

Challenges in the Digitalization of MYPES in Mexico: A Comprehensive Approach to Competitiveness

Desafíos en la Digitalización de MYPES en México: Un Enfoque integral para la Competitividad

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Abstract

In the 21st century, digitalization and the strategic use of Information and Communication Technologies have become determining factors for the development and competitiveness of companies around the world. Using them is increasingly necessary that it is no longer an option and not doing so increases inequalities in order to compete in a globalized world. This project focuses on investigating the challenges that MYPES in Mexico face to adopt digitalization and take advantage of the benefits offered by Information and Communication Technologies. In the current business context, digitalization is essential for growth and competitiveness. Despite the opportunities provided by technology, MSEs often fall behind and face obstacles to adoption. For this research work, the objective was to identify the barriers and challenges that prevent the digitalization of MYPES and, consequently, their ability to innovate and grow. Considering a methodology with a mixed approach, where a sample of 377 managers of MSEs was taken into account and a documentary technique was used to collect information. and search for scientific articles using analysis instruments, resulting in the identification of four main variables that hinder Mypes in their digitalization process, among them: factors related to the firm, human capital, the environment that surrounds the company and technology to which it has access.

Digitalization, Information and communication technologies, Innovation, Competitiveness, MIPES

Resumen

En el siglo XXI la digitalización y el uso estratégico de las Tecnologías de la Información y Comunicación se han convertido en factores determinantes para el desarrollo y la competitividad de las empresas en todo el mundo. Utilizarlas es cada vez más necesario que ya no es una opción y no hacerlo incrementa las desigualdades para poder competir en un mundo globalizado. Este proyecto se enfoca en investigar los desafíos que enfrentan las MYPES en México para adoptar la digitalización y aprovechar los beneficios que ofrecen las Tecnologías de la Información y Comunicación. En el contexto empresarial actual, la digitalización es fundamental para el crecimiento y la competitividad. A pesar de las oportunidades que brinda la tecnología, las MYPES a menudo se quedan rezagadas y enfrentan obstáculos para su adopción. Para el presente trabajo de investigación, se tuvo como objetivo identificar las barreras y desafíos que impiden la digitalización de las MYPES y, en consecuencia, su capacidad para innovar y crecer. Considerando una metodología con enfoque mixto, donde se tomó en cuenta una muestra de 377 directores de MYPES y se utilizó una técnica documental para la recolección de información y en la búsqueda de artículos científicos usando instrumentos de análisis obteniendo como resultados la identificación de cuatro principales variables que obstaculizan a las Mypes en su proceso de digitalización, entre ellos: los factores relacionados con la firma, el capital humano, el entorno que rodea la empresa y tecnología a la que esta tiene acceso.

Digitalización, Tecnologías de información y comunicación, Innovación, Competitividad, MIPES

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Introduction

Addressing the realities faced by micro and small enterprises (MSEs) regarding the issue of digital transformation has never been as important as it is today. We are faced with two perspectives of companies in this situation: the first refers to digitally born companies which represent the early era companies that are born into technology, while the second represents a group that is in a period of digital adoption, in comparison both types are important and recognizing the limitations, possibilities and advantages offered by technologies is important for both.

Today they are facing the era of a new industrial revolution, so digitization by companies is a transcendental issue. In a general sense, the company is the most common and constant activity organized by the human being, which involves a set of daily work, common labor, personal or collective effort and investments to achieve a certain goal. (García del Junco & Casanueva Rocha, 2000), authors of the book "Prácticas de la Gestión Empresarial", define a company as an "entity that, through the organization of human, material, technical and financial elements, provides goods or services in exchange for a price that allows the replenishment of the resources used and the achievement of certain objectives".

The (Diccionario de Marketing de Cultural S.A, 2006) defines a company as an "economic unit of production, transformation or provision of services, whose *raison d'être* is to satisfy an existing need in society".

Taking into account both definitions, the company can be established as an economic and social entity destined to the production of goods and services by means of human, material and financial resources that seeks the production of goods or services capable of satisfying the needs of a specific market.

The study problem focuses on the lack of digital transformation faced by micro and small enterprises (MSEs) in Mexico. Despite the growing advance of digital technology in the business environment, MSEs still fail to fully adopt the tools and strategies offered by new technologies to remain competitive.

This problem is reflected in a digital gap that limits companies to take advantage of the opportunities that technology offers and endangers their survival.

Therefore, the objective of this article was to identify the barriers and challenges faced by MSEs in the digital transformation process in order to find areas of opportunity.

The scope expected in this research is descriptive type since the objective is to find the barriers that prevent digital transformation in MSEs, from cultural, economic and regional factors that may influence the adoption of digital technologies to find certain areas of opportunity, which can help to reveal key issues in the lack of digitization and innovation opportunities.

With the development of this research will have an impact for the strengthening and generation of strategies for MSEs in the use of digitization that leads to their competitiveness.

The present work will be elaborated under the methodological approach of a qualitative approach, since it is the one that best suits the characteristics and needs of this research to describe the causes of the problem.

1. Theoretical framework

Digitization can offer MSEs a number of competitive advantages by improving efficiency, visibility, flexibility and adaptability to an increasingly digital business environment (Annarelli et al, 2021).

Digitization can be highly favorable as it boosts the dynamic abilities of firms. First of all, it helps companies to be able to detect transformations in their environment. The enormous advantage of digital resources in terms of quantity, speed, diversity and usefulness allows companies to acquire or retrieve information from the external environment in a cost-effective way, while improving efficiency in the organization's operational and functional processes. According to (ECLAC, 2021), the concept of digital technologies alludes to a broad and heterogeneous set of modalities of use of these technologies.

Digital transformation according to the (Strategic Guide for Digital Transformation, 2022) encompasses five key domains or areas in an organization to drive change and the adoption of digital technologies, such as operations and processes, customer experience, business model, human resources and technology.

Following the approach of (Ferraz & Haguenaer, 1996) competitiveness can be defined as the ability of a company to devise and implement competitive strategies with the purpose of preserving or sustainably increasing its product market share. These capabilities comprise a series of elements, some under the control of the firms and others not, ranging from the technical training of personnel and management procedures to the influence of public policies, the availability of infrastructure and the particularities of supply and demand. The relevance of competitiveness is evidenced by its positive correlation with long-term economic growth.

"Systemic factors" are those over which the company has little or no control. These factors are responsible for generating externalities for companies, acting as parameters of the decision-making process. Among these factors, the following stand out: infrastructural (availability, quality and cost of energy, transportation, telecommunications, basic inputs and technological services), macroeconomic factors such as exchange rates, tax burden, growth rate of domestic product, credit supply and interest rates and wage policy (ECLAC, 2019). In management processes, the term capabilities is used to refer to the intangible assets of an organization that allow it to stand out in innovation, rapid learning and product development superior to those of its competitors (Smallwood, 2004).

(Jeon, G., Han, K. and Lee, M. 2006) conducted a study to determine the success factors in e-business adoption by small businesses. They found that one of the main determinants is the manager's knowledge of the advantages and benefits of e-business implementation, with government support for the adoption and use of e-business as a strategy for globalization and market expansion coming in second place.

Facing the changes associated with digitization in organizations not only involves the company, but also the human capital the level of competence and training in technology of owners and employees of MSEs, achieving better workers, organizations and societies will only be possible through a greater effort in digital skills (Peiró & Martínez - Tur, 2022).

Now, according to (Botello Peñaloza & Pedraza Avella, 2015) among the factors that favor the diffusion of ICT within organizations are the knowledge possessed by the members of the organization: greater technical knowledge about the applications to be integrated into organizational processes allows a faster and easier diffusion of technologies.

In particular, the skills in MSE collaborators that facilitate innovation are associated with the development of aspects such as creative process, combination of approaches, construction and destruction, focus on solutions, valuation of error, risk and tolerance, uncertainty, human relations, commitment, vision of the future, planning, leadership, action, implementation and monitoring (Neme-Castillo, 2021).

According to Castillo (2021) in relation to the set of explanatory variables from the analysis of the Probit model, the determinants that affect the use and appropriation of ICTs in MSEs are established in a relationship with the conditions of the firms, showing that the size of the company is a determining element, as well as the economic sector, services and activity of the company.

The article entitled Detonators of Technological Modernization in the Printing Industry of Mexico: a Methodology and Case Study analyzes the influence of the business sector on the modernization process. The problems faced by Mexican printing companies are: lack of planning and programming, scarcity of financial resources, which prevents modernization, quality defects and lack of trained human resources.

Based on the study and the tools of open interviews, direct observation and Likert-type summary evaluation, four variables were determined that triggered the increase in productivity of the lithographic plant.

These variables are: technological modernization, prospective innovation, operational efficiency and strategic leadership (Ángel, 2015).

2. Methodology used

The methodology used corresponds to a mixed approach, considering a survey with 19 variables of the systemic analysis valued on a five-level Likert scale, Cronbach's alpha for the instrument was 0.974. In order to have a statistically representative sample, the sample size was determined considering a confidence level of 95%, an estimated error of 5% and the expected proportions were estimated at 50%, from which a minimum sample of 377 micro and small enterprises was obtained, which for the study corresponded to the municipalities of Orizaba and Ixtaczoquitlán, Veracruz.

For the purposes of the research, the instrument that makes up the systemic analysis of the MSE as proposed by Posada, et al. (2016) was considered, considering only the section on the most common technological tools in the daily work of their business activity. The questions were: Do you have an account in social networks, Do you have email, Do you have a web page, Do you use internet banking, Do you use a spreadsheet, Do you use a word processor, Do you use presentation programs, Do you use database programs, Do you use an internet search engine, Do you use special computer programs to search for information, Do you have a web page, Do you use internet banking, Do you use a spreadsheet, Do you use a word processor, Do you use presentation programs, Do you use database programs, Do you use a search engine, Do you use an internet search engine, Do you use special computer programs to search for information? Do you use special computer programs to manage companies, Do you use computer programs to support production, Do you use e-mail on your cell phone, Do you use office software on your cell phone, Do you use WhatsApp on your cell phone, Do you use other social networks on your cell phone, Do you make electronic invoices for your clients, Have you acquired technology for your company that you never use, Have you acquired technology for your company that you never use, Do you use any other social networks on your cell phone, Do you make electronic invoices for your clients, Have you acquired technology for your company that you never use?

As for the qualitative research, the following was carried out:

Phase 1: Preparation and contextualization

Identification of the tools and resources necessary to achieve the effective use of ICTs. At this point we went into the definition of concepts that involve the digital transformation, to identify the terms and classification of technologies, also in the basic categorization the most common technologies to which micro and small enterprises in the country have access are stipulated, among which are found in Figure 1.

Tool	Description	Potential Benefits for MYPES	Technology
E-mail	Email communication system.	<ul style="list-style-type: none"> - Efficient communication with clients and suppliers. - Cost reduction compared to physical mail. 	Essential
Website	Online platform that presents information about the company and its products or services.	<ul style="list-style-type: none"> - Greater visibility and online presence. - Potential to attract new customers and sales. 	
Electronic banking	Online banking services, including electronic payments and transactions.	<ul style="list-style-type: none"> - More efficient financial management and time savings. - Access to financial information updated in real time. 	
Social networks	Platforms such as Facebook, Twitter, and LinkedIn to interact with customers and promote the company.	<ul style="list-style-type: none"> - Direct communication with audience and digital marketing. 	
e-commerce	Sale of products or services online.	<ul style="list-style-type: none"> - Market expansion and global sales opportunities. - Reduction of operating costs of physical stores. - Improvement in operational efficiency and decision making. 	
Business management systems	Software that helps manage and organize systems.	<ul style="list-style-type: none"> - Cost savings in IT infrastructure. - Remote access to data and applications from anywhere. 	
Cloud Computing	Storage and access to data and applications online, instead of on local servers.	<ul style="list-style-type: none"> - Automation of tasks and processes, energy savings. - Real-time monitoring of data and processes. 	
Internet of Things (IoT)	Connecting devices and objects to the Internet to collect and share information.	<ul style="list-style-type: none"> - Security and transparency in transactions. - Simplification of verification processes and contracts. 	
Blockchain	Distributed ledger technology that guarantees the integrity and security of transactions.	<ul style="list-style-type: none"> - Automation of repetitive tasks and decision making. - Personalization of interaction with customers. 	
Artificial Intelligence (AI)	Systems and algorithms that imitate human intelligence to perform specific tasks.	<ul style="list-style-type: none"> - Automation of manufacturing and logistics processes. - Increased productivity and efficiency. 	
Advanced Robotics	Robots with advanced capabilities, such as vision, mobility and learning.		Advanced or frontier technologies

Figure 1 Digital tools, contribution and level

Barriers and obstacles faced by MSEs to carry out the digital transformation process were evaluated.

In the first part of the analysis process, through observation, companies or businesses with problems related to digitalization were identified and then a qualitative and quantitative study was carried out.

At this point an exhaustive review of the literature is made, to evaluate according to different authors the barriers and obstacles that MSEs have in common when carrying out the digital transformation process.

The literature review is an essential step as it grounds the main variables of our study, which have been previously described in the theoretical framework.

The main variables are summarized in Figure 2, which were necessary to determine in order to gather information and elaborate the theoretical support based on them, in addition to recovering the challenges and success stories from the speeches given by the authors.

Dependent variable	Independent variable	Reference
Digitization in Mypes	Human capital. <ul style="list-style-type: none"> • Skills. • Leadership. 	<ul style="list-style-type: none"> 1. Botello Peñaloza, H.; Pedraza Avella, A. (2015). "Determinants of ICT adoption in developing countries: the case of Ecuadorian industrial companies." <i>Academia y Virtualidad Magazine</i>, 8, (2), pp.48-59. 2. Peiró, J. M., & Martínez-Tur, V. (2022). "Digitalized" competences. A crucial challenge beyond digital competences. <i>Journal of Work and Organizational Psychology</i>, 38(3), 189-199. https://doi.org/10.5093/jwop2022222. 3. Neme-Castillo, O. (2021). <i>Innovation skills in the collaborators of the Mypes</i>. Redalyc.org. https://www.redalyc.org/articulo.oa?id=456065109008.
	Factors related to the characteristics of the Company or firm. <ul style="list-style-type: none"> • Organizational Structure and Culture • Size • Sector 	<ul style="list-style-type: none"> 1. De Lourdes Tiburcio-Sánchez, M., Lozano-Montero, E., & López, R. G. (2023). The digitalization of Mypes: Guanajuato-Jalisco case study. <i>Administrative science theory and praxis</i>, 19(1), 90-100. https://doi.org/10.46443/catyv.v19i1.322. 2. Casalet, M. (2021). The uncertain future of digitization in Mexico: Can it take off? <i>Economics Theory and Practice</i>, 4568. https://doi.org/10.24275/etpuaum/nej/e052020/casale. 3. Ángel, M. M. (2015). <i>Triggers of technological modernization in the Mexican printing industry: a methodology and a success story</i>. <i>Engineering Research and Technology</i>. https://doi.org/10.1016/j.rit.2015.05.002
Environment/Atmosphere surrounding the company <ul style="list-style-type: none"> • Economical • Social • Politicians 	<ul style="list-style-type: none"> 1. Agüero, F., Palacios, J. J. M., & Peña, C. P. B. (2020). Digital strategies for SMES. <i>Innova magazine</i> Itfp.6(1),29-49. https://doi.org/10.54198/innova06.02. 2. Chiachoua, C., & Lozano, C. (2021). Adjustment and digitalization mechanisms for micro and small businesses in the face of COVID-19 in Mexico. <i>Nova Scientia</i>, 13. https://doi.org/10.21640/ns.v13i0e.2733. 3. Saavedra García, M.L., and Topis Sánchez, B. (2013). <i>The use of GSM: 1690-7515 ICT information and communication technologies in micro, small and medium-sized Mexican industrial companies</i>. <i>Venezuelan Magazine of Information, Technology and Knowledge</i>, 10 (1), 85-104. https://doi.org/10.22430/21457778.157. 	
	Factors related to the Technology that the firm has. <ul style="list-style-type: none"> • Sector to which the industry belongs. • Current digital gaps. • Limitations in infrastructure. • Costs to invest. 	<ul style="list-style-type: none"> 1. Mora, L. (2012). Innovation and competitiveness in international trade. <i>Trilogía</i>, 4(7), 137. https://doi.org/10.22430/21457778.157. 2. Limón, M. L. S. (2018, April 1). Information technologies and organizational performance of Mypes in Northeast Mexico. https://doi.org/10.24275/etpuaum/nej/e052019/buenraostro. 3. Mercado, H. E. B., & Del Carmen Hernández Eguiarre, M. (2019). <i>The incorporation of ICT in companies: Factors of the digital divide in the Mypes of Aguascalientes</i>. <i>Economics Theory and Practice</i>, 50. https://doi.org/10.24275/etpuaum/nej/e052019/buenraostro

Figure 2 Detection of variables for the construction of the state of the art

Phase 2: Data Collection

Probabilistic convenience sampling was used for data collection, which involves selecting elements for the sample in a non-random manner, based on the availability and accessibility of the elements. The following tools and instruments were used for data collection:

1. Academic search engines: used to find reliable articles and information that support the theoretical basis.
2. Literature review: It examines research related to the topic in order to understand the knowledge to be addressed.
3. Documentary analysis: Review documents and materials that provide relevant information to the research.

4. Comparative tables: This instrument helped the research to quantify the technological tools in which the MSEs in question have access, pointing out the common infrastructure in them. Likewise, the main elements that lead to the digital divide are rectified.
5. Diagrams and conceptual maps: Allows visualization of relationships, patterns and structures during the analysis.

Phase 3: Data analysis

In this phase, the results were combined to obtain a complete picture of the barriers and challenges in the digital transformation of MSMEs and to generate the relevant discussion regarding the opportunities of digital transformation, as shown in Figure 3.

Results

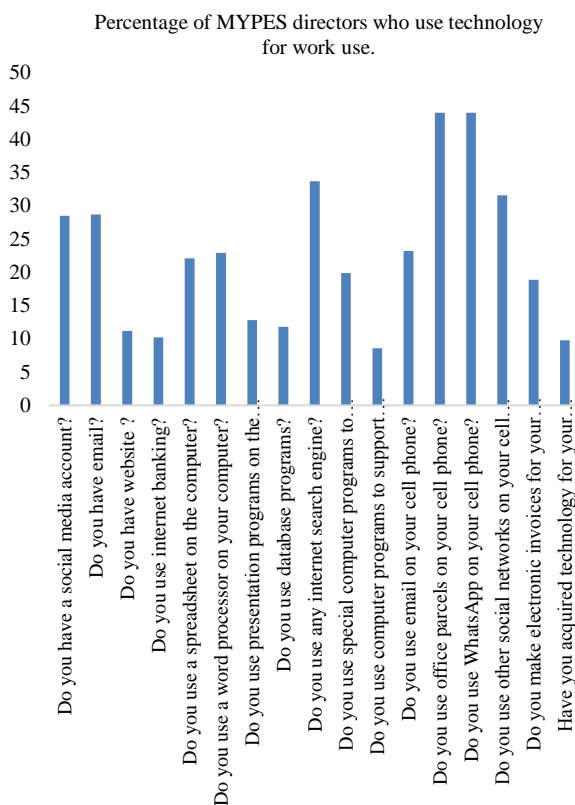
According to the results obtained from the surveys, only 19.9% of the managers of micro and small enterprises use some specialized software to manage their business and 8.6% use some software to support production.



Figure 1 Detection of digital barriers in Mypes

Overall, the percentage of companies that use a specialized program to manage or produce amounts to 21.9%. We can also observe that the most used technological tool is WhatsApp with 44%, however, micro and small businesses lack in the implementation of technology that allows them to strengthen their processes, management and attention with both internal and external people.

Since it was obtained that only 8.6% if they use computer programs to support production, 9. This represents an area of opportunity for them to be competitive with the insertion of technology in different areas such as production, marketing management, distribution, storage and sales, as shown in Graph 1.



Graph 1 Percentage of users who use technology for work use

Source: Own Elaboration based on Martínez N., et al (2018)

Micro and small enterprises cannot undertake their digitalization process automatically; their level in this process is intrinsically related to the internal capabilities of the company. This ranges from the level of digital competencies, entrepreneurial attitudes and risk tolerance in a holistic sense, both on the part of the employees and the owner, who play a crucial role in guiding the company's innovation.

Moreover, the level of digitalization is influenced by additional factors, such as the degree of formalization and the sector in which the company operates, as well as access to technology. In addition, external factors, such as the digital ecosystem, global business networks, the social and political environment, and adverse situations such as pandemics, can also impact the digitization process of SMEs.

Achieving business competitiveness and overcoming the aforementioned barriers is a challenge that can only be addressed through the development of four fundamental factors. First, strategic leadership plays a central role in setting the direction, vision, coordination and guidance needed to guide an organization through the complexity of digital transformation, ensuring that it is beneficial, sustainable and aligned with the company's long-term objectives. Operational efficiency involves optimizing internal processes, which in turn can free up resources for innovation. Foresight innovation is essential to keep up with technological trends and develop new approaches to address business challenges. Finally, technology modernization is a crucial part of supporting digital transformation.

This digital transformation process begins as the first step in driving change, and the adoption of digital technologies should span five key domains in an organization. These include optimizing operations and processes, improving the customer experience, adapting the business model to take advantage of digital opportunities, effectively managing human resources in a digital environment, and acquiring the right technology to support these initiatives. By advancing in these domains, MSEs can strengthen their competitiveness in a constantly evolving and digitizing business world.

Opportunities of digitalization

Increased reach and access to global markets: Digitalization allows companies to overcome geographic barriers and reach a global audience. Through online platforms and social networks, companies can promote their products and services internationally, resulting in an expansion of their potential market.

1. **Process automation:** Digitization enables the automation of tasks and processes, leading to greater operational efficiency. Companies can use software and systems to manage inventories, production processes, invoicing, accounting and more. This saves time and reduces errors, which improves productivity and reduces costs.

2. Personalization and improved customer experience: With digitization, companies can collect and analyze data to better understand their customers' needs and preferences. This enables them to offer highly personalized products and services, improve customer experience and foster customer loyalty.
3. E-commerce and new sales opportunities: Digitalization has driven the growth of e-commerce. Companies can open online stores and reach customers 24 hours a day, 7 days a week. In addition, online marketing strategies such as SEO and social media can increase online visibility and sales.
4. Data analytics and informed decision making: Digitization enables the collection and analysis of large amounts of data. This helps companies make more informed decisions, identify trends, predict demand and optimize their business strategy.
5. Collaboration and remote work: Digitization has enabled greater flexibility in the workplace. Companies can leverage online collaboration tools to enable their employees to work more remotely, which in turn can reduce office costs and attract talent from anywhere in the world.
6. Innovation and product development: Digitization accelerates innovation by enabling global collaboration and idea sharing. Companies can use technology to develop new products and services faster and in tune with changing market needs.
7. Reduced costs and improved profitability: The automation and efficiency brought about by digitization can lead to a significant reduction in operating costs. This, in turn, can increase the company's profitability.
8. Improved supply chain management and logistics: Digitization enables more accurate supply chain tracking, which reduces product loss and improves delivery efficiency. Technology such as IoT (Internet of Things) is used to track products in real time and ensure their integrity.
9. Adapting to market trends: Digitization allows companies to adapt quickly to market trends. They can adjust their marketing strategies and launch new products or services in response to changes in market demand.
10. Sustainability and corporate social responsibility: Digitalization can help companies reduce their ecological footprint by optimizing processes and reducing the use of paper. In addition, they can communicate their sustainable practices through digital channels, which can be an important factor in attracting sustainability-minded consumers.
11. Data security and risk management: Digitalization also provides opportunities to improve data security and cyber risk management. Companies can implement stronger security measures and protect their customers' confidential information and intellectual property.

These 12 points and the methodology presented above are shown in Figure 4.

MSEs play a central role in the economy because of their contribution to economic growth, employment and the generation of innovations. Moreover, they account for more than 95% of enterprises in developing countries (Ueki, Tsuji and Cárcamo, 2005).

Therefore, it is essential to understand how these agents incorporate ICTs within the value creation processes, through a more efficient management of their technological resources (Mercado & del Carmen Hernández, 2019).

According to (Saavedra García & Tapia Sánchez, 2013) in their article "El uso de las tecnologías de información y comunicación TIC en las micro y pequeñas empresas (MYPES) industriales mexicanas" regarding the technologies used in the plants, the application of internet connections stands out with 33.5%, resource planning (ERP) with 30.5%, activity-based costing (ABC) with 28.4%, electronic data interchange with suppliers (EDI) with 19% and electronic data interchange with customers (EDI) with 18%. However, these percentages are very low, indicating that most industrial MSMEs do not apply ICTs in their production process, which would be detracting from their competitiveness.

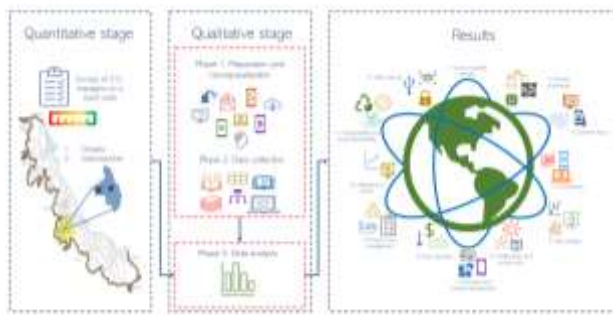


Figure 4 Stages of the applied methodology and opportunities for digitalization

According to (Mora, 2012), among the main factors that stop SMEs to adopt new digital technologies are:

The information that exists about new digital technologies tends to adopt macro levels or a perspective for large companies that are useless for SMEs, since they adopt high-level strategic recommendations that are inoperative for small and medium-sized companies.

Infrastructure investment. Most SMEs face this problem, investments in technological infrastructure can become costly and access to private investment or external financing is limited, for this reason SMEs leave aside the adoption of digital technologies as something exclusively for large companies.

Adoption difficulties and lack of infrastructure tend to be interrelated at both the local and national levels. This means that even if a micro or small enterprise has access, financial resources and skills to use digital technologies, it may be constrained by an environment where adoption is low.

In summary, the existing technology in a company can become a factor that prevents digitization due to the complexity of the existing infrastructure, resistance to change, lack of investment and challenges related to the integration of new digital solutions. In this sense, the use of information technologies in MSEs becomes vital if we consider that today they represent a fundamental element to increase the competitiveness of such companies.

Once the company has understood the digital technology it wants to integrate into its business process, it must understand the characteristics of digital technology, which can vary significantly with respect to other types of technologies, digital technologies are changing and unpredictable.

These distinctive qualities of digital technologies should be taken into account by companies when developing their digital innovation strategies and shaping their processes and services, especially when these technologies are focused on improving business performance through automation, access to information, reduction of transaction costs and incorporation of learning processes.

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Conclusions

With the realization of the article, it addresses the improvement of technology-related aspects available to the company, ensuring that MSEs have access to appropriate and affordable technology, finally, it focuses on adapting to the particularities of the firm, followed by the creation of an enabling environment.

Overcoming these obstacles is the first step to digitization, which translates into creativity, innovation and growth. When MSEs achieve this, they contribute to reducing existing inequality by becoming more resilient and productive. Key elements for achieving Goal 8 of the SDGs, which seeks to promote inclusive and sustainable economic growth.

Digitalization opens the door to borderless expansion and access to global markets with unprecedented reach. Thanks to online presence and the use of digital platforms and social networks, companies have the ability to promote their products and services internationally, which translates into a significant expansion of their potential market. Likewise, process automation is an essential advantage that digitalization provides.

This translates into an optimization of operational efficiency through the implementation of software and systems that manage tasks such as inventory, production, invoicing and accounting, which not only saves time, but also reduces errors, increases productivity and reduces costs. Digitization also enables a more personalized and richer customer experience by enabling data collection and analysis to gain a deeper understanding of customer needs and preferences. This enables companies to offer highly tailored products and services, improve customer satisfaction and foster loyalty. Similarly, digitization is driving the growth of e-commerce, enabling companies to establish online stores that operate 24/7, providing new sales opportunities. In addition, online marketing strategies, such as search engine optimization (SEO) and the use of social media, can increase online visibility and sales.

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