Financial Performance Factors and Technological Resources in The Strategic Management of Tourism Companies

Oscar Ernesto Hernández Ponce¹, Jorge Carlos Morgan Medina², Luis Enrique Valdez Juárez¹

Abstract

Tourism is experiencing static growth; however, the decrease in transportation costs and technological development can make it a more dynamic industry; therefore, the purpose of the study was to evaluate two tourist destinations in Mexico, one in the northwest (Guaymas, Sonora) and the other in the southeast of the country (Bahías de Huatulco, Oaxaca) in order to establish the correlation between financial performance factors and technology resources in tourism companies’ strategic management. The research was exploratory based on the organizational theoretical perspective called TOE: Technology, Organization and Environment framework, non-parametric statistics were used, quantifying the intensity and direction of the interdependence between the variables. It can be concluded that the tourism companies that presented a systematic financial performance and an efficient use of technological resources, generated greater opportunities to grow in the market and the ability to face the competition by improving their strategic management, in contrast to those that do not adequately present their financial statements, as well as null or low use of Information Technologies due to lack of knowledge, which has prevented them from obtaining real value from the organization and a management focused on profitability and its permanence in the future.

Keywords: Financial performance; tourism companies; business management; ICT management; tourism

1. Introduction

The globalization process added to a higher disposable income, the decrease in transportation costs and technological development has made this activity one of the most dynamic and impactful industries in the world (Nikopoulou et al., 2023). In such a way, the current conditions of the global economy require constant changes from organizations to strengthen their performance and be competitive in the market (Calderón et al, 2009), (Parra et al, 2022)

Micro, Small and Medium Enterprises (MIPYMES) present difficulties in the strategic management strategy to face these conditions, which makes them vulnerable and uncompetitive despite being a great support for the national economy and in the generation of employment, vanishing shortly after being created. This environment unveils the impact of strategic management models that exert those strategies that have been successful in practice, thus generating challenges for the administration and management of businesses with a focus on entrepreneurship, the solidarity economy and financial education (Teixeira, 2021). For the study of companies, it is important to start from the local and multidimensional approach to determine the specifications required by each territory; which makes it dispensable to carry out studies on the conformation and behavior of companies from the local level, this due to the scarce information that limits having quantitative data, as well as the characterization of companies in the regions (Romero et al., 2023).

In empirical research, it has been concluded that part of the MSMEs sector, entrepreneurs are made out of necessity rather than vocation, thus, causing a negative impact on their vision, affecting the stability of the business in the medium and long term; and more and more companies are seeing the need to respond to the demands of all their interest groups, and ultimately to society as a whole, providing them with information on the impact of their actions in all areas, not just economically, but also socially and environmentally (Hernández et al, 2021). In this context, financial information is clearly insufficient to satisfy the demands of all stakeholders and this means that companies, mainly, although not exclusively the big ones, have been providing information of a non-financial nature. In studies of entrepreneurship and behavior of companies it is essential to consider the financial and technological factors; since they are a fundamental part of the competitiveness of organizations (Romero et al., 2023).

As mentioned, MSMEs represent the segment of the economy that contributes the largest number of economical units and employed personnel worldwide; hence the need to study them to strengthen their financial performance and the use of technological resources, which represents the economic essence of all strategic management (Cháves, 2019).

Globally, it is perceived that the tourism sector is experiencing growth and an expansion boom (Azmi et al., 2023). The Ministry of Tourism (SECTUR) publishes data where it is estimated that tourism represents 10% of the world’s Gross Domestic Product (GDP) and generates one job out of every ten sources of work in the world. In this sense, the tourism sector represents a door to the economic progress of countries, because it is becoming a wealth producer, it invigorates the economy (Secretaría de Turismo, 2019).

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According to the Ministry of Tourism (2018), this activity constitutes one of the main economic activities. That is why, in Mexico, tourism has become a real alternative for the development and maintenance of the national economy. According to the figures issued by the Ministry of Tourism (2019), the tourism GDP registered a higher growth in relation to the national GDP; therefore, the participation of this activity went from 8.2% in 2012 to 8.8% in 2017 and 8.7% in 2019. However, for the years 2020 and 2021 the sector had a considerable drop caused by Covid 19. For this reason, tourism promotes the creation of jobs, economic benefit, allows the development of the areas, develops cultural exchanges and leads to the opening of other lifestyles; however, tourism activity also generates a series of negative impacts (Gallardo, et al; 2019). The stage of modern tourism in Mexico begins in 1945, and the promotion of the tourism sector is considered as an opportunity for economic growth. The areas of roads and transportation, lodging, tourist attractions, and staff training began to be promoted (González & Mendoza, 2014).

The statistical data published by Ramos (2020) where he points to Mexico with 42 million economic units, of which 99.8% are MSMEs, which are responsible for 52% of the Gross Domestic Product (GDP) and 72% of the formal jobs nationwide. Of these organizations, 32% are located in the northwest of the country, 27% located in the center-west, 17% located in the southwest, and 6% located in the southeast. On the other hand, despite the fact that MSMEs in the tourism industry have had difficulties to implement IT, it is important to mention that as a result of COVID-19, they were forced to acquire and be trained in the use of technologies for marketing efficiency of their tourist services (Nikopoulos et al, 2023).

Derived from the above, strategic management strategies must be in accordance with the competitive strategies that have been decided through the organization’s strategic planning process. Consequently, it is significant to determine the existence of a correlation between financial and technological management variables and strategic management for the success and permanence of tourism companies in Mexico. Therefore, the objective of this study was to evaluate two tourist destinations in Mexico, one in the northwest (Guaymas, Sonora) and another in the southeast of the country (Bahías de Huatulco, Oaxaca), and based on the results, be able to have an exploratory comparison between two tourist destinations that complement another research.

Based on the aforementioned, the following specific research question is posed: What is the relationship between financial performance and technological resources in the strategic management of tourism service companies?

2. Theoretical framework

Tourism is a component of the global economy, since its contribution to the macroeconomic environment is fundamental, which is conditioned by the ability of companies to generate profitability through the achievement of their financial objectives (Gallardo et al, 2019). Due to the above, companies must constantly evaluate their economic results, allowing them to clearly identify their strengths and weaknesses, while knowing the economic and financial evolution throughout their operation (Pérez et al., 2017).

The present investigation is based mainly on the theoretical perspective of the Technological Framework, Organization and Environment (TOE); since according to Nikopoulos et al (2023), this theory enables an analysis of the use and implementation of technologies of financial performance and the environment for the improvement in the management of companies.

2.1 Financial performance in tourism companies

Financial management is one of the functional areas of companies needed for the analysis of decisions and actions related to financial means to carry out activities related to the use and control of financial resources (Pallo, 2013). Financial management in MSMEs is directly related to the efficiency of financial resources, the generation of the necessary income to finance purchases of raw materials, machinery and equipment; and the ability to pay suppliers in the short term as a result of a correct application of economic resources, which at the same time generates the performance to finance its growth (Lasrado, 2020). With efficient strategic management, the company will grow, otherwise the company will fail (Yasir, 2019).

Berrio et al (2017), mentions that financial management contemplates a series of elements and actions aimed at giving the company a correct financial methodology with the aim of achieving planning, control, evaluation, and use of financial resources. Therefore, financial planning becomes a tool in decision-making in the management of companies, impacting talent management for the sound financial management of companies (Velázquez & Cruz, 2022). However, good financial performance is limited in MSMEs; additionally, they lack the skills to efficiently manage resources, which makes them more volatile and inefficient (Dedusenko, 2020).

From the perspective of the Resource Based Vision (RBV) theory and the Resource Dependency Theory (RDT); the financial planning process is covered and to develop hypothetical financial planning models with specific characteristics that help the strategic management of MSMEs to improve their analytical capacity and with it an assertive decision-making (Masilo & Aguirre, 2017), (Romero et al., 2023). Based on the RDT, the profitability analysis allows to have a general perspective of the company for the adequate distribution of resources (Charco et al, 2019). Likewise, the financial results come from carrying out financial operations referring to the levels of liquidity, profitability and risk that a company goes through in a given period (Acosta, 2018).

Under this premise, tourist destinations are competitive when companies are capable of generating profitability above the industry average (Hernández et al, 2019). In addition, having objective and updated information allows the company to implement innovation in processes with continuous improvement in customer service (Sperotto & Tartaruga, 2022). Likewise, technological resources can make
a difference in a business by combining a good strategy. In addition, companies that implement “eco-innovation” have a greater possibility of innovating using support technology (Sperotto & Tartaruga, 2022).

The hypotheses of the study are described below:

**Hypothesis 1 (H1):** the financial performance of tourism service companies has a significant correlation with the strategic management of tourist destinations.

**Hypothesis 2 (H2):** the technological resources of tourist service companies have a significant correlation with the strategic management of tourist destinations.

2.2 Information Technologies as technological resources in tourism companies

Globalization driven by the continuous development of Information and Communication Technologies (ICT’s), triggers a context of competitiveness in the socioeconomic field in the tourism industry, so the use of technological resources and the development of ICT’s constitute a facilitator in the construction of competitive advantages (Moreno, 2018), (Rawashdeh, 2021).

According to Romero et al (2023), and based on the RDT approach, the technological aspect (ICTs) is essential for business development in the tourism industry; since technology has meant a marketing mechanism from a local level to an international one. In addition, through the RBV theory it is important to consider the values, finances and technologies related to entrepreneurial strategies. That is why the integration of both theories is relevant when conducting research on entrepreneurship.

On the other hand, Abrines (2017) points out that the benefits of ICTs are efficiency and reduction of operating costs, improvements in service, quality and customer satisfaction, improvement of relationships with suppliers, access to global markets and a planning of tourism services focused on the needs of the demand.

For their part, Encala da et al., (2019), points out that ICTs provide support to increase productivity, reduce costs, improve decision-making processes, facilitate collaboration and improve customer relationships. Likewise, in the management and administration of tourism companies, the implementation of information technologies (IT) is essential, since this will allow good management in the operation, in the management of human resources, and in the financial and strategic management of companies (Juan Luis et al., 2022). In addition, the impact of the internet within the tourist activity has increased due to the use of mobile devices, smartphones and the use of social networks (Facebook, Twitter, YouTube, Instagram, etc.). It is evident that the use of ICT in companies is substantial for the good performance of companies (Ivars, 2016).

The representatives of the company Webloyalty (2017), carried out an investigation regarding the Internet and tourism, reaching the following data: 75% of travelers worldwide plan their trips through online media (websites, blogs, social networks, chats, WhatsApp); In addition, another of the factors that people consult before embarking on a trip is “the climate” of the place or places to visit, meteorological patterns of tourist destinations that can significantly affect the well-being of tourists (World Tourism Organization, 2021).

Within the trends in relation to ICTs, is the use of analytics, therefore, data is a central axis for the future of companies, and analytics applied to “big data” stand out; that is, the collection and analysis of countless data, many of which are without any structure, such as documents, comments on social networks, etc. (Sperotto & Tartaruga, 2022). In this way, it is the analysis of texts that allows obtaining objective information. Finally, other trends are the analysis of networks of people to seek collaborations and the creation of communities, where there is an advantage of social recommendations for the company. On the other hand, artificial intelligence must be a tool to be taken into account, to achieve strategic objectives (Pérez et al., 2017). In conclusion and according to Juan Luis R. S et al (2022), ICTs are currently an essential factor that will have a direct relationship to positive results in the process of operation and organization of tourism companies.

In Smart Tourist Destinations (DTI), the challenge is to integrate sectors and cutting-edge technological possibilities such as “big data”, nanotechnology and sensorization, in the habits and customs of travelers to generate the best experience and a clear differentiation with compared to its competitors (Lasrado, 2020). Therefore, DTIs require the use of ICTs to improve the tourist’s travel experience based on the exchange of information before, during and after the trip (Dauti, 2021).

Companies in the tourism sector have been characterized as an industry where more has been invested in information technology in order to be competitive in the market. However, MSMEs have not been able to adopt technologies, so they opt for the use of traditional technological resources, which limits their possible competitive growth; Therefore, the adoption of technology and having digital maturity is an organizational challenge rather than a technical challenge that consists of rebuilding organizational paradigms in order to be competitive in the market in the long term (Juan Luis et al., 2022), (Nikopoulou et al., 2023).

The hypotheses of the study are described below:

**Hypothesis 1 (H1):** the financial performance of tourism service companies has a significant correlation with the strategic management of tourist destinations.

**Hypothesis 2 (H2):** the technological resources of tourist service companies have a significant correlation with the strategic management of tourist destinations.

2.3 Strategic management in tourism companies

Organizations are in a constant search for tools or alternatives that allow them to obtain solutions to the challenges they face in a highly competitive and sustainable environment (Hernández et al, 2021). In this sense, each organization needs to develop a strategic management that responds to the demands of the markets. Therefore, strategic management emphasizes the planning of processes to achieve the objectives of tourism companies (Velázquez & Cruz, 2022). In this sense, management is conceived as an area that manages the strategic aspects of the organization (Carroll, 2016). The foregoing determines the need to integrate new techniques, practices or tools, in the value chain, in process reengineering and in strategic accounting (Pedroni & Briozzo, 2022).
The tourism sector seeks efficient development considering a series of elements as a system, where supply and demand are related, in addition to the tourism plant and the superstructure (Hernández et al., 2019). For these reasons, responsible companies search for resources that have a certain potential, to later design and offer the product that meets the needs of the market (Borboa & Delhumeau, 2016). Therefore, good business management is essential for their competitiveness. In a broader context, organizations must respond or guarantee customers that they are capable of responding to their needs, desires and expectations, and be able to differentiate themselves from the competition. Therefore, quality in tourism companies is the consequence of factors such as their strategic management, technology, means of production, facilities, work methods or information systems and human resources (Mera & Bravo, 2018). Therefore, customer satisfaction is crucial for continuous improvement, allowing for the identification of critical areas to address them promptly using management tools that enable an effective stimulus for acceleration and orientation to change or improve certain organizational, cultural and technical aspects (Velázquez & Cruz, 2022). Likewise, the degree of customer satisfaction is a key indicator (KPI) for any company, and therefore it is used as one of the strategic management tools called Balanced Scorecard (Bruni, 2017). In addition, it is important to highlight that strategic management tools allow transforming strategies into action, where operational objectives are set, being effective and efficient for decision-making, because it provides summarized and organized information (Zambrano et al., 2021).

In addition to the above, the comparative advantages are also strengthened by factors that the site has and that have facilitated its appeal as a tourist destination (Gallardo et al., 2019). These factors are natural resources (beaches, mountains, climate, etc.), socioeconomic conditions (local population attitude towards tourism, labor availability, etc.), local regulations and policies used to promote tourist activity (taxation, incentives, etc.). Due to the above, a tourist destination with minimal comparative advantages can become highly competitive if it knows its strengths and weaknesses when contemplating a strategic plan for the use of its resources and good strategic management to be competitive (Engert & Baumgartner, 2016). Sánchez mentions (2023) that in the competitive advantages of tourism companies, one of the most influential factors is having technological resources that allow improving the customer experience and facilitating communication between client and company.

Based on the above, the following theoretical model is proposed:

**Figure 1. Theoretical model**

![Theoretical model](Own elaboration.)

The theoretical model (figure 1. Theoretical model) responds to the problem statement and the previously established objective, for which the following research hypothesis is structured: the factors of financial performance and technological resources have a significant correlation with the management of tourism service companies.

**Method**

This research is structured as follows: firstly, the introduction of the context of the tourism industry worldwide was described, as well as the situation in Mexico, emphasizing the role played by financial and technological resources within the management strategy of tourism companies. Secondly, the literature of the study is presented, basing the theoretical model based on the foundation of the organizational theoretical perspective called TOE: Technology, Organization and Environment framework, TOE. Thirdly, the methodology implemented was of an exploratory nature and non-parametric statistics were used, quantifying the intensity and direction of the interdependence between the variables of financial performance and technological resources with the management of tourism service companies in tourist destinations of Mexico, specifically Guaymas, Sonora which is located in the northwest of the country and Bahías de Huatulco, Oaxaca located in the southeast; and with it, we have data from two important
tourist territories. Fourthly, the results achieved in the research on the correlation of financial performance and technological resources in the strategic management of tourism companies are detailed. Finally, the main conclusions resulting from the research and analysis carried out are expressed, as well as the limitations and suggested lines of future research.

For the acceptance or rejection of the study hypotheses, the Spearman's association or correlation coefficient (Rho) was used, which is a non-parametric statistic that quantifies the intensity and direction of the interdependence between the variables. In addition, descriptive statistics were used to understand the conformation of the study subject.

3.1 Research study subject
The main tourist companies of two tourist destinations were considered: Guaymas, Sonora in the northwest of Mexico and Bahías de Huatulco, Oaxaca in the south of the country. For the Guaymas region, the population that was considered were micro, small, medium and even large companies whose function is to provide lodging services, food, and beverages. While, in Bahías de Huatulco, companies belonging to the service and commerce sector with a focus on tourism were taken as study subjects, such as lodging, food, and beverage companies, handicraft stores, clothing stores and car rental companies. These study subjects respond to the tourist profile of each evaluated destination.

The type of sampling used was stratified random probabilistic, because they were grouped into homogeneous categories regarding the business and tourist service offered by the research subjects. To calculate the sample, the empirical formula of Fischer (2000) is applied for populations of less than 500,000 elements; with which, the process used to determine the sample size for the study is described, through the following values: $N = \text{Total population for Guayas was 124 companies and for Huatulco it was 376 companies, p and q = 50% probability for and against, } \delta = \text{coefficient of the 95% confidence level with an estimate of estimation error of 5%}. \text{ Therefore, the study sample was 157 companies for Bahías de Huatulco and 85 establishments for Guayas, representing 64.88% and 35.12% respectively of the data obtained for the study.}

3.2 Design of the Instrument
The data collection instrument was applied during summer vacation periods, Easter Week, and December, in person during the year 2019. Its construction was carried out in three moments: the first one was the elaboration of a draft of the test, formed after the review of the literature; The second moment is an adaptation of the Delphi method for the validation process of the instrument, which was carried out with the participation of a panel of six experts in the field, which allowed obtaining the consensus of the experts with the intent of validating the instrument. At the last moment, a piloting of 30 cases was carried out to determine, through the SPSS V. 22 Software, Cronbach’s Alpha, obtaining a coefficient of 0.908 for the 6 items of the Financial Performance variable, .876 for the 6 items of the Technological Resources variable and 0.654 for the 11 items of the strategic management variable, there was no exclusion of items and the 242 cases of the sample were considered (See Table 1).

3.3 Procedure

### 4. Results

In the process of determining whether or not the sample scores follow a normal distribution; and according to the Kolmogorov-Smirnov test, the Financial Performance variable presented a K-S ($Z = .191$) and for the Technological Resources variable K-S ($Z = .118$). Both results show a critical level of bilateral asymptotic significance = 0.000; which is less than 0.05, so they do not fit a normal distribution.
The distribution of the sample for data collection, and according to the descriptive data of the research subjects, which were formed as follows: Hotels (30.58%), Restaurants (13.64%) and Real Estate (28.93%) being the main tourist services operating in the study areas. 67.77% of the total sample of personnel who responded to the survey are male and 32.23% are female. The foregoing reflects that the female population is being incorporated into leadership positions. Likewise, it is important to highlight that tourist companies continue to be managed by personnel hired for this purpose; since only 20.66% of the companies where data was collected are managed by their owners (See Table 2). From the sample, it was also detected that 64.88% of the leaders who run the tourist companies do not have a family relationship or any kinship, 35.12% if there is a kinship.

Table 2. Job position that the interviewee occupies within the organization

<table>
<thead>
<tr>
<th>Position/Interviewee</th>
<th>Guaymas, Sonora.</th>
<th>Huatulco, Oaxaca.</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner</td>
<td>23</td>
<td>27</td>
<td>50</td>
<td>20.66</td>
</tr>
<tr>
<td>General manager</td>
<td>46</td>
<td>89</td>
<td>135</td>
<td>55.79</td>
</tr>
<tr>
<td>Head or director of operations</td>
<td>9</td>
<td>20</td>
<td>29</td>
<td>11.98</td>
</tr>
<tr>
<td>Others</td>
<td>7</td>
<td>21</td>
<td>28</td>
<td>11.57</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>157</td>
<td>242</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Own Elaboration

The job seniority of the respondents reflects that 64.46% have a work experience of more than 6 years, 20.25% of the sample have between 3 and 6 years within the organization and only 0.41 are recently hired for less than a year, for such, the contribution and knowledge of the respondent with respect to his company strengthens the results of the investigation.

Table 3. Number of employees within the organization

<table>
<thead>
<tr>
<th>Number of employees</th>
<th>Guaymas, Sonora.</th>
<th>Huatulco, Oaxaca.</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 to 10 employees</td>
<td>31</td>
<td>81</td>
<td>112</td>
<td>46.28</td>
</tr>
<tr>
<td>11 to 20 employees</td>
<td>38</td>
<td>51</td>
<td>89</td>
<td>36.78</td>
</tr>
<tr>
<td>21 to 30 employees</td>
<td>16</td>
<td>24</td>
<td>40</td>
<td>16.53</td>
</tr>
<tr>
<td>More than 30 employees</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0.41</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>157</td>
<td>242</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Own Elaboration

58.68% of the personnel who occupy management positions are male and 41.32% are female, it is concluded that at a general level, women are being incorporated every day in senior management positions and/or as business owners in the tourism sector, as for the Municipality of Guaymas, up to 54% of the female gender is detected (See Table 4).

Table 4. Gender of the leader, director and/or general manager

<table>
<thead>
<tr>
<th>Manager Gender</th>
<th>Guaymas, Sonora.</th>
<th>Huatulco, Oaxaca.</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woman</td>
<td>46</td>
<td>54</td>
<td>100</td>
<td>41.32</td>
</tr>
<tr>
<td>Man</td>
<td>39</td>
<td>103</td>
<td>142</td>
<td>58.68</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>157</td>
<td>242</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Own Elaboration

It is important to mention that the leadership is young in the surveyed population, we observed 59.09% older than 40 years, 29.75% have an age range of 30 to 40 years and 11.16% range between 20 and 30 years.

The Factorial Analysis with exploratory cut and through the Kaiser Meyer Olkin test (KMO) and Bartlett’s sphericity as methodological procedures for the validation of the construct. The Financial Performance variable provided a value of 0.815 and the Bartlett’s sphericity test had a significance value close to 0.000. The principal component analysis presented 1 factor that explains 70.687% of the total variance. For the validation of the Technological Resources variable, the KMO test provided a value of 0.721 and the Bartlett sphericity test had a significance value close to 0.000. The principal component analysis presents 2 factors that explain 83.917% of the total variance. Finally, for the validation of the Strategic Management variable, the KMO test provided a value of 0.443 and the Bartlett sphericity test had a
significance value close to 0.000 and the principal component analysis allowed us to determine that with 4 factors it is explained 80.4697% of the total variance.

The best valued item in the Financial Performance sample was the DFI5 item: debts have decreased in the last three years; the worst valued item was the DFI6 credits contracted at preferential rates in recent years (See Table 5).

Table 5. Descriptive analysis of financial performance items

<table>
<thead>
<tr>
<th>Financial Performance</th>
<th>N</th>
<th>Rango (Min/ Max)</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>DFI1</td>
<td>242</td>
<td>1-5</td>
<td>3.5744</td>
<td>1.32821</td>
<td>1.764</td>
</tr>
<tr>
<td>DFI2</td>
<td>242</td>
<td>2-5</td>
<td>3.7355</td>
<td>1.03682</td>
<td>1.075</td>
</tr>
<tr>
<td>DFI3</td>
<td>242</td>
<td>2-5</td>
<td>3.5661</td>
<td>0.95423</td>
<td>0.911</td>
</tr>
<tr>
<td>DFI4</td>
<td>242</td>
<td>1-5</td>
<td>3.5496</td>
<td>1.16645</td>
<td>1.361</td>
</tr>
<tr>
<td>DFI5</td>
<td>242</td>
<td>2-5</td>
<td>3.9876</td>
<td>0.90861</td>
<td>0.826</td>
</tr>
<tr>
<td>DFI6</td>
<td>242</td>
<td>1-5</td>
<td>2.9752</td>
<td>1.09668</td>
<td>1.203</td>
</tr>
</tbody>
</table>

Source: Own Elaboration

On the other hand, the best valued item in the sample for the Technological Resources variable was Item TEC4: technological resources allow good planning, the worst valued item was TEC5: machinery and/or equipment improvement programs (See Table 6).

Table 6. Descriptive analysis of technological resource items

<table>
<thead>
<tr>
<th>Technological resources</th>
<th>N</th>
<th>Rango (Min/ Max)</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEC1</td>
<td>242</td>
<td>1-5</td>
<td>3.4669</td>
<td>0.92057</td>
<td>0.847</td>
</tr>
<tr>
<td>TEC2</td>
<td>242</td>
<td>2-5</td>
<td>3.5289</td>
<td>0.70061</td>
<td>0.491</td>
</tr>
<tr>
<td>TEC3</td>
<td>242</td>
<td>1-5</td>
<td>3.7769</td>
<td>0.71135</td>
<td>0.506</td>
</tr>
<tr>
<td>TEC4</td>
<td>242</td>
<td>3-5</td>
<td>4.1777</td>
<td>0.67976</td>
<td>0.462</td>
</tr>
<tr>
<td>TEC5</td>
<td>242</td>
<td>1-5</td>
<td>3.3471</td>
<td>1.09097</td>
<td>1.19</td>
</tr>
<tr>
<td>TEC6</td>
<td>242</td>
<td>1-5</td>
<td>3.781</td>
<td>1.07671</td>
<td>1.159</td>
</tr>
</tbody>
</table>

Source: Own Elaboration

As the behavior of the data was not normal, we proceeded to use the technique of non-parametric inferential statistics called: Spearman’s correlation coefficient (Rho), which allowed quantifying the intensity and direction of the interdependence between the variables. The measurement of the Financial Performance and Strategic Management variable resulted in Rho = 0.492 whose interpretation is the existence of a moderate positive association (See Table 7).

Table 7. Spearman’s correlation (X1, Y1)

<table>
<thead>
<tr>
<th>Financial Performance</th>
<th>Strategic management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correlation coefficient</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (bilateral)</td>
<td>0.000</td>
</tr>
<tr>
<td>N</td>
<td>242</td>
</tr>
<tr>
<td>492*</td>
<td>1</td>
</tr>
<tr>
<td>Correlation coefficient</td>
<td>.492*</td>
</tr>
<tr>
<td>Sig. (bilateral)</td>
<td>0.000</td>
</tr>
<tr>
<td>N</td>
<td>242</td>
</tr>
</tbody>
</table>

Internal elaboration **. The correlation is significant at the 0.01 level

The measurement of the Technological Resources and Strategic Management variable resulted in a Rho = 0.633 whose interpretation is the existence of a moderate positive correlation. When analyzing the significance with a value of 0.000, which is less than 0.05, and is even less than 0.01, which indicates that there is a significant correlation (See Table 8).
The results established a Spearman’s Rho level of 0.492 for H1, which is a significant positive correlation. In other words, the higher the level of Financial Performance in tourism service companies, the better the Strategic Management will be, and vice versa. In the same way, the results observed for the acceptance of H2 determine that between the variable of Technological Resources in tourism companies and Strategic Management there is a positive correlation and moderate interdependence according to the degree of relationship, obtaining a level of Spearman’s Rho of 0.633. A summary of the hypothesis test of the research study is attached (See Table 9).

### Table 8. Spearman’s correlation (X2, Y1)

<table>
<thead>
<tr>
<th>Spearman’s Rho</th>
<th>Technological resources</th>
<th>Strategic management</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Correlation coefficient</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (bilateral)</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>242</td>
</tr>
<tr>
<td></td>
<td>Correlation coefficient</td>
<td>0.633**</td>
</tr>
<tr>
<td></td>
<td>Sig. (bilateral)</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>242</td>
</tr>
</tbody>
</table>

Source: Internal elaboration**. The correlation is significant at the 0.01 level

### Table 9. Hypothesis Testing (H1:H2)

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Rho</th>
<th>X-&gt;Y correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: The Financial Performance of the tourist services companies have a correlation with the strategic management of the tourist destinations of Guaymas and Bahías de Huatulco</td>
<td>0.492</td>
<td>Moderate correlation accepted</td>
</tr>
<tr>
<td>H2: The Technological Resources of the tourist services companies have a correlation with the strategic management of the tourist destinations of Guaymas and Bahías de Huatulco</td>
<td>0.633</td>
<td>Moderate correlation accepted</td>
</tr>
</tbody>
</table>

Source: Own Elaboration

### 4.1 Discussion

By analyzing the correlation of financial performance and technological resources in the strategic management of tourism companies in the tourist destinations of Guaymas, Sonora and Bahías de Huatulco, Oaxaca both in Mexico; and according to the results obtained, a moderate positive relationship is exposed between strategic management and the financial performance of tourism companies according to Spearman’s Rho coefficient = 0.492, these results coincide with the work of Chira & Suáquita (2020) whose research had the objective of determining the influence between strategic management and profitability in textile companies that manufacture sports shirts, because in this sector the market is very competitive, according to the Pearson statistical test ($r_P = 0.561$, $p < 0.05$), which indicates that there is a positive relationship because strategic management is important in the world of business. On the other hand, Choy (2019) carried out the study to determine the influence of strategic management on the profitability of the company, the results obtained through the statistical test of (Rho Spearman) allowed to show that the intensity of the relationship is 0.628 having an associated probability of $p=0.012 < 0.05$, so said correlation is moderately positive.

With regard to establishing the relationship between technological resources and strategic management, it was possible to obtain a moderate positive correlation in the Rho Spearman statistical test, which yielded a correlation coefficient value of 0.633. Therefore, it is corroborated by what was stated by the authors Tabares, Correa and Herrera (2021), who argue that information management as one of the three organizational metamorphoses requires the integration of the computer system. In addition, through the use of ICT, companies are better able to offer their products and services in local, national and international markets. For this reason, it is essential that companies that have not incorporated these new technologies invest in their business, since their use leads to improving business management, which can foster the generation of competitive positions, as well as improving productivity, short-term and long-term benefits, adapting products to the needs of demand and the levels of customer loyalty (Meraz, et al, 2015). Similarly, Ruiz et al (2018) mention that the effective use of technologies favors the reduction of communication barriers, minimizing the distances between the different markets at the international level. Business dynamism has increased thanks to information and communication technologies, which allows tasks to be completed in less time and generates new styles of doing business, which directly affects the potential for information processing in decision-making analysis. Finally, any implementation of technology to improve the performance of companies must start from the managers or strategic level areas of the companies, this in order to consolidate strategies and budget in the short, medium and long term that allows achieving the competitiveness of organizations, but this will only occur when organizations are digitally mature (Nikopoulou et al., 2023). The objective of the study was to determine the existence or not of a correlation of financial performance and technological resources in the strategic management of companies in the tourism sector of Guaymas, Sonora and Bahías de Huatulco, Oaxaca, both tourist destinations located in Mexico.
In the observed results, it is important to mention that according to the National Survey on Productivity and Competitiveness of MSMEs (ENAPROCE, 2018), the backbone of the national economy continues to be MSMEs, where 97.3% are microenterprises, 52% of them are responsible for GDP, 72% of the creation of formal jobs. For the localities of Guaymas, Sonora, 36.47% are integrated by micro and 63.53% by MSMEs, with respect to Bahías de Huatulco, Oaxaca, the indicators are 51.59% of micro and 48.41% of MSMEs.

Another important issue to highlight is the gender gap, which continues to be latent in the leadership of organizations. It is important that companies create equal opportunities, since Mexico occupies position 66 out of 144 countries in the Global Gender Gap Index (Castellano, 2018), having a female participation in executive positions of only 14.6% until before the SAR-COVID 19 pandemic. Therefore, the direction of organizations must be more inclusive, position women in decision-making and leadership, and continue promoting a culture of equality where talent is important. Something notable in this study is that the sample from Guaymas, Sonora, is represented in the majority by a female leadership of 54.11%, and in Bahías de Huatulco, with 34.39%, the tourism companies are led by women.

According to the data obtained, the companies that presented an adequate Financial Performance generated greater opportunities to grow in the market and face the competition. In general, those that do not adequately present their financial statements due to the lack of knowledge, which hinders obtaining real value from the organization, in addition to not appreciating what its true profitability is and what profits it can yield in the future. Additionally, companies reduce their possibilities of expansion into new markets if they do not have adequate resources (González, 2019). According to the data obtained in Bahías de Huatulco, there is a better valuation in the averages of each Financial Performance item of the instrument than in the area of Guaymas, Sonora, with the exception of debts, which have decreased in the last 3 years and loans contracted to preferential rates in the last 3 years, indicating that companies from Sonora have had better flows and better support for the tourism industry.

In globalized markets, technology is a fundamental tool for the competitiveness and survival of companies. The data shows that in Guaymas, Sonora there is a better valuation in the means of each item of the technological resources of the instrument than in the area of Bahías de Huatulco, Oaxaca, which is relevant and consistent with the State ICT Development Index (IDTIC), indicating that in the Oaxaca area there is a need to increase the use of technological resources to improve the positioning of the tourism sector without alienating man from human contact service processes, and fall into dehumanization (Gómez et al, 2018). Based on the theory of relational marketing and to strengthen the improvement of the experience of clients who use tourist services, strategies for the use of technology, implementation of innovation actions and financial control must be included, in order to consolidate the organizations and strengthen its growth (Arosa et al., 2023).

A key success factor for organizations is their ability to adapt to complex and dynamic environments. In order to face the new challenges of the market, it is necessary to have a strategic management that enables decision-making not only based on economic-financial analysis, but also achieve a comprehensive assessment of management and serve as a tool in locating deviations in the different processes of the company, the measurement of business performance must be comprehensive (Jurado & García, 2021).

The findings determine that there is a moderate positive correlation of the independent variables: Financial Performance and Technological Resources with the Strategic Management of companies in the tourism sector of the sites of Guaymas, Sonora and Bahías de Huatulco, Oaxaca. The foregoing is equivalent to the fact that as tourism companies implement their strategies to strengthen their management in financial performance and the management of technological resources, they increasingly impact the strengthening of the strategic management of the tourism business sector in the region. Therefore, the hypotheses in the approach to the research problem: H1: the financial performance of the tourist service companies have a significant correlation with the strategic management of the tourist destinations of Guaymas, Sonora and Bahías de Huatulco, Oaxaca and the hypothesis where H2: the technological resources of the tourist service companies have a significant correlation with the strategic management of the tourist destinations of Guaymas, Sonora and Bahías de Huatulco, Oaxaca; a significant positive correlation is accepted.

It should be noted that, although the choice of the tourism industry is not accidental, as it is one of the economic sectors with the greatest impact on the Mexican economy given that it produces wealth and employment, this study is not exempt from limitations, therefore, it is necessary to indicate them critically specifying the weaknesses of the study. One of the aspects to take into account is that, since it is a research funded by the Program for Teacher Professional Development (PRODEP) of the Mexican Ministry of Education, the financial resources allocated allowed two tourist destinations to be included in the research, not being able to contemplate a greater number of tourist areas. Future lines of research could analyze different regions establishing comparative results. Likewise, with regard to financial performance, there is no availability of quantitative information, therefore, the veracity of the results is supported by the opinion of the employer, that is, from personal perception, so it would be important to delve into the hard data. In the same way, the data analyzed was obtained through the survey, which derives that they are subjective evaluations based on the experience and knowledge of the population surveyed, and it was intended to reduce the perception bias by ensuring the reliability of the answers through the selection of the key respondents. With this limitation in mind, future studies could use objective values of the results of tourism companies from post-pandemic SAR-COVID-19 tourism destinations.

5. Conclusion

The results of this research allow generating relative knowledge about the situation of strategic management in companies in the tourism sector in the towns of Guaymas, Sonora and Bahías de Huatulco, Oaxaca pre-pandemic SAR-COVID-19; however, it is recommen-
ded to carry out similar investigations at the macro level. According to Sarango et al. (2023), research related to the digitization of SMEs focuses on investigating the use of information technologies, digital transformation, innovation and application of strategies towards the digitization of files and databases for decision making. That is why, in the development of future research, it is extremely convenient, on the one hand, to take into consideration the conceptual model, by including constructs that provide data on what new technologies are being used by companies, as well as constructing a new Line of Generation and Application of Knowledge in the field of tourism and its well-being relationship for both tourists and tour operators. The tourism industry is one of the most exposed and sensitive to the change of the digital age or fourth industrial revolution, and given that the tourist destinations surveyed have valued agreeing that technological resources allow good planning and constant investment in systems of information, allowing them to improve the experience of tourists and provide competitive advantages that allow them to survive and excel in an industry as demanding and competitive as tourism.

Lastly, the means of the independent variables were contrasted with the Mann-Whitney U test, resulting in a significance of 0.811 for Financial Performance and 0.079 for Technological Resources; therefore, for both sites its significance is greater than 0.05, therefore, the hypotheses are also accepted.

The objective of the investigation was fulfilled, which consisted of: establishing if the factors of Financial Performance of the tourist companies and the Technological Resources have a correlation in the Strategic Management of the companies of the tourist sector of Guayas, Sonora and Bahías de Huatulco, Oaxaca both sites in Mexico. That is why, in Latin America, in order to increase the innovation rate, work must be done to strengthen the innovative capacity of companies in order to improve their position in the market (Quintero et al., 2021). However, the human factor within companies is essential for the adoption of innovation strategies; since the challenge is more about working in information education, valuing the experience of the staff (Vega et al., 2022).

Declaration of interest conflict

The authors do not declare institutional or personal conflicts of interest.

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team and employees’ human capital. *Journal of technology management & innovation, 17*(1), 3-14. [http://dx.doi.org/10.4067/S0718-2724202000100003](http://dx.doi.org/10.4067/S0718-2724202000100003)


