
ORIGINAL RESEARCH ARTICLE

Digital transformation and the influence of business intelligence on companies in the meetings tourism sector in Mexico

Rosa Isabel Morales-Martínez

UPAEP (Universidad Popular Autónoma del Estado de Puebla). Puebla City 72410, Puebla State, Mexico. E-mail: isabelmmtz@outlook.es

ABSTRACT

Digital transformation is a mechanism that is being increasingly used for business growth in many sectors, especially in the wake of the 2020 pandemic in meeting tourism sectors, such as business tourism, conventions, conferences. Business tourism is a highly profitable tourism segment and of great importance for the socioeconomic development of the localities. In this context, this paper seeks to explain the influence between digital transformation and business intelligence within meeting tourism in Mexico, to subsequently determine, in a qualitative way, topics of interest. As a result, the theoretical framework of the research and conclusions of the study are evidenced.

Keywords: digitalization; business tourism; entertainment companies; business strategies; business innovation

1. Introduction

In the 20th century, the UNWTO recognizes that “tourism can also include the working time of people who have to carry out activities outside their usual environment and use tourism services^[1]. This type of tourism is called business tourism, which differs from mass leisure tourism. MICE tourism (Meeting, Incentive, Congresses, Exhibitions) is considered as an object of study, meetings, incentive trips, conferences and exhibitions. Based on the Iguazu conference, the UNWTO has defined it as: “that which encompasses activities based on the organization, promotion, sale and distribution of meetings and events; products and services that include government, corporate and association

meetings, corporate incentive travel, seminars, congresses, conferences, conventions, exhibitions and fairs”^[2].

In this context, the objective of this paper is to analyze the influence of digital transformation on business intelligence in the meeting tourism sector in Mexico. In the first part, a documentary research is carried out to analyze and understand concepts and thus incorporate them into the strategic orientation of the projects.

In the second part, we analyze interviews with leaders in the meetings industry in Mexico and specialists in the field with the main objective of identifying new trends in the industry from their perspective, changes in service consumption habits,

ARTICLE INFO

Received: September 2, 2022 | Accepted: October 5, 2022 | Available online: October 21, 2022

CITATION

Morales-Martínez RI. Digital transformation and the influence of business intelligence on companies in the meetings tourism sector in Mexico. *Smart Tourism* 2022; 3(2): 7 pages.

COPYRIGHT

Copyright © 2022 by author(s). *Smart Tourism* is published by Asia Pacific Academy of Science Pte. Ltd. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<https://creativecommons.org/licenses/by/4.0/>), permitting distribution and reproduction in any medium, provided the original work is cited.

decision making, and how they have improved the new digital transformation of events during and after the confinement caused by COVID-19.

2. Materials and methods

The research is documentary and descriptive. Documentary because there is a compilation of information from various sources on the subject, management trends. It is descriptive, since the purpose of this level is to interpret factual realities. It influences description and registration^[3].

According to its scope, it is explanatory in nature because it seeks to demonstrate the causal correlation between the determinant variables of the study, such as “digital transformation” and its influence on “business intelligence” in the meeting tourism sector in Mexico. The main objective of this research is to establish the causes of the phenomena, analyzing the cause-effect relationship of both determinants.

Consequently, the unit of analysis of the present research is identified as comprising three types of population.

Population N.1 is comprised of scientific

articles, institutional documents, reports, books, news, and research papers published on the web portal, as well as printed publications of international origin.

Population N.2 is comprised of scientific articles, institutional documents, reports, books, news, and research papers, published on the web portal, as well as printed publications of national origin.

Population N.3 corresponds to 8 semi-structured interviews so as not to limit the capacity to respond to MICE events.

The interviews were conducted with leading companies in the meetings industry in Mexico and specialists in the field.

The second part of the object of study, classifications were established based on stakeholders who are part of the industry (**Table 1**). Classifying the content in four blocks to follow:

- Organizational.
- Operational.
- Profitability
- Future prospects.

Table 1. List of groups interviewed for field analysis

NO.	Cargo	Collective	Date
1	Manager	Academic institution representative.	17.08.21
2	CEO	Academic expert.	18.08.21
3	Manager	Academic institution representative.	21.08.21
4	Manager	Business organization representative.	21.08.21
5	Chief Executive Officer	Director of a representative company in the sector.	21.08.21
6	Chief Executive Officer	Director of a representative company in the sector.	06.07.21
7	Project Manager	Representing the business organization.	06.07.21
8	Meeting Tourism Coordinator	Professional institution representative.	19.07.21

Source: Own elaboration (2021).

Due to the link between the interviewees and the subject matter under study, all of them answered the questions established for each of the content blocks. However, depending on the interviewee’s knowledge of each block, they have gone into greater or lesser depth.

3. Results

3.1. Meeting tourism

As defined by UNWTO, Reed Travel Exhibitions, ICCA and MPI, “meeting” is a general term that refers to the gathering of a number of

people in one place for the purpose of organizing or carrying out a specific activity.

The term “meeting” and its description just mentioned applied to a gathering of 10 or more participants for a minimum of four hours in a contracted space.

These meetings consist of conventions, conferences, congresses, trade fairs and exhibitions, incentives, corporate and business meetings and other meetings that meet the above criteria^[4].

In terms of the company’s relationship with the target audience, events can be classified into internal and external events: the former are for the company’s own personnel (sales conventions, product presentations, supplier conventions, commemorative events, open days, etc.) and the latter are aimed at an audience outside the company (opinion leaders, consumers, the general public, the press, etc.)^[5].

3.2. Characteristics of the meetings sector

Framed within the tourism industry, the meetings segment, due to the nature of its corporate processes, responds to the characteristics of the service sector^[6].

- Heterogeneity: They are not standardized, two similar services will never be identical or the same.
- Inability to store and transport: Services are not packaged, do not have weight, are not packed, as they are intangible.

- Inseparability. Its consumption is carried out simultaneously with its production, so that the services can be provided, the physical presence of the producer and the consumer is necessary.
- Intangibility. It cannot be seen, tasted, smelled, heard, felt before the event, therefore the quality criteria apply more to those who provide them.
- They are perishable. Because of their intangibility and inability to be stored, this means that if they are not used at the moment they can be kept and/or stored^[7].

The event and entertainment organization industry accounts for 1.5% of the country’s GDP. It is estimated that each participant spends an average of \$ 810 on these activities. These figures bring Mexico to 23rd position in the list of the 50 countries in the world whose event organization industry is the most powerful, led by the United States, Germany and France, in that order (Table 2).

3.3. Incursion of technology in mice events

Now, new technologies with digital tools for dissemination, digital management systems for reservations and data capture do in one day what used to take weeks of work. New technologies also improve the experience of the event itself, with applications such as virtual and augmented reality, interactivity through apps and 360 content,” said Ricardo Zamora^[8].

Table 2. Mexican cities in the ICCA 2019 ranking^[9]

City	Position in the ICCA ranking	# of meetings
CDMX	38	64
Cancun	106	29
Guadalajara	191	15
Merida	221	12
Puebla	221	12
Monterrey	307	8
Oaxaca	377	6

Source: International Congress and Convention Association (ICCA) Report 2019.

As in the entire tourism sector, technology has

transformed the meetings tourism segment in recent

years, we can distinguish two areas where technology has had a greater impact:

- Technology applied to the organization of meetings and events.
- Technology applied to the services offered to meeting and event attendees.

For these meeting tourists, it is always essential to be connected, having 3 specific needs:

- Interact with the meeting or event itself.
- Be connected to your work or professional activity.
- Stay connected with family and friends

New users demand two-way communication and more services that they can manage directly from their mobile devices, at all stages of the journey (before, during and after the meeting or event)^[10].

3.4. Elements of digital transformation in mice events

Mobile applications or web pages

Mainly intended to be used for:

- a) Inform: Provide information to attendees that will help improve their experience at the meeting.
- b) Engage: Provide attendees with a way to actively participate in the event, in a digital realm.
- c) Analyze: Leverage the information generated in the App by the attendees, to evaluate the development of the event and the satisfaction of the guests.

Big data

Through the Internet of Things, meeting venues will increasingly use sensors to measure data about the meetings themselves and attendee flows.

Relevant information can be extracted from this data so that organizers can adapt and modify the meeting in real time to improve attendee satisfaction

and achieve the objectives set by the organizer.

Having this information can make it possible:

- a) Know your customer better.
- b) Personalize your experience.
- c) Increase your satisfaction.
- d) Generate more income.

Strategic meeting management

They help companies manage their meetings and events through streamlined planning processes, preferred suppliers and meeting data. SMM programs help companies align their meetings and business objectives to deliver value by saving on operational costs, mitigating risk and improving the way events are managed.

Among the benefits of its use, we can highlight:

- a) Economic savings.
- b) More strategic vision of the meeting.
- c) Risk reduction (both financial and legal).
- d) Transparency.
- e) Increased attendee satisfaction.

Hybrid events

Technology has made it possible to have much larger audiences, who are not physically at the meeting or event.

A hybrid event must provide something more, better content and interactivity with remote users. Hybrid events have several advantages over more conventional formats:

- a) Reach larger audiences.
- b) They generate lower costs for the organizers.
- c) The life of the event can be longer than face-to-face events.
- d) It is easier to follow up with participants.

- e) They are friendlier to the new generations.
- f) They are naturally linked to social networks.
- g) They can have real-time feedback on attendee satisfaction, allowing them to adapt the event as it unfolds.
- h) And they generate a new revenue channel for the organizers^[11].

3.5. New ways of transmitting content

Technology is also changing the way in which knowledge is transmitted. On the one hand, using technological tools and audiovisual elements such as:

- a) Giant screens.
- b) QR Code.
- c) Holograms and video mapping.
- d) Augmented reality.
- e) Robots.

The use of mobile devices by the attendees themselves to transmit images of the meeting in real time via streaming. Meeting attendees will increasingly can broadcast what is happening at the event via applications such as Periscope, Meerkat or Facebook Live^[11].

4. Analysis of results

From the review of the literature and the characteristics of the different approaches, based on the interviews, a content analysis was carried out with the objective of identifying units of detailed meaning to the arguments that responded to the research objectives, as well as those that confirmed, endorsed and enriched the results of the research.

Most of the interviewees for this study were general managers or managers, followed by coordinators and project managers of representative companies in the MICE sector (**Figure 1**).

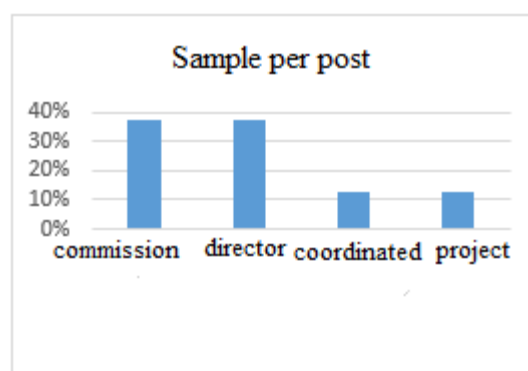


Figure 1. Percentage distribution according to position within the organization.

Source: Own elaboration.

4.1. Organizational dimension: Organizational culture training oriented to digitalization

Digital and cultural transformation go hand in hand, because this transformation involves the influence and participation of employees in the decision-making process.

The organizational culture oriented to

digitization in events starts mainly from managers, as well as their training from the use of information technologies for the automation of processes within organizations, understanding what technological value will add to the customer to generate experiences.

Likewise, companies that today are not working together in this digital transformation will be less competitive and will bring in less quality talent.

The trend is to become specialized companies, as well as not to focus only on tangible inventory, since nowadays congresses and conventions have become hybrid 50% face-to-face and 50% online, thus forcing companies to implement new technological tools.

The main challenges are in terms of adoption for the use of new technological tools, involving language factors, changes in business models and even cultural factors. As well as the lack of constant training.

4.2. Operating dimension: Digital disruption change of business model

In order to generate a digital disruption, a change of mentality must take place throughout the organization, breaking down barriers and stereotypes.

The design of an event as well as its purpose has been changing over time, now the main goal is to be environmentally friendly, now the focus of the business is the customer. The main objective is to develop customer experiences and provide value, with this bring better data management and costs, as well as the use of “big data” for “matchmaking”, knowing the market to know tastes, needs, inputs, etc. Since now you must think of an event aimed at a community and thus provide constant content 365 days a year and for different platforms.

Target customer needs are no longer the same, communities are looking for less generalized and more specialized information.

The implementation of virtual events, remote events, hybrid events, streaming, webinars, etc. have affected the commercial account, all those interlocutors of the MICE industry, as people have stopped traveling and generating demand for meeting tourism. The business model is changing and with it the new strategies to implement.

Now the new forms of content transmission are mainly found in “YouTube and Podcast”, without leaving aside the new initiative of social networks for the transmission of live events.

4.3. Profitability dimension: E-commerce digital marketing

Virtual events have become more international, due to the connectivity capacity and the facilities offered by e-commerce in events. It helps to eliminate physical distances, optimize attendees’ time and even reduce the investment of economic resources by companies.

Among the advantages of online media, virtual events allow event organizers to keep control of the event not only during the event, but also before and after it, through the use of CRM “Customer Relationship Management” and thus detect the main points of improvement and strategic points as event organizers in the MICE industry.

During the global pandemic 2020 event organizers were very affected by so many people who stopped working, unemployed and even so many people who died, it is for that reason that when doing digital marketing is necessary to update the database, during and after the global pandemic significant changes were made.

Digital marketing is changing and the MICE industry must be at the forefront regarding the content that is presented, now the web pages no longer accept “cookies” to third parties, this means that the user will no longer leave a digital trace on the page and thus, less information of the “target” (objective), which is why the current challenge is the generation of micro systems and communities.

4.4. Future prospects: Dimension immediate future trends

Online or virtual events offer great advantages to both participants and organizers from a geographic and cost barrier perspective.

However, hybrid events have favored the reduction of time, risk and costs. However, face-to-face attendance will not disappear, because now they will have to have an emotional or interesting reason for a client to attend the event. Similarly, among the trends are:

Cybersecurity: Security of data managed online, both for participants, sponsors, partners, and organizers.

Matchmaking: Ability to find similar patterns between one person or another for content generation.

Bigdata: Improved speed for data collection and processing, as well as CRM utilization.

Real and structured one-to-one networking: Personalized networking on topics of interest, through appointments on video conferencing platforms.

5. Conclusions

Throughout the present research results were obtained concerning the general objective. On the explanation of the influence of digital transformation and business intelligence of companies in the MICE sector within the meeting tourism in Mexico.

As stated by Posada, business intelligence is the set of skills, technologies, applications and best practices used to help a given organization to obtain greater knowledge of its business context, essential to make better decisions aimed at acquiring competitive advantages^[12].

The interviews analyzed demonstrate such characterization. The approaches focused specifically and solely on the study of its impact, both in facilitating decision making, developing new strategies for changing the industry's business model and demonstrating improved operational efficiency, stand out.

This study is an initial step, which allows an approach to the growing situation of digital transformation in MICE events. This exercise was necessary to understand the scope and dimension of the new technologies in trend from the strategic use

involving business intelligence.

Conflict of interest

The author declares no conflict of interest.

References

1. UNWTO. World Tourism Organization [Internet]. 2021. Available from: <https://www.unwto.org/en/glosario-terminos-turisticos>.
2. Organización Mundial del Turismo. AM Reports-Miembros afiliados (Spanish) [AM reports - affiliate members]. Madrid: Informe Global Sobre la Industria de Reuniones; 2014.
3. Santa FM. Methodology of Quantitative Research. Venezuela: Fondo Editorial de la Universidad Pedagógica Experimental Libertador (FEDUPEL); 2006.
4. Meis S (editor). Conference on “The Tourism Satellite Account (TSA): Understanding tourism and designing strategies; 2005 Oct 3–6; Iguazu. Madrid: UNWTO; 2005. p. 1–7.
5. Raimond T. Corporate Events. The Power of Live Communication. Spain: Deusto; 2005.
6. Gronroos C. Marketing and Service Management: Managing Moments of Truth and Competition in Services. Maryland: Lexington Books; 1994.
7. López JRL. La Gestión de la Calidad en los Servicios (Spanish) [Quality Management in Services]; Mexico: ConCiencia Tecnológica; 2002.
8. Conexo N. Online journal of congresses, meetings and incentives [Internet]. 2018 [updated 2018 Apr 20]. Available from <https://www.nexotur.com/noticia/97195/conexo/emociones-experiencias-y-tecnologia-tendenciascurrent-in-sector-mice.html>.
9. ICCA. International Congress and Convention Association [Internet]. 2019. Available from: <https://www.iccaworld.org/newsarchives/archivedetails.cfm?id=3189909>.
10. Rivoir AL. Tecnologías digitales (Spanish) [Digital technologies]. Buenos Aires: CLACSO; 2019.
11. Power Data [Internet]. 2019. Available from: <https://www.powerdata.en/digital-transformation>.
12. Posada AM, Pérez JV, Ampuero MA, et al. Business intelligence solution for project management metrics. Cuban Journal of Computer Science 2015; 9(17): 85–97.