Scientific articles

Factores que influyen en la competitividad de las Pymes desde la perspectiva de los empleadores del sector manufacturero en México

Factors that influence the competitiveness of SMEs from the perspective of employers in the manufacturing sector in Mexico

Fatores que influenciam a competitividade das PME na perspectiva dos empregadores do setor manufatureiro no México

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Resumen

Las Pequeñas y Medianas Empresas (Pymes), son una unidad básica para el crecimiento de los países porque son generadoras de riqueza y de trabajo que de acuerdo con el INGEI en 2020 representaron aproximadamente 99% del total de compañías a nivel mundial; en México las Pymes conforman el 97% de las empresas consideradas nacionales, este segmento empresarial aporta ventajas a la economía porque generan empleo, ingresos y desarrollo regional, en este estudio se analizan los factores que influyen en la competitividad de las Pymes desde la perspectiva de los generadores de empleo, siguiendo una metodología cualitativa para comprender el fenómeno, el tipo de alcance es descriptivo y de acuerdo al tiempo de la realización es transversal, para esta investigación se implementó un tipo de muestreo no probabilístico por conveniencia en donde se entrevistaron a 15 empleadores de distintas Pymes pertenecientes al sector manufacturero ubicadas en la zona del altiplano hidalguense, México, a partir del cual se reafirma la importancia que tiene el capital humano en la competitividad de la empresa siempre y cuando adopten la cultura empresarial con prácticas de gestión para la sostenibilidad de igual manera comprueba que la integración de los resultados, habilidades, capacidades y estrategias empresariales definen mejor la ventaja competitiva en las Pymes del sector manufacturero (INEGI, s.f.).

Palabras Clave: Pymes, competitividad, sector manufacturero.

Abstract

Small and Medium Enterprises (SMEs) are a basic unit for the growth of countries because they are generators of wealth and work that represent approximately 99% of all companies worldwide. In Mexico, SMEs make up 97% of the companies. companies considered national (INEGI, 2020), this business segment provides advantages to the economy because they generate employment, income and regional development. This study analyzes the factors that influence the competitiveness of SMEs from the perspective of job generators. Following a qualitative methodology to understand the phenomenon, the type of scope is descriptive and according to the time of the realization it is transversal, for this research a type of non-probabilistic convenience sampling was implemented where 15 employers from different SMEs belonging to the manufacturing sector located in the area of the Hidalgo highlands, Mexico, from which the importance of human capital in the competitiveness of the company is reaffirmed as long as they adopt the business culture with management practices for

sustainability in the same way it verifies that the integration of results, skills, capabilities and business strategies best define the competitive advantage in SMEs in the manufacturing sector.

Keywords: SMEs, competitiveness, manufacturing sector.

Resumo

As Pequenas e Médias Empresas (PME) são uma unidade básica para o crescimento dos países porque são geradoras de riqueza e de trabalho, que segundo o INGEI em 2020 representavam aproximadamente 99% de todas empresas a nível mundial; No México, as PME representam 97% das empresas consideradas nacionais. Este segmento de negócio traz vantagens à economia porque gera emprego, renda e desenvolvimento regional. Este estudo analisa os fatores que influenciam a competitividade das PME na perspectiva dos geradores de emprego. , seguindo uma metodologia qualitativa para compreensão do fenômeno, o tipo de escopo é descritivo e de acordo com o tempo de realização é transversal, para esta pesquisa foi implementado um tipo de amostragem não probabilística por conveniência onde foram entrevistados 15 empregadores de diferentes PME pertencentes ao setor manufatureiro localizado na região montanhosa de Hidalgo, México, a partir do qual se reafirma a importância do capital humano na competitividade da empresa, desde que adotem a cultura empresarial com práticas de gestão para a Sustentabilidade também comprova que a integração de resultados, competências, capacidades e estratégias empresariais definem melhor a vantagem competitiva nas PME do setor transformador (INEGI, s.f.).

Palavras-chave: PME, competitividade, setor industrial.

Introduction

The COVID-19 pandemic severely affected all sectors, and the manufacturing industry was no exception, being one of the most impacted. Not being considered an essential sector, like the food industry, it suffered significant stagnation. In Mexico, the manufacturing industry Manufacturing plays a crucial role in the economy, contributing 18% of the Gross Domestic Product, according to data from INEGI (2022).

Small and Medium Enterprises (SMEs) are a basic unit for the growth of countries as they generate wealth and work and allow for the identification, development and exploration of new activities. productive. According to the Organization for Economic

Cooperation and Development (OECD), SMEs represent approximately 99% of the total of companies to level world, contributing directly to GDP with he 60% for Europe and for America Latin with a 30% approximately (ECLAC/OECD, 2012).

SMEs have been in the spotlight for the last few years. years, due to that are organizations that HE adapt better, this allows them to position themselves in the highly competitive markets producing items at competitive prices, generating sources of work both locally, regional, national and international; as well as, an increase of knowledge according to the relationships they have with the financial environment, which positions them as a base fundamental in the economy; however, it is important to consider the aspects that affect its survival and reduce their competitiveness, productivity and other factors internal that are vital for its proper functioning. Among the structural weaknesses that most affect, hinder and restrict the improvement of SMEs, we find the acceleration of technological change and the development of new information and communication systems, globalization of markets, poor management of knowledge and human capital, the low evaluation and performance of managers and employees, the difficulty in raising foreign capital, and the lack of technological innovation (Villarreal & Gómez, 2009), in addition to take into account he risk gradual of the market, the decrease of the profitability, the lack of liquidityand the problems labor.

The world of SMEs is characterized as a way of life, not simply as entrepreneurial activity. The main determinant of success is the entrepreneur's ability for manage a wide range of interdependencies between customers, suppliers, bankers, accountants, lawyers, regulators, family workers and others groups that interact in varying degrees of complexity, dynamism and, consequently, considerable uncertainty (Flores *et al.,* 2009)**.**

For SMEs to maintain their growth without obstacles, they must have innovation in their products or services, in addition to having a higher technological level and possess a strategic development plan on how to take care of its financial resources and boost its growth (American Express, 2023).

One of the biggest threats to businesses, especially to the growth of SMEs, is the market risk, which Cohen (1998), Domínguez and Oliver (2006) describe as a financial risk that generates loss as a result of changes in the markets financial in which participate the company; and this risk is defined by losses due to fluctuations in the prices of the market, that is, it is the active risk that decreases, which affects companies, the There may be variations in: interest rates, in exchange rates or even in the prices of goods, considering

each variation a factor of risk, it is necessary to mention that market risk, which is determined as a situation caused by unforeseen events that affects the values assets, is an element that affects theSMEs on a daily basis (Pictet Asset Management, 2020).

In 2022, the manufacturing industry showed a moderate reactivation, hence in Mexico the Manufacturing Business Confidence Index (ICEM) stood at 51.2 (INEGI, 2022). In Mexico there are 244,603 companies belonging to the manufacturing sector and in January 2022 the total number of people working in this sector was 4,363,913, where 76.2% are operational personnel; This reflects a growth of 0.1% in Mexico, however this industry is the third with the most economic units in Mexico, the second with employed personnel and in first place in remunerations that are considered as salaries, wages, social benefits, profits and liquidation amount, reaching income of $10,971,095 in 2018. This industry had a total gross production of 10,800,994,226, ranking as the first industry in this country, DENUE (2022).

In Hidalgo, Mexico, 53,126 Economically Active Persons (EAP) were registered incorporated into the manufacturing sector, placing the state in 17th place in the Mexican Republic in income generated by both the private and parastatal sectors; However, during the pandemic in Hidalgo, 16,400 jobs were lost, reported by the Mexican Social Security Institute (IMSS, 2020) for July 2020, due to the partial or total closure of their sources of employment, this as a result of the impact on the value chain due to restrictions on the mobility of people and the operation of non-essential economic units, this has been reversing according to the Mexican Institute for Competitiveness.

This study considers the five municipalities that make up the Hidalgo highlands, which are Tepeapulco, Apan, Almoloya, Emiliano Zapata and Tlanalapa, which enjoy an excellent location, close to Mexico City. This last geographic area is characterized by its excellent consumption, communication routes, economy and logistics for the manufacturing sector. In addition to this, the Hidalgo highlands has two industrial parks in the area, positioning it in second place in the state of Hidalgo, Mexico. The purpose of this study is to analyze the factors that, from the perspective of employers, influence the competitiveness of companies in the manufacturing sector in the state of Hidalgo, Mexico.

Manufacturing SMEs in Mexico represent 5.5% of the total economic units. Companies are exposed to market risks either directly or indirectly due to the movement of the economy that brings with it globalization and causes changes of different magnitude in prices, currencies and interest rates that do not depend on the company, but do affect its

operations (Grupo Bancolombia, 2021). These external situations affect the company internally because they impact the sales, production costs and debts, which makes it necessary to have proactive market risk management that helps minimize the negative effects that these situations could have (Grupo Bancolombia, 2021).

In the Oslo Manual, it is addressed that innovation is not only related to the product but also to the way in which the organizational method is going to be marketed; this is where competitiveness comes into play, for Porter "the competitiveness of a nation depends on the capacity of its industry to innovate and improve; companies in turn gain advantages over the best competitors in the world due to pressure and challenge" (2008).

Competitive strategy involves the adoption of both defensive and offensive actions to participate in an increasingly demanding and dynamic market, to which business units must respond effectively. To achieve this, it is essential to consider the available resources, operational processes, and values and criteria that guide decision-making, such as costs, risks, and ethical principles. In the industrial and business sector, factors such as quality, resources used in production, costs related to the acquisition of raw materials and supplies, as well as fluctuations in supply and demand, play a fundamental role. Likewise, customer identification and satisfaction, together with the introduction of innovative products, stand out as key elements to ensure competitiveness and sustainability in the market (Ahmedova, 2015).

Gomes *et al.* (2014) demonstrate –based on analyses that show that larger companies are able to more easily adopt management practices for the sustainability and profitability of the business, Lorenzo *et al.* (2018) prove that both capabilities and resources, together with the definition of business strategies, contribute to improving a company's competitive advantage.

For their part, Benites *et al.* (2020) demonstrate with the results of their research that companies in the most important industrial sectors in Trujillo such as: footwear, textiles and metal mechanics at 70% and 89% respectively and furniture and sawmill companies with 57% of the total in their sector, responded favorably to the five competitive forces under Porter's approach; However, based on the study, it cannot be stated that it is sustainable because in the use of ICT it is deficient in its cognitive level, due to the degree of instruction of its managers; it is seen that international competition will be better prepared to optimize its productivity and displace companies from this geographical area. We need to improve our preparation for the sixth competitive force, which is digitalization.

According to Muda and Abdul (2016); Benites *et (* 2020) intellectual capital in companies shows positive and significant results in the development of the company and they found that human capital contributes to a greater extent in the growth stage; they argue that SMEs in Southeast Asia benefit from mobilizing structural and relational capital from the birth, growth stage to business maturity, therefore they consider that the three components must be integrated to achieve a sustainable product life cycle in SMEs.

Benites *et al.* (2020) argue that the adoption of sustainability-oriented management practices is directly related to the size of the company, which influences the achievement of better business results. They also argue that the integration of business results, capabilities and strategies contributes significantly to defining the competitive advantage in small and medium-sized enterprises (SMEs). Their research reveals that, to guarantee the performance of this segment, it is necessary to implement holistic strategies that ensure both the sustainability of the productivity of services and that of innovative products, adding high value to the latter. In addition, they highlight that the competitiveness and business development of SMEs depend largely on the quality of products and services, complemented by an efficient pricing strategy. The authors also underline that the implementation of Total Quality Management has a positive impact on the manufacturing industry.

Materials and methods

The focus of this research is qualitative, which according to Hernandez *et al.* (2010), is an inductive process that is contextualized in an environment natural, because in the data collection a close relationship is established between the research participants, thus collecting their experiences and ideologies of according to employment of an instrument of measurement predetermined, this type of research allows defining information based on results after an analysis, where the interpretation is rational and not mathematics; this in order to discover patterns and relationships in somewhat raw data, to base a new theory that seeks to obtain new knowledge.

According to Stern (1980), the qualitative research process begins with the selection of a stable communication model, through which information will be obtained for subsequent analysis. Next, a pre-analysis of the research is carried out, followed by data collection. Subsequently, a set of units is defined to establish the rules that will guide the

analysis. In the next phase, the data is coded to group them into categories, which culminates in the elaboration of a research synthesis (see figure 1).

Figure 1. Qualitative Research Process
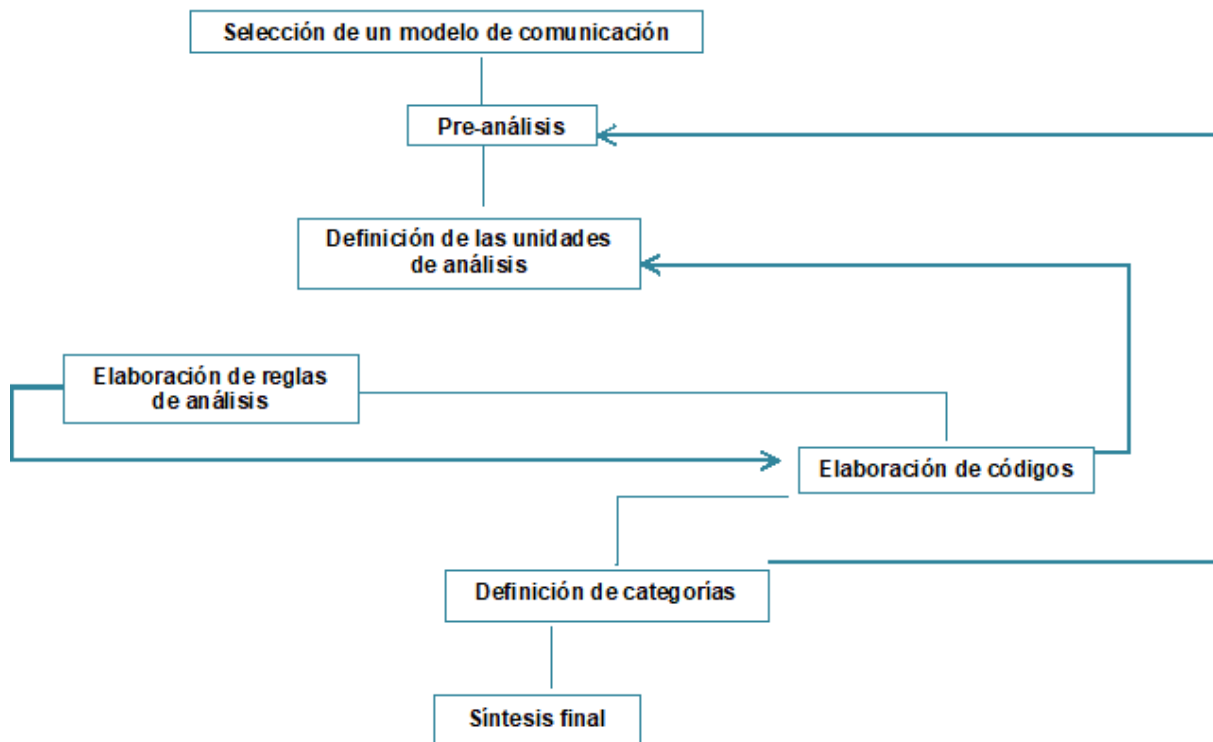
Fountain: Data obtained of Mayring (2014) and Serna (2001).

According to the meaning of the research analysis, the methodology of the theory was used founded, proposed by Glaser and Strauss (1967) and described in summary by Carrero (1998) (see Figure 2).

Figure 2. Methodology of the Theory Well-founded.

Fountain: Glaser and Strauss (1967).

The grounded theory methodology arises from data collected in a systematic, where the theory will emerge from the information collected, with the purpose that it adheres to the reality of the phenomena studied, allowing their understanding and Expressed in a theoretical way, this qualitative study allows us to analyze the perception that employers have about the business competitiveness of SMEs in the sector that are located in this area from the Hidalgo plateau of Hidalgo, Mexico.

Regarding sample selection, this research focuses on the geographical area of the Hidalgo plateau, made up of the municipalities of Emiliano Zapata, Apan, Tlanalapa, Tepeapulco, and Almoloya. The metal products manufacturing sector has 1,895 units in the state of Hidalgo. According to the Mexican Association of Private Industrial Parks (AMPIP, 2022), 39 companies in this sector are located in the Hidalgo plateau area, concentrated in the municipality of Tepeapulco, where two industrial parks are located: the Industrial Park of Ciudad Sahagún, which houses 25 companies of various sizes, and the subdivision called MiPyMES de Sahagún, with 14 companies. This research focuses on Small and Medium Enterprises (SMEs) in the manufacturing sector, with an employed staff ranging from 31 to 100 employees. According to the National Statistical Directory of Economic Units (DENUE, 2022), there are 21 companies with these characteristics in the region; of these, 15 are selected for this study (see Table 1).

Table 1. Distribution of manufacturing SMEs in the Hidalgo plateau

Total economic units	Municipality	Economic Units studied
3	Apan	3
1	Emiliano Zapata	1
15	Tepeapulco	9
2	Tlanalapa	2
	Total	15

Source: Own elaboration, data obtained from DENUE (2022).

To measure the effects that the factors have, a semi-structured questionnaire, which supports the use of interviews with open questions to obtain relevant information in order to understand the effect and The situation of the companies studied. The first part of the questionnaire includes elements of the company's location, the employers' highest level

of education, and gender; the second part includes questions about the perception of the current market, financing, control of key business information, perception of product innovation, competition, performance, skills and training of employees, market expectations with respect to the previous period, investments in technology, definition of a strategic plan, sustainability and social responsibility .

The type of sampling used is non-probabilistic for convenience, which according to Hernandez (2021), it define as a method that selects subjects that are accessible or available, this allows to select the companies of agreement to the criterion of the researchers and its analysis, in addition of the turn economic to the that belong for delimit the of Research; for the analysis and coding of data, the qualitative analysis software NVIVO 12 was used, which allows the analysis and storage of information in nodes, which are structured in hierarchies or trees creating topology, or showing a word cloud in order to identify keywords of the information analyzed.

Results

In this research, it is observed that 73.3% of the participating companies are small and 26.6% are medium-sized. Of the total number of participants, 80% are men and 20% women. In addition, 93.3% of the directors or owners, who are the main generators of employment, have a professional degree.

As for the results, the obstacles perceive that the market has become more dynamic and demanding after the pandemic. They agree in pointing out that customer demand has increased, as well as ecological awareness, which has driven companies to modify their processes to reduce their environmental impact. In the case of small businesses, the obstacles indicate that they usually resort to bank financing to make investments, although they point out that one of the main limitations is the high associated interest rates. 80% of the participants mentioned having taken a finance course in order to acquire accounting tools that allow them to optimize decision-making and improve the management of the company.

The women who participated in the study reported that they had implemented eco-efficient technologies in order to minimize their fixed costs. In addition, they have gradually begun to introduce control systems to manage the information generated in the company, analyzing the benefits that these tools provide. However, the challenge posed by constant technological progress is highlighted. For their part, the women participating in the study

stated that adapting to technology is easier for them, and they recognize that this is a key component to maintaining the competitiveness of their companies.

Regarding perceptions of product innovation, participants stressed the importance of identifying products that do not have a regular rotation in order to discontinue them. Small business obstacles emphasized the importance of quickly replacing less efficient products with those that customers really demand. This is crucial, since many of these small businesses specialize in supplying products to large companies. Therefore, they stressed the importance of developing customized products that fit specific needs.

Small businesses claim to be continuously working to increase their competitive advantage, focusing on offering better products and maintaining constant contact with their customers. In contrast, medium-sized companies consider that their focus is on optimizing resources through efficient processes and establishing achievable standards. These companies also emphasize the importance of knowing their customers and differentiating themselves from the competition. In the context of establishing social responsibility strategies, medium-sized companies highlight the relevance of this aspect to enhance their business competitiveness. They argue that it is essential to invest in developing the skills of their employees, so training is carried out continuously, both with external personnel and among their own employees. In addition, they underline the need to constantly promote organizational values among all hierarchical levels, considering it an essential element to consolidate a solid business culture.

Small and medium-sized companies agree that they have had to constantly modify the projected scenarios after the pandemic, they mention the importance of knowing the market and predicting the behavior of the industry at an international level in order to be competitive, they argue that having a strategic plan is essential to consider all the factors that impact the company, they mention the importance of financial and technological resources constantly; However, all the employers interviewed mention and agree on the importance of human capital as a differentiating factor among their competition, they affirm that training their collaborators is the most important thing since they are the ones who will develop and implement with their intellect strategies that allow achieving collective goals for the benefit of the company.

After processing and analyzing data through NVIVO 12 software, it is evident that the sample ha reached the saturation theoretical, is say, the supersaturation of the items and the categories that HE analyze, it that allows focus the search of saturated elements and

look for those nodes that have not reached that level, therefore, based on the results of the analysis of the information obtained in the interviews conducted to the SMEs, HE ponder the frequency of words further important of the research, which can be viewed at the Figure 3.

Figure 3. Cloud of words created with NVIVO 12.

Source: Elaboration own with data obtained from NVIVO 12.

Based on the interviews, it was concluded that business competitiveness is based primarily on product characteristics. The interviewees, who belong to small businesses, identify product quality as a significant priority in their businesses. In this context, the term "product" emerges as the most relevant factor for competitiveness, followed by "sales," which are affected by variations in the prices of raw materials and other inputs. This fluctuation considerably impacts the sales generated by small businesses. By analyzing the most prominent words in the responses, it is confirmed that "product" is central to the discussion on competitiveness. The data obtained from the interviews with the SME colleagues, presented in Table 2, reflect a list of the most recurrent words associated with competitiveness, which were weighted and analyzed in this study.

Table 2. Frequency of answers to the factors of competitiveness.

Word	length	count	weighted percentage
Product	8	10	3.00
Technology	9	10	3.00
Sales	6	10	3.00
Market risk	6	9	2.70
Price	7	8	2.40
Customer	7	5	1.50
Human capital	7	4	1.20
Competence	11	3	0.90
Shopping	7	3	0.90
Strategies	11	3	0.90
Intellectual capital	6	3	0.90
Sustainability	7	3	0.90
Promotion	9	3	0.90
Innovation	4	2	0.60
Knowledge	11	2	0.60
Communication	15	2	0.60
Marketing	9	2	0.60
Commodity	9	2	0.60
Pandemic	8	2	0.60
Productivity	8	2	0.60
Profitability	10	2	0.60
Training	12	1	0.30
Differentiation	9	1	0.30
Raw material	7	1	0.30
Expansion	9	1	0.30
Increase	10	1	0.30
Income	8	1	0.30
Production	10	1	0.30

Fountain: Elaboration own, with data obtained from NVIVO 12.

Discussion

From the results of this study, it is possible to analyze the factors that influence the competitiveness of SMEs from the perspective of employers in the manufacturing sector, where competitiveness is fueled by different factors that are considered in organizations, both within the market and its scope; This considering the personal factors of human capital, the skills they develop in training and the development of collaborators in SMEs impacts both the resources and the efficient development of the organization to be competitive, leaving open the proposal for future research in this regard. The results obtained make it possible to relate the businessman's perception that the product is the highest risk factor in the market,

since it is around it that productive activity is developed, with the rise in the entry of imported products from China, as well as the entry of new competitors that has been intensified by the signing of trade agreements, which ,Martínez (2022) points out.

It should be noted that production is not seen as a priority in the perception of the entrepreneur, but rather the product as a vehicle to generate sales, which are the basis of their profitability, hence it is the topic most addressed by the interviewees.

On the other hand, we agree with authors such as Flores *et al.* (2009), who point out that the ability of the entrepreneur to manage his resources in times of uncertainty and constant change is a determining factor for the success of SMEs. The respondents speak of strategies, training, marketing and promotion as tools to overcome the difficulties that arise in the economy and produce results that allow contributing to competitiveness, thanks to the development of communication, generation of innovation in their processes and products, among others, in the same way with this research what was obtained by Benites *et al.* (2020) is strengthened regarding the importance of incorporating comprehensive strategies that consider sustainability, product quality, their innovation, as well as the development of their collaborators with constant training and monitoring of their intellect, because from this analysis the perspective of employers is exposed who argue that the fusion of these elements has a positive impact on the competitiveness of SMEs.

Conclusions

Based on the results and discussion of the same, it can be concluded that competitiveness is the result of the different strategies implemented by companies, considering various factors such as price, competition, product, innovation, market risk, intellectual capital, concluding that the latter contributes from the employer's perspective to greater growth for the company by adopting a business culture consistent with what has been done.

It is also concluded that these types of studies can have great benefits for both the worker and the companies in terms of competitiveness, since from the analysis that takes into consideration the factors that employers consider as determining factors to achieve competitiveness, which allow to identify and strengthen human capital in the manufacturing industry, consequently it will impact the economic development of the Hidalgo plateau area in Mexico.

Future lines of research

The results obtained show that those who make decisions within the company are aware of the risks they face in their daily operations and agree on their interest in terms of the product and sales, which is not surprising since a large part of the company's profitability is based on these elements.

It is recommended that the results obtained from this research be considered, first of all, place, with the aim of designing strategies that are oriented towards the growth of the SMEs, through financial, marketing and sales tools and techniques; and in Secondly, that the important and relevant data in this article can be usedfor a further exploration of the issue in future studies.

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References

Acatenco, S., Domínguez, S., Pérez, S. y Cruz, D. (2014). El riesgo estratégico y su impacto con el crecimiento en microempresas manufactureras hidalguenses, desde la perspectiva de la gestión de riesgos empresariales. Memorias 2do. Congreso Internacional de Investigación en Ciencias Económico-Administrativas. Cambios e innovación: una visión estratégica para el desarrollo. México. UATx. https://www.uaeh.edu.mx/investigacion/productos/6425/

Ahmedova, S. (2015). Factors for Increasing the Competitiveness of Small and Medium-Sized Enterprises (SMEs) in Bulgaria. Procedia-Social and Behavioral Sciences, 195(1), 1104-1112.

American Express S.A. (2023). Estado de información no financiera de America Express Europe.https://www.americanexpress.com/content/dam/amex/es/beneficios/EINF_AEESA_2023.pdf

Asociación Mexicana de Parques Industriales Privados, A.C. (AMPIP). (s.f.) [Parques Industriales en México]. https://www.ampip.org.mx/parques-industriales-en-mexico

Asociación Mexicana de Parques Industriales Privados, A.C. (s.f.) [Parques Industriales en México]. AMPIP. Recuperado el 10 de febrero del 2022, de https://www.ampip.org.mx/parques-industriales-en-mexico

Benites Gutiérrez, L. A., Ruff Escobar, C., Ruiz Toledo, M., Matheu Pérez, A., Inca Alayo, M. y Juica Martínez, P. (2020). Análisis de los factores de competitividad para la productividad sostenible de las PYMES en Trujillo (Perú). Revista de Métodos Cuantitativos para la Economía y La Empresa, 29, 208-236. https://doi.org/10.46661/revmetodoscuanteconempresa.3513

Benites Gutiérrez, L. A., Ruff Escobar, C., Ruiz Toledo, M., Matheu Pérez, A., Inca Alayo, M., & Juica Martínez, P. (2020). Análisis de los factores de competitividad para la productividad sostenible de las PYMES en Trujillo (Perú). Revista de Métodos Cuantitativos para la Economía y la Empresa, 29, 208-236.

Carrero V. (1998). Anpalisis Cualitativo de Datos: Aplicación de la teoría fundamentada (Grounded Theory)en el ámbito de la innovación organizacional. Tesis Doctoral. Universidad Jaume I (Castellón).

CEPAL (Comisión Económica para América Latina y el Caribe) (2021), Perspectivas económicas de América Latina 2012: transformación del estado para el desarrollo. Disponible a través de: https://hdl.handle.net/11362/1443.

Clavellina, J. L. (2018). Determinantes del tipo de cambio y su volatilidad. Economía UNAM. http://www.scielo.org.mx/scielo.php? script=sci_arttext&pid=S1665-952X2018000300070

Cohen, R. (1998), "Características y Limitaciones del Valor en Riesgo como Medida del Riesgo de Mercado", ponencia incluida en "La Gestión del Riesgo de Mercado y de Crédito. Nuevas Técnicas de Valoración", Fundación BBV, Bilbao.

Cruz, D., Pérez, S. y Hernández, E. (2012). X Congreso Internacional de Análisis Organizacional 2012 Aprendizaje e Innovación: las organizaciones frente a una nueva concepción del conocimiento del tiempo y del espacio. Universidad Autónoma del Estado de Hidalgo. https://www.uaeh.edu.mx/investigacion/productos/5525/situacion_actual_de_la_mi pyme.pdf NO APARECE EN INTERNET.

DataMéxico(s.f.). Parques Industriales. https://datamexico.org/es/profile/geo/hidalgo-hg#industrial-parks

Feria Domínguez, J. M., & Oliver Alfonso, M. D. (2006). Valor en riesgo (VeR):concepto, parámetros y utilidad. Universia Business Review, (10), 66-79.

Feria, J. M. (2005). El riesgo de mercado, su medición y control. eLibro. https://elibro.net/es/ereader/biblioitesa/170116

Flores Jiménez, R., Hernández Ortiz, I. y Flores Jiménez, I. (2009). Caracterización general de las Pymes e importancia de la capacitación. Academia de Ciencias Administrativas. https://www.uaeh.edu.mx/investigacion/estl/LI_AdmninEst/Ruth_Flores/caracterizacion_gral_pymes.pdf

García, L. B. (2015). Causas del fracaso en las Pymes. Revista Emprendedores UNAM, 151, 22-25.

Glaser, B., and Strauss, A. (1967). The discovery of grounded theory. Strategies for qualitative research. Aldine Transaction.

Gomes, C., Kneipp, J., Kruglianskas, J., Barbieri da Rosa, L. y Bichueti, R. (2014). Management for sustainability: An analysis of the key practices. Ecological Indicators, 52(2), 116-127.

Grupo Bancolombia. (12 agosto de 2021). Qué es el riesgo de mercado y su importancia. Capital Inteligente. https://www.bancolombia.com/empresas/capital-inteligente/especiales/gestion-de- riesgo-mercado/que-es-riesgo-mercado

Hernández González, O. (2021). Aproximación a los distintos tipos de muestreo no probabilístico que existen. Revista Cubana de Medicina General Integral, 37(3). Epub 01 de septiembre de 2021. http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S0864-21252021000300002&lng=es&tlng=es

Hernández Sampieri, Roberto, Fernández Collado, Carlos, Baptista Lucio, María del Pilar (2014). Metodología de la investigación (6° ed.). México: McGraw Hill Interamericana Editores S.A. de C.V.

Hernández, Y. (s. f.). Los retos de las pequeñas y medianas empresas hidalguenses en el siglo XXI. Universidad Autónoma del Estado de Hidalgo. https://www.uaeh.edu.mx/campus/icea/revista/art1_quinto.htm

Hernández, Y., Saavedra, M. L. (s. f.). Capacidad y orientación de las Pequeñas y Medianas Empresas del Estado de Hidalgo para insertarse en el mercado global. Universidad

Autónoma del Estado de Hidalgo. https://www.uaeh.edu.mx/campus/icea/revista/art1_quinto.htm

Instituto Mexicano del Seguro Social (2020). [Puestos de Trabajo Afiliados al Instituto Mexicano del Seguro Social]. Recuperado de: http://www.imss.gob.mx/prensa/archivo/202008/557

Instituto Nacional de Estadística y Geografía (INEGI). (s.f.). Establecimientos de la industria manufacturera en Hidalgo. DENUE. https://www.inegi.org.mx/app/mapa/denue/

Instituto Nacional de Estadística, Geografía e Informática (2020), [Indicadores de Confianza Empresarial]. Disponible en: https://inegi.org.mx/contenidos/saladeprensa/boletines/2022/ice/ice2022_02.pdf

Instituto Nacional de Estadística, Geografía e Informática (s.f.). [Establecimientos de la industria manufacturera en Hidalgo]. DENUE. Recuperado el 20 de enero del 2022, de https://www.inegi.org.mx/app/mapa/denue/

Knop, R., Ordovas, R. y Vidal, J. (2013). Medición de riesgo de mercado y crédito. eLibro. https://elibro.net/es/ereader/biblioitesa/170075

Lorenzo, J. R., Maza, M.T. y Abella, S. (2018). The competitive advantage in business, capabilities and strategy. What general performance factors are found in the Spanish wine industry? Wine Economics and Policy, 7(2), 1-2.

Manual de Oslo. (2005) OECD and Statistical Office of the European Communities. https://www.oecd-ilibrary.org/science-and-technology/oslo-manual_9789264013100-en

Martínez Esquivel, Ricardo. Los chinos de ultramar: diásporas, sociabilidad e identidades. Ciudad de México: Palabra de Clío, 2018. 349p. ISBN: 978-607-970-481-0.

Mayring, P. (2014). Qualitative content analysis: theoretical foundation, basic procedures and software solution. Klagenfurt. https://nbn-resolving.org/urn:nbn:de:0168-ssoar-395173

McMillan, J.H. y Schumacher, S. (2001). Research in education: A conceptual introduction. New York: Addison Wesley Longman.

Muda, S., & Abdul, M. (2016). Human Capital in SMEs Life Cycle Perspective. Procedia Economics and Finance, 35(2), 683-689.

PICTET Asset Management. (Junio de 2020). Riesgo de mercado: qué es y cuáles son los factores que lo determinan. https://am.pictet.com/pictetparati/guia-de-

finanzas/2020/riesgo-de-mercado-que-es-y-cuales-son-los-factores-que-lo-determinan

Porter, M.E. (2008). Estrategia Competitiva Técnicas para el análisis de los sectores industriales y de la competencia. México: Grupo Editorial Patria

Serna, H., (2001). Strategic Management. Planning and Management - Theory and Methodology. 3R Editores LTDA.

Stern, P. N. (1980). Grounded Theory Methodology: Its Uses and Processes. DOI: 10.1111/j.1547- 5069.1980.tb01455.x

Terrones, A. (2019). Las micro, pequeñas y medianas empresas en el estado de Hidalgo. de Doctorado en Ciencias en Economía. Licenciatura en Economía, Instituto de Ciencias Económico-Administrativas. https://www.uaeh.edu.mx/investigacion/productos/4830/las_micropequenas_y_medianas.pdf

Villarreal Solís, Francisco Martín, & Gómez Romero, José Gerardo Ignacio. (2009). La integración en las pequeñas y medianas empresas fabricantes de muebles de la ciudad de Durango, México. Contaduría y administración, (227), 49-68. Recuperado en 10 de octubre de 2024, de http://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S0186-10422009000100004&lng=es&tlng=es

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