

# DIGITAL TRANSFORMATION MODEL FOR THE DEVELOPMENT OF TOURISM COMPANIES

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## ABSTRACT

The way of consuming information and the way we communicate is evolving thanks to advances in technology, the digital transformation breaks new ground in the tourism sector when communicating its services, offers and messages to customers. One of the challenges facing tourism professionals is understanding technological trends to innovate and reinvent their services towards clients. For which we propose a model to adopt the digital transformation in the development of tourist companies. A questionnaire was carried out with 20 managers from the sector with 95% reliability related to customer management, competition and innovation strategy regarding digital transformation; organizational culture and change management regarding business development. The results show that 45% indicate that they rarely keep a record with updated customer data. 35% indicate that they sometimes evaluate business models to anticipate their competition. 35% rarely use any methodology to develop a business model. This reflects that companies must manage data for later use, invest resources in innovating the business model, and have technological professionals who reinvent business processes.

## KEYWORDS

Digital Transformation, Tourism Companies, Development, Model.

# 1. INTRODUCTION

Today, companies struggle to survive and execute technology to face the new challenges that the market demands, it is related to digital transformation with devising and transforming culture to make changes in processes, customs and the way of acting of companies and persons; it acts as an indispensable tool for survival in the market (Ametic, 2017). Digital transformation helps companies meet multiple and changing consumer needs, focusing on the importance of data analytics and integrating technology across the business, revamping the way they work to deliver value to customers. This transformation should redirect the entire company towards a digital model that is effective in improving the relationship with the customer (Sánchez, 2019).

Companies are changing the way they do business by creating opportunities to have a competitive advantage, they generate a very important activity since they contribute to the growth of GDP, which allows a series of changes linked to economic aspects, including industrialization processes, communications, commerce and means of transport (Vashi, 2018). The tourism sector has a large and diverse offer, the demand in this sector is potential since there are many clients who are served by mediation systems physically but due to the arrival of technology it was radically transformed (Fundación Orange, 2016).

In tourism, in order to be competitive, the company must have differentiation, reputation and online presence in order to create value for the user and exceed their expectations. Digitization in tourism companies is a long and complicated process, it is related to the cost of implementation, to meet customer expectations, some companies use technology to innovate and provide new products, services and provide information on the business model to their clients, other companies use technology to reinvent themselves by improving their processes and the quality of their products, but there is a high level of ignorance and inappropriate use of new technologies such as cloud computing, big data or business intelligence in the tourism sector, all this added to the high costs of technology implementation, the lack of organization and structure within the company means that they are not at the forefront and available to the customer.

For this reason, the objective of this research is to propose a model to adopt digital transformation in the development of tourism companies that allows competition in a changing economic environment and prioritizes a roadmap towards digital transformation.

## 2. THEORETICAL BASES

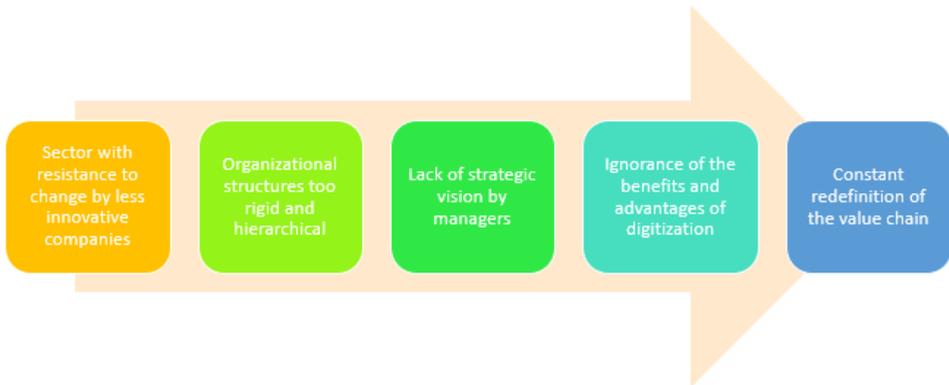
### 2.1. DIGITAL TRANSFORMATION

Companies use new trends in technology such as social networks, mobility, smart devices and improved use of Enterprise Resource Planning ERP to transform processes, customer relationships and the value proposition (Westerman, Bonnet & McAfee, 2014). In this way, organizations improve their performance and reach through digital technology. It is a great cultural and technological change that all companies must implement to meet the needs of Generation Z customers. A real digital transformation is obtained when the company becomes aware of the meaning of digital culture applied to all areas of the company (Peña, 2015). This new management model must be adopted by the people and organizational structures.

For Fenwick *et al.* (2014) all business sectors are obliged to have a change caused by digitization, some will drastically change the business model, leaving the traditional for the modern, which in most cases will be disruptive. A dynamic ecosystem for the organization should be considered, linking the internal and external digital resources of the company as appropriate to promote speed, operational efficiency and achieve a competitive advantage. The advantages of digital transformation make it possible to improve, streamline operations and processes with customers (Sánchez, 2019). Activities such as withdrawing money, depositing money, buying and selling products or services are currently performed virtually, making the economic system quick and easy.

According to a study carried out by Stibo Systems (2016), digitization changes the way of doing business, becoming opportunities to obtain a competitive advantage in this new global digital economy, allowing an organization to be modern, structured and specific that improves the customer experience, increases revenue, fosters a culture of innovation throughout the company, improves internal processes for greater efficiency in the value

chain and deepens data analysis in all areas of the company. In Figure 1, the barriers to digital transformation are shown.



**Figure 1.** Barriers to digital transformation in companies.

**Source:** adapted from (Stibo Systems, 2016).

There are information systems for decision-making, from transactional ones that make automatic operational processes saving labor, to strategic ones that provide relevant information that is used in the decision-making process (Bonilla & Briceño, 2014). They are intended to assist top corporate executives with relevant information and the use of visual resources for easy interpretation. With data analysis, the increase in products and smart systems on the market, companies and factories will have a large number of information.

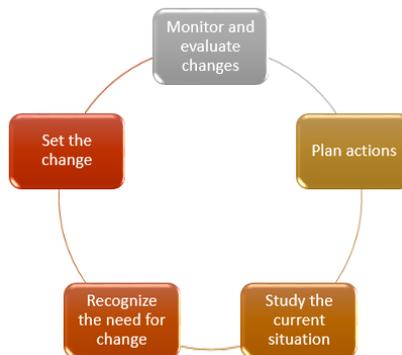
Analyzing these data will allow finding patterns and interdependencies, studying the processes and finding inefficiencies, including future events (Val, 2016; Pop, 2020). Thanks to data analysis, new opportunities will be found, improving efficiency and discovering services for the client, of which they will have more information. Organizational culture represents a strategic option by interfering with the culture that influences teamwork within the company. The values of each person within a company and the different customs make organizational culture fundamental in all organizations (Knein *et al.*, 2020).

The digital culture influences a change of mentality suggesting changes for the good of the company, with new routine customs of organization and leadership, it is essential for this reason that all companies adopt digitization. The organizational culture intervenes in all the internal relations of the company such as coordination, communication, teamwork, conflict management, authority and autonomy (Runtu *et al.*, 2019).

The steps to building a strong organizational culture for companies to be successful are: building committed teams, allowing staff to design the culture, hiring qualified staff aligned to the company culture. Customer management is a growing business method, useful for companies to interact with their current and future consumers (Soltani *et al.*, 2018).

The purpose is to analyze historical information on consumers, focusing on retaining customers and increasing sales to improve the customer-company relationship. The management of the customer experience helps us to order the cultural mentality towards the user experience, they are strategies and organizational capacities to maintain loyalty (Holmlund *et al.*, 2020). It is the response of consumers to the interrelationships with a company before, during and after making the purchase that produces a competitive differentiation.

To start with a change management process, companies must practice dialogue and communication with a leader who has an integrating vision for the effective growth of the work of the staff that promotes innovation and creativity for making good decisions in business (Valderrama, 2013). For an organizational change to be carried out with good results, management must keep in mind the global vision of these aspects: elements for change management, factors of change and phases of change, these phases of organizational change are shown in Figure 2 (Ruiz *et al.*, 2012).



**Figure 2.** Phases of change.

**Source:** own elaboration from Ruiz *et al.* (2012).

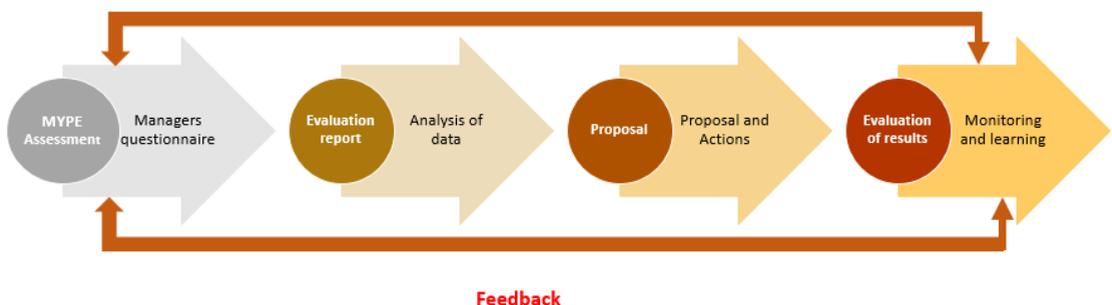
The ability of a company to offer products and services but also innovative solutions to meet the expectations and needs of the market is competitiveness (Chiavenato, 2011). Today companies seek to be competitive in order to have an advantage over other organizations seeking the same market and resources, in which consumers demand price, quality, respect

for ecology and response time. Competition is the situation in which companies are constantly in disputes to sell more products and services in a market (Medina- Quintero *et al.*, 2011), therefore technology positively influences generating competitive advantage, the influence of competition generates opportunities as it increases the intensity of the demand. Companies must choose the innovation strategy they must apply to succeed in the market or only to survive (Kotler *et al.*, 2010).

The most convenient innovation strategy is adapted to the external and internal environment of the company to improve its profitability. Business innovation improves the organization's activities through changes in business models, products, and marketing processes so that the company is more efficient and positions itself in the market. Innovation depends on various aspects such as the tastes and preferences of customers, the globalization of markets and the arrival of new technologies.

### 3. METHODOLOGY

To carry out this research, the quasi-experimental type design applied to 20 MYPES in the tourism sector of Cañete was used. The instrument used was a questionnaire on the digital transformation variable with three indicators: clients, competition, innovation with a total of 15 questions and the business development variable with two indicators: organizational culture, change management with a total of 12 questions. The questionnaire was validated by expert judgment and has a 95% reliability. The research work was based on four stages: Evaluation of the MYPE, Evaluation Report, proposal and evaluation of results for continuous improvement as shown in Figure 3.



**Figure 3.** Stages of research development.

**Source:** own elaboration.

## 4. RESULTS

The questionnaire was carried out to 20 managers of the tourism sector MYPES in Cañete. In Table 1, the customer management dimension of the digital transformation variable indicates that 45% rarely keep a record with the updated data of their customers, a 25% sometimes keep track, 15% never, 10% often, and 5% always.

**Table 1.** Do you keep a record with the updated data of your customers?

Levels	Frequency	Percentage
Never	3	15%
Rarely	9	45%
Sometimes	5	25%
Often	2	10%
Always	1	5%
Total	20	100%

**Source:** Survey of MYPES in the tourism sector.

In Table 2 in the competition dimension of the same variable, 35% indicate that they sometimes evaluate business models to anticipate their competition, 30% rarely, 20% often, 10% never and 5 % forever.

**Table 2.** Do you periodically evaluate business models to stay ahead of the competition?

Levels	Frequency	Percentage
Never	2	10%
Rarely	6	30%
Sometimes	7	35%
Often	4	20%
Always	1	5%
Total	20	100%

**Source:** Survey of MYPES in the tourism sector.

In Table 3 in the innovation strategy dimension of the same variable, 35% rarely make use of any methodology to develop a business model, 30% sometimes, 15% always, 10% a often and another 10% never.

**Table 3.** Do you use any methodology for the development of new business models?

Levels	Frequency	Percentage
Never	2	10%
Rarely	7	35%
Sometimes	6	30%
Often	2	10%
Always	3	15%
Total	20	100%

**Source:** Survey of MYPES in the tourism sector.

In Table 4 in the organizational culture dimension of the business development variable, 40% express that sometimes the key personnel of the organization have an adequate level of digital knowledge, 35% rarely, 15% often and 10% always.

**Table 4.** Are ICT used to promote the organizational culture in your company?

Levels	Frequency	Percentage
Never	0	0%
Rarely	7	35%
Sometimes	8	40%
Often	3	15%
Always	2	10%
Total	20	100%

**Source:** Survey of MYPES in the tourism sector.

In Table 5 change management dimension of the business development variable, 40% indicate that they rarely use technological tools to support change management, 25% sometimes, 15% often, 10% never and 10% always.

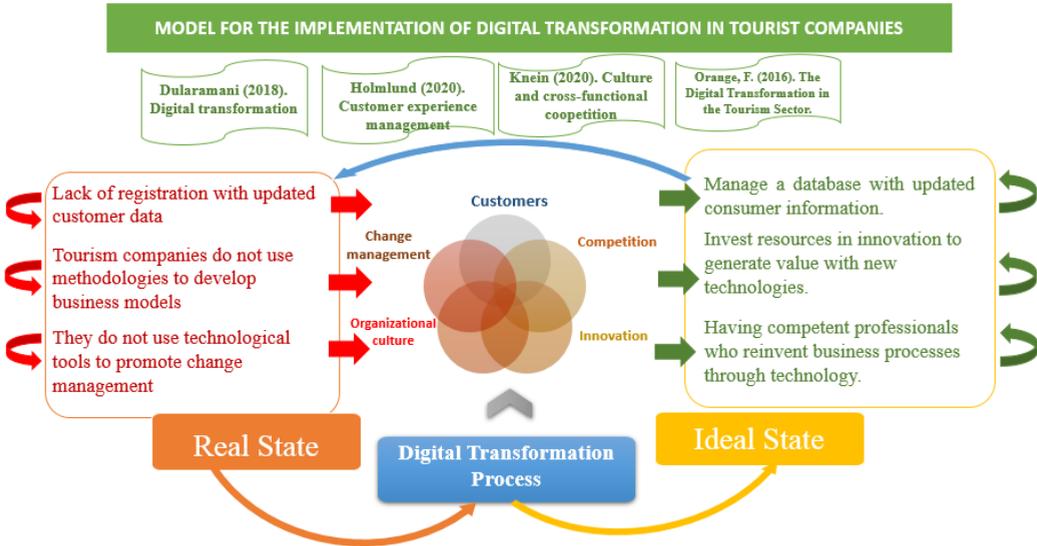
**Table 5.** Do you use technological tools to support change management?

Levels	Frequency	Percentage
Never	2	10%
Rarely	8	40%
Sometimes	5	25%
Often	3	15%
Always	2	10%
Total	20	100%

**Source:** Survey of MYPES in the tourism sector.

## 5. PROPOSAL

Based on the results of the survey, the following implementation model for digital transformation is proposed, which helps us to assess the current state of tourism companies, then apply the principles of digital transformation to obtain ideal results.



**Figure 4.** Model for digital transformation.  
**Source:** own elaboration.

## 6. CONCLUSIONS

This research work proposes the application of a digital transformation model for the development of tourist companies based on instruments and techniques carried out in the field work. In Table 1, 45% of companies in the tourism sector indicate that they rarely keep a record with the updated data of their customers, so they must manage a database that includes demographic and historical information on consumer interests, giving them a higher-level personalization to retain them. This agrees with del Val (2016) and Pop (2020) highlighting the analysis of the data to find patterns and interdependencies, studying the processes and finding inefficiencies to predict future events.

In Table 2, 35% indicates that they sometimes evaluate business models to anticipate the competition. For this reason, tourist MYPES, in order to know what services their clients want, must carry out surveys to analyze the market; make the necessary changes to the

service through pilot tests to obtain customer feedback; develop strategies through a SWOT analysis to reduce potential problems. This agrees with Chiavenato (2011) and Medina-Quintero *et al.* (2011) highlighting that competition is the situation in which companies are constantly in dispute to sell more products and services in a market.

In Table 3, 35% express that they rarely use any methodology for the development of any business model, tourism companies must invest their resources in innovating the business model generating value with new technologies. This agrees with Kotler *et al.* (2010), expressing that business innovation is an organizational improvement due to changes in the business model, in the organization, in the processes, products and marketing to position itself in the market.

In Table 4, 40% express that ICTs are sometimes used to promote organizational culture, the results show that Cañete tourism companies must improve the management of information technologies to increase cultural productivity and achieve a new level of improvement. This agrees with Knein *et al.* (2020) and Runtu *et al.* (2019), explain that the organizational culture intervenes in all the internal relations of the company such as communication, teamwork, conflict management, authority, autonomy and coordination.

In Table 5, 40% indicate that they rarely use technological tools to support change management, the data shown shows that companies in the Cañete tourism sector must have professionals with skills and competencies to introduce new technologies that they develop and reinvent the business processes. This agrees with Valderrama (2013) and Ruiz *et al.* (2012) express that to start a process of change companies must have a dedicated direction to practice dialogue and communication and must also have a leader who has an integrative vision for the growth of the organization through innovation, creativity and use of technology.

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