterns may exist in other cities of comparable size and characteristics. Second, the study may not account for all possible variables that could influence the relationships between constructs, potentially impacting the validity of the results. Third, the significance levels used in the analysis (5%) differ from those in other studies that might use a 1% significance level, which could limit the generalizability of the findings. Fourth, the data were collected through personal surveys, which may introduce biases due to the perceptions of the interviewers/respondents. Despite efforts to mitigate these biases through training, there remains a risk that some respondents may not fully understand or be genuinely interested in providing accurate responses. Finally, the research focused solely on quantitative variables, suggesting that future studies should incorporate qualitative variables to enhance the depth of the analysis.

REFERENCES

Aiken, L. R. (1980). Content Validity and Reliability of Single Items or Questionnaires. Educational and Psychological Measurement. https://doi.org/10.1177/001316448004000419.

Babbie, E. R. (2020). *The Practice of Social Research (15th edition).* Cengage AU.

Brealey, R. A., Myers, S. C., & Allen, F. (2019). *Principles of Corporate Finance (13th edition).* McGraw-Hill Education.

Brigham, E. F., & Houston, J. F. (2018). *Fundamentals of Financial Management (15th edition).* Cengage Learning.

Cedeño Franco, G. G. (2020). *Incidencia de la gestión administrativa en la rentabilidad de los restaurantes de la Ciudadela Urdesa, parroquia Tarqui de la ciudad de Guayaquil en el periodo 2018 – 2019.* Guayaquil: Universidad Tecnológica Empresarial de Guayaquil.

Cochran, W. (1977). *Sampling Techniques (3rd ed.).* New York: John Wiley & Sons.

Creswell, J. W., & Creswell, J. D. (2022). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (6th edition).* SAGE Publications, Inc.

DENUE. (2024, 04 15). *Directorio Estadístico Nacional de Unidades Económicas*. Retrieved from https://www.inegi.org.mx/app/mapa/denue/

Egoavil, E. X., & Meza, C. G. (2022). *Gestión Estratégica e Innovación empresarial en las Mypes del Rubro.* Lima: Universidad César Vallejo.

Escurra Mayuate, L. (1988). Cuantificación de la validez de contenido por criterio de jueces. *Revista De Psicología*, 6(1-2), 103-111. https://doi.org/10.18800/psico.198801-02.008.

Fraenkel, J., Wallen, N., & Hyun, H. (2023). *How to Design and Evaluate Research in Education (11th edition).* McGraw Hill.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis (7th edition).* New York: Pearson.

Hambrick, D. C., & Fredrickson, J. W. (2005). Are You Sure You Have a Strategy? *Academy of Managment Perspectives*, Vol. 19, No. 4. https://doi.org/10.5465/ame.2005.19417907.

Henseler, J., Hubona, G., & Ray, P. A. (2016). Using PLS Path Modeling in New Technology Research: Updated Guidelines. *Industrial Management & Data Systems*, 116, 2-20. https://doi.org/10.1108/IMDS-09-2015-0382.

Horngren, C. T., Sundem, G. L., Elliott, J. A., & Philbrick, D. (2023). *Introduction to Financial Accounting (11th edition).* Pearson.

INEGI. (2023, 11 25). *INEGI*. Retrieved from https://www.inegi.org.mx/app/areasgeograficas/?ag=02#collapse-Resumen

Instituto Nacional de Estadística y Geografía (INEGI). (2021). *Estadísticas de la Población y Grupos de Edad. INEGI.* Retrieved from https://www.inegi.org.mx

Kaplan, R. S., & Norton, D. P. (2004). Strategy Maps: Converting Intangible Assets into Tangible Outcomes. *Harvard Business School Press*.

Lesníková, P., Schmidtová, J., & Novotná, A. (2022). STRATEGIC ORIENTATION OF COMPANIES: THE SEVERAL STRATEGIC ISSUES IN TIMES OF COVID-19 PANDEMIC. *Economics & Sociology*, 186-201. https://doi.org/10.14254/2071-789X.2022/15-3/11.

Lizárraga Cajumi, M. R. (2017). *LA INNOVACIÓN EN LA TECNOLOGÍA MÉDICA Y SU INCIDENCIA EN LA RENTABILIDAD DE LAS CLÍNICAS PRIVADAS DE LIMA METROPOLITANA, 2013 - 2015.* Lima: Repositorio Académico USMP.

Lohmoller, J. B. (1989). *Latent variables path modeling with partial least squares.* Heidelberg, Germany: Physica. https://doi.org/10.1007/978-3-642-52512-4.

Lohr, S. L. (2019). *Sampling: Design and Analysis (2nd edition).* Chapman and Hall/CRC. https://doi.org/10.1201/9780429296284.

López-Lemus, J. A., & De la Garza Carranza, M. T. (2020). El papel de la gestión del emprendimiento y la innovación en relación con los resultados de las pymes en México. *Suma de Negocios*, 11(24), 12-23. https://doi.org/10.14349/sumneg/2020.v11.n24.a2.

Meza Martínez, V. I. (2013). *LA GESTIÓN ESTRATÉGICA DE COSTOS EN LA RENTABILIDAD EN LAS EMPRESAS DE ENSAMBLAJE E INSTALACIÓN DE ASCENSORES EN LIMA METROPOLITANA, AÑO 2012.* Lima: Repositorio Académico USMP. https://hdl.handle.net/20.500.12727/671.

Murray, R. S., & Larry, J. S. (2009). *Estadística (4ta edición).* México, D.F.: McGraw-Hill.

Nacional Fianciera. (2023, Marzo 10). *Nacional Financiera*. Retrieved from https://www.nafin.com/portalnf/files/secciones/capacitacion_asitencia/pdf/Fundamentos%20de%20negocio/Administracin/administracion1_1.pdf

Núñez Guerrero, Y. M. (2014). *Recursos intangibles como factores clave en la gestión estratégica de instituciones de educación superior y su impacto en los procesos de innovación.* Madrid: Universidad Politécnica de Madrid. https://doi.org/10.20868/UPM.thesis.33123.

Organización para la Cooperación y el Desarrollo Económicos . (2021). *Manual de Frascati: Propuesta de Norma Práctica para Encuestas de I+D.* OCDE.

Pérez, C. M. (2019). Innovación empresarial al servicio de la micro y pequeña empresa nortesantandereana: por la competitividad regional. *Económicas CUC*, 40 (1), 91-104. https://doi.org/10.17981/econcuc.40.1.2019.06.

Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research Methods for Business Students (8th edition).* New York: Pearson.

Suclupe Sánchez, R. J. (2022). *Estrategia de gestión administrativa para incrementar rentabilidad en un restaurante en Talara.* Chiclayo: Universidad César Vallejo. https://hdl.handle.net/20.500.12692/94366.

Thompson, A. A., Strickland III, A. J., Peteraf, M., & Gamble, J. E. (2020). *Crafting and Executing Strategy: The Quest for Competitive Advantage: Concepts and Cases (22nd edition).* McGraw-Hill Education.

Valdez-Juárez, P. L., Ramos-Escobar, M. E., & Barboa-Alvarez, P. E. (2019). Las Capacidades dinámicas y la orientación emprendedora: fuente de innovación y rentabilidad en la Pyme Mexicana. *Small Business International Review*, 3(1), 49-66. https://doi.org/10.26784/sbir.v3i1.158.

Valdez-Juárez, P., Ramos-Escobar, M., & Maldonado-Guzmán, G. (2017). *El Conocimiento En La Pyme, Factor Clave Para La Innovación Y La Rentabilidad.* Buenos Aires: 3rd Pan-American Interdisciplinary Conference.

Wan, X., Pan, F., Liu, C., Zhao, J., & Li, C. (2024). The Impact of Profitability Sustainability on Innovation in Dairy Companies: The Multiple Moderating Effects of Corporate Social Responsibility. *MDPI*, 1-25. https://doi.org/10.3390/su16145935.

Authors' Contribution

All authors contributed equally to the development of this article.

Data availability

All datasets relevant to this study's findings are fully available within the article.

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