



Responsible tourism research and benefits solutions digital

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Abstract

Research on tourists is rarely represented in 'responsibility' studies, although tourist research is not a neglected area, from the point of view of sustainable tourism development, tourism has ethics or responsibilities, and the focus is primarily on the public and the private. Prior to the COVID-19 pandemic, tourism was growing steadily, and in some countries, tourism was one of the main contributors to a large share of GDP in the economy. Therefore, tourism has become one of the most important industries worldwide that are connected with economic and social development. To promote responsible development in the tourism sector, a great deal of effort has been made in technology and innovation, with consequences at the organizational level and new consumer needs.

Responsible tourism products have faced a number of changes and digitization is one of the most important areas. Digital innovations and technological devices influence the development of a number of industries such as information and communication technology, manufacturing and service industries. Responsible tourism products depend on the cooperation of a number of stakeholders, and the benefits of digital solutions are enabling us to better meet consumer needs and remain competitive in a competitive market. The field changes rapidly.

Keywords: responsible travel, tourism digital, digital solutions

Introduction

Research on the factors affecting responsible tourism products in different localities is not the same, not representative, and associated with the characteristics of each country, maybe the success factor of responsible tourism products in one locality but not necessarily successful in another. The question "Who is responsible for responsible tourism?" Still unanswered satisfactorily and just led to 'ignore'. Asking this question is perhaps somewhat unprofitable as it seems unanswerable, and responsibility is transferred in turn from different key players in the tourism system. A more useful question would build on the assumption that "all parties involved have an obligation" and would address more revealing questions about why or why they failed to demonstrate their obligation's responsible behavior. Once motives are understood, we will be better equipped to encourage responsible people and discourage irresponsible behavior, thereby helping to bridge the gap between theory and practice.

Tourist research is rarely represented in 'responsibility' studies: Although tourist research is not a neglected area, from the point of view of sustainable tourism development, tourism, is ethically or responsible, with a primary focus on the public and the private sector. Fields, although there are some recent exceptions to this rule (see Kang and Moscardo 2005) [4]. Swarbrooke, (1999: 142) [13] observes that tourists are often only mentioning the problem they create and we should: "... more emphasis on the role of tourists... acknowledges that unless tourists begin to really care and show a commitment to sustainable tourism, little will be achieved by government action or industry initiatives."

Tourists may be receptive to the idea of responsibility: Market research indicates that consumers are beginning to demand more responsibility from the businesses they use (Weeden 2001) [16]. A recent Tearfund report indicates that travelers are also accepting more responsibility for their role in sustainable tourism and nearly 50% of the travelers they surveyed want more information about their travel. The view is appropriate at their destination (Tearfund 2002) [14]. Similar questions were asked by tourists, who were interviewed as part of the research conducted (Stanford 2000) [12]. This limited study, using 20 semi-structured interviews with UK tourists, also indicated that travelers wanted to receive information about responsible behavior.

Tourists to New Zealand can have a direct and often negative impact on the fresh, green, pristine environment they are visiting. The impact of this growing number of tourists can be localized – trail erosion, for example, especially in popular areas like Mt Tongariro Crossing, Heaphy Tack, and Abel Tasman National Park (Napp, 2002) [10], wildlife disturbance, toilet waste, litter, water pollution, increased litter, and vandalism (Department of Conservation 1996). The impact of tourists can be more extensive, for example, carbon emissions from different means of transport or from tourism activities such as scenic flights (Becken and Simmons 2001) [3].

Responsible tourism products have faced a number of changes and digitization is one of the most important areas. Digital innovations and technological devices influence the development of a number of industries such as information and communication technology (ICT), and manufacturing and service industries. Responsible tourism products depend on the cooperation of a number of stakeholders, and the benefits of digital solutions are enabling us to better meet

consumer needs and remain competitive in a competitive market. The market changes rapidly (Zach, 2017) ^[17].

However, the development of marine tourism activities has led to an increase in local security and order issues, immigration issues, and cost of living issues... Survey results show that sea tourism activities have made goods scarce and increased prices, making it difficult for local people's lives, especially in the peak tourist season. According to survey data from the Kien Giang Tourism Department in 2020, 65.7% of local people agree with this statement. People's opinion that tourism increases crime rates is also relatively high, with 81.2% of people agreeing. Traditional activities such as local customs, practices, and festivals are showing signs of being lost.

Theoretical basis

The tourism industry is by far one of the best and earliest recipients of the latest technological advancements for business benefit. However, not all organizations have proven to be able to do so at the same rate and many have fallen behind in implementing these strategies. Part of the travel industry has clearly yet to embrace a sweeping digital transformation with a scientific approach to customer experience. Distinguishing digital and non-digital customers no longer makes sense. Today, all marketing tactics have a digital component, and most consumer journeys consist of digital micro-moments.

Companies should adopt an Omni channel approach that focuses on the customer journey. Today we don't talk as much about the digital age as the cognitive phase, the age of artificial intelligence, where data and how we interpret them are king. The current marketplace requires the development of more predictive capabilities to grow brands, customers, and businesses, using advanced metrics with digital traceability.

Travel agencies are facing a new reality where it is important to have as much knowledge as possible about tourists, as today's customers are worth much more than mere transactional profits; They also build brand reputation, attract new customers, and increase customer value in the future. The impact of tourists on brands is important: up to 70% of the reliability of a value proposition depends on the voice of the customer. If you don't have public and customer-generated credibility, your conversion costs will skyrocket and it will cost more to get the ratio your business needs for this variable.

Industry 4.0 is a new revolution related to the development of engineering. Moreover, the new trend is called the fourth industrial revolution. It deals with network-physical systems, the internet of things, cloud computing, and cognition. As technology evolves almost daily, new inventions are produced every day. As more and more people book trips online, companies have to adapt to this new booking method. Otherwise, the hotel will not meet its goal in terms of the number of services sold such as rooms or food. However, different target groups prefer different ways to book their rides. For today's consumer, there are many different ways of booking while before digitization there was only one option: a travel agency. Mobile phones expand the options, especially when considering developments related to data roaming in the European Community. For example, online travel guides offer several advantages: simple updates, links to specific information, search functionality, bookmarks, or other travelers' feedback

and reviews. While the older generation prefers to book a vacation at a travel agency, the younger generation prefers online booking portals. Based on this fact, more and more hotels focus on online promotion. In contrast to larger hotels or large hotel chains, smaller hotels have to expand their online selling features, e.g. book directly through their official website or invest in online travel agents, ie booking.com. Otherwise, the hotel will be negatively impacted and affected by the new development known as "industry 4.0".

Impact of Industry 4.0 on tourism promotion and marketing on tourism development

Impact on Tourism such as an increase in customer expectations, improvement of product quality, innovation cooperation, and organizational form. Customers are at the heart of the economy, improving the way customers are served. Products and services are enhanced with digital capabilities. New technology makes travel services fast and flexible, and information and data are updated continuously and widely. Customer experience, and data-driven services through analytics, demand new forms of collaboration, at a fast pace.

Expanding space, time, and tourism market

The development of the Internet of Things, erases space and time, creating a flat world. People all over the world, just need an internet connection, can access and learn about all the monuments. Historical, famous tourist attractions around the world. This is an important push to create travel demand in all people, a golden opportunity to expand the tourism market. Potential space tourism market Earth tourism is a trillion-dollar industry. These surveys confirm a widespread personal interest in space tourism (60 to 80%, depending on the country) and a willingness to spend up to a month's salary just to go into space once. Obviously, this is not a "far-fetched" plan without a connection to earthly reality — space, and tourism expanded an already thriving industry into a new and potentially very lucrative field.

Reduce advertising and marketing costs

If in the past, to promote and develop a destination, people had to spend a lot of time and have to pay a large amount of money for advertising on television, newspapers, and radio, distributing leaflets, brochures, etc. maps, tours, introductions, and prices per tour... now through the application of smart websites (such as Web30s, Smart Live Chart, Smart Marketing Tool) and virtual switchboards (all these software is run on the cloud computing environment) cost of advertising, marketing and time spent on it have been greatly reduced. This is a huge advantage brought by Industry 4.0. Furthermore, if the design of a product requires the consumer to trade both time and money, then the actual price includes more than just its price" (Wells and Prenskey, 1996: 92).

Kavaratzis (2011) ^[5] argues that when it comes to pricing, price psychology is important in determining one's price-value relationship. Attitudes towards price are very closely related to the degree of risk that the buyer feels related to the purchase decision. As a result, cost-based travel pricing methods can be dangerous - their true value lies in determining the lower bounds of prices.

Digitize tourism database

The digitization of tourism databases such as the introduction of natural and human tourism resources, maps of tourist attractions, systems of restaurants, hotels, transportation systems... of each locality, each country is being widely deployed, bringing convenience to managers, tourism businesses, and visitors around the world. Smart products are products that are capable of computing, storing data, and communicating and interacting with their environment (Miche *et al.*, 2009; Mühlhäuser *et al.*, 2008) [7-8]. Industry 4.0 implies a huge increase in the variety, volume, and velocity of data creation (Lee *et al.*, 2014), Industry 4.0 implies a huge increase in the variety, volume, and velocity of data creation and capacity to deliver information.

Strategy and business intelligence smart

Strategy and business intelligence Smart means understanding every stage of the consumer experience. In the travel industry, these stages begin with inspiration, followed by planning, booking, staying, and post-stay. Here's another big challenge: if we can connect with consumers during the inspiration phase, the conversion rates and associated costs will be better. Of course, knowledge alone is not enough. It needs to be accompanied by the right strategy. It is that combination that will determine whether we can manage each channel and engage with customers more profitably (ASEAN Secretariat, 2016) [2].

Therefore, it will help us to be more profitable due to lower customer acquisition costs. On hotels, we save up to 70% and even, in some cases, 200% on conversion costs. Digital delivery on mobile is one of the areas where companies should grow. For example, for less than 50,000 € you can get a very powerful application that offers a high return, especially compared to the opportunity cost we would pay if we did not use the mobile channel. Strategy in the tourism industry is oriented to become more and more scientific, seeking to quantify and measure absolutely everything.

Reputation

Reputation has become the primary goal. In fact, investing in customer experience is more important than investing in mere advertising. This is a very profitable investment. At the end of the day, 55% of customers are willing to pay more for better service. In travel, service is everything. All travel agencies should strive for excellence that will turn their customers into their best advocates and ambassadors. Companies like Iberostar or Palladium have achieved double-digit profit growth using a customer experience strategy. How can we do this? By looking at our entire value chain throughout all stages of the customer journey. The chain must be solid; there can be no weak link (Anuar A. and Sood N., 2017) [1]. Here, agility is required: it cannot take us 24 or 48 hours to identify areas of customer conflict, because the profitability of our business cycle depends on it. In addition to delivering greater operational efficiency, streamlining the value chain, and delivering real business intelligence, new technologies will leapfrog new business models.

Technical facilities for tourism

Technical facilities have a special role in tourism activities in general, which is a factor to ensure tourism activities are carried out effectively. Understood in a broad sense, tourism

material and technical facilities are all material and technical means mobilized to participate in the service of exploiting tourism resources, and providing tourism services, in order to create tourism products, and tourism goods to satisfy the needs of tourists in their journey. According to this understanding, tourism technical facilities include the technical facilities of the tourism industry itself and the technical facilities of other related economic and social sectors, such as the Internet. grids and means of transportation, communication systems, water and electricity supply works, environment, entertainment systems, food demand supply systems, security and safety of visitors, food service establishments, accommodation, transportation, entertainment, convalescence, shopping, sports, medical facilities, information centers, hotels, guest houses, restaurants, camping, bungalow, a network of professional shops belonging to tourist centers and local commercial networks, sports facilities, medical facilities, medical centers... to serve medical tourism and providing complementary services at tourist attractions, work serving cultural information activities such as cultural centers, cinemas, theaters, clubs, museums, exhibition halls... Besides, there are also buildings and other plugins (Murphy, P. (1994) [9]. These factors are collectively known as social infrastructure, which plays the role of ensuring general conditions for tourism development. This is explained by the inevitable dependence of tourism on the results of other economic and social fields. Therefore, we usually talk about the technical facilities of the whole society for tourism, not just the technical and material bases of the tourism industry.

Scientific approach

Strategy in the tourism industry is oriented to become more and more scientific, seeking to quantify and measure absolutely everything. Defining the metrics for each decision and action taken is fundamental to maximizing business performance and achieving competitive advantage. Today, technology makes it possible to track, interpret, and cross-check everything with other data in real-time. This includes not only the most obvious, i.e., customer interactions, but also all other elements of the value chain, such as employee training courses.

The World Tourism Organization (UNWTO, 2018) [15] defines tourism as: "Tourism is the sum of the phenomena, relationships and economic activities arising from the circulation and stay of groups of people individuals and entities outside their usual place of residence or outside their country for peaceful purposes, where their place of stay is not their workplace" In practice, digital tourism or digital transformation of the tourism industry is to develop tourism in a smart way with the support of digital technology, to create and provide the most convenient services for tourists and make visitors satisfied. Over the past decade, the travel industry has become too popular with the usual offline travel agents and few high-tech agents. When traditional agents cannot provide the necessary, visual information to customers before the trip. Along with that before a trip, customers often need to spend hours just booking tickets and going through a series of events certification documents and forms. Especially for itineraries related to flights, passengers have to wait about 2 hours to check in due to all manual procedures.

This last point, regarding staff and talent, is another challenge facing the industry. Attracting and retaining talent

is fundamental to the successful execution of a business strategy. Companies in the travel industry are always very good at taking care of their customers and training their staff to ensure exquisite customer service. However, it is now necessary to include an element

With the emergence of digital transformation, activities in the travel industry have created an innovation in the way people perceive and grasp the information and services that travel agents provide. In particular, the existence and prevalence of Internet use, as well as the development of travel software, has eliminated the challenge of geography, allowing companies and customers to interact with each other through a single screen. With the help of digitization, travel agents have leveraged to make transactions and publish details of each stage of the trip, allowing customers to research thoroughly before preparing was departed (S.J. and Dowling, R.K., 2002) ^[11]. Many customer wishes are met through comparing agencies and checking feedback from previous users or important features such as booking tickets, booking accommodation, or even requesting a tour virtual visit to their desired destination.

As such, digital transformation is definitely a must for travel companies that want to thrive in today's competitive travel market. However, these digitalization trends only benefit when their businesses interact regularly and consistently with their customers, listen to them, and strive to understand their needs to continuously provide them with a great experience great.

For businesses, digital transformation of the tourism industry today is not only an optional strategy but gradually becomes an indispensable practice to be sufficiently competitive and to meet the constant development in the tourism industry customer's needs.

Why digital transformation is needed in the tourism industry?

The needs and decision-making of travel and tourism customers change rapidly over time. And with the traditional approach, they can hardly meet the needs of customers. Companies that want to thrive need to offer destinations that are flexible to satisfy their visitors and rich in information on multiple platforms, especially on social networking sites so customers can share and explore.

During the Covid-19 outbreak, the development of the tourism and travel industry has slowed down. And as a result, the importance and demand for digital transformation increases. Travel business owners have been implementing various solutions to align their presence on digital platforms and deliver great digital experiences.

In addition, the digital transformation process in the tourism industry will help improve the quality of customer service. It can be said that each travel customer is now fully supported through applications, and service provider accounts created with many modern features. Whether you choose an airline, a shipping service, or a variety of accommodations such as hotels or apartments, the application of modern digital technologies makes a difference in every trip. It can be seen that any travel agency today is trying to improve the quality of service provided to customers through modern digital platforms.

In a modern world full of chaos and uncertainty, one thing is certain: we must get through this together. As we need to take steps to recover from the severe impacts of the pandemic, adopting digital transformation measures must be

an important step to be taken into account by travel service businesses.

Like other businesses, travel, tourism, and hotel businesses are strongly affected by the pandemic. Among the fast-growing hi-tech solutions, some can help the tourism industry recover as soon as the lockdown is over and international and domestic transportation business is open.

Solutions for the digital transformation of the tourism industry

Like other businesses, travel, tourism, and hospitality businesses are strongly influenced by digital transformation moves. Among the high-tech solutions that are being widely applied in the tourism industry, the following prominent trends of digital transformation of the tourism industry can be mentioned:

Virtual reality digital travel

Along with the rapid development of internet-based high technology, the term Virtual Tour or Interactive Tour appeared in 1994, and over time, became more popular with tourists in many countries around the world. However, the term is still very new and has not been widely applied in developing countries around the world.

To meet the needs of customers to search for information and experience tourist attractions on the Internet before and during the trip of customers, many tourist attractions or travel service companies have built virtual tours or tours. Interactive tourism is part of digital transformation in the tourism movement that simulates tourist destinations through the reproduction of images, videos, and other multimedia elements such as sound effects, music or narration, descriptions, and text. The factor that makes the virtual tour attractive to tourists is the new technologies applied at the core of the system such as 360 photos, 360 videos, Panorama photos, and Flycam photos... Visitors can better understand the places to visit and explore the world. Get inspired by your travel.

Currently, the trend of personalizing tourism in the form of self-sufficient travel and sightseeing is developing strongly. Responding to this trend, the virtual tour application will help visitors visualize the full schedule

At the same time, during the travel process, the virtual tour application can provide the necessary information to help tourists get the most complete experience of the destination. Some businesses, even offer "at-home" tours at a much lower cost than the actual trip.

For example, visitors can spend 200 USD to buy a virtual tour of The Louvre, instead of having to spend a large amount of money to go to Paris and buy tickets to visit the museum.

However, many people are still wary of this approach, believing that the information provided through virtual tours cannot replace the experience, especially the emotional one.

Travel 4.0 integration of mobile devices

These mobile applications are designed to fit a customer (visitor) profile of tourism businesses. These people are often far away from where the "product" is located and only "consume" the product during travel. Applications on smart mobile phones allow customers to exploit information, images, and services, perform transactions, and integrate a variety of other utilities.

With service integration through mobile applications, customers can plan the entire trip from booking tickets, booking room services for finding information about places to visit, and choosing a guide... during the trip without having to interact directly with anyone in the traditional way.

Artificial Intelligence and Chatbot

Artificial intelligence (AI) has confirmed its place in the trend of the digital market, and the tourism sector is no exception. Chatbot is a computer-generated program, which can be defined as a tool that allows humans to interact interactively, through preprogrammed artificial intelligence. Chatbots are divided into two categories according to how they interact with humans, auditory (audio) and textual (text), and the use of these chatbots is increasingly common on travel business websites.

The advantage of a chatbot is the ability to work continuously and be ready to answer many different types of requests from people such as processing reservations, weather reports, displaying the locations of ATMs, etc., place, any time, any time language.

Applying IoT (Internet of Things) in the tourism industry

With more and more devices connected to the Internet, travel and tourism businesses can find ways to exploit to help serve customers more conveniently and efficiently.

IoT data enables businesses to know their needs, their needs, travel habits, and some other characteristics so that they can convey to potential customers the information they know without interested customers.

IoT data mining not only helps businesses increase the ability to sell travel products, be closer to customers, and at the same time help customers save time searching and easily choose the right product package.

Reviews and ratings on social networking platforms

The fact that customers can share their opinions quickly and conveniently through the Internet, especially social networking platforms designed specifically for the travel and tourism industry such as Facebook, Yelp, TripAdvisor, or other websites. Tourism websites help accommodation establishments and travel service providers gain a deeper understanding of the wants and needs of their visitors.

These reviews will motivate these businesses to pay more attention to quality to create visitor satisfaction, and build a reputation through customer review scores.

Besides, this is also a reference channel, helping customers feel secure when choosing travel products and services. However, it can be seen that this trend is towards better customer service, not to increase profits for tourism businesses.

All around us today, business models are being completely transformed by digitalization. New opportunities are constantly being opened up as the number of new technologies continues to grow. And to quickly catch up with the trend of digital transformation for integration and development, tourism businesses in particular, and businesses in other fields in general need to move towards digital transformation.

It can be seen that, in the context that the tourism industry is currently being heavily impacted by the pandemic, digital transformation is a necessity. Very few organizations can

ensure a sustainable and growing business without a specific digital transformation plan and taking advantage of digital technology. Therefore, businesses need to soon draw up a long-term digital transformation plan so that they can keep up with the development trend of the current 4.0 era.

This last point, regarding staff and talent, is another challenge facing the industry. Attracting and retaining talent is fundamental to the successful execution of a business strategy. Companies in the travel industry are always very good at taking care of their customers and training their staff to ensure exquisite customer service. Now, however, another factor needs to be included: employee ownership and their commitment to the company

In short, the travel industry should embrace the full breadth of digital transformation. Only then can the current poverty rate be overcome, which, according to Forrester studies show that only 37% of companies really understand the needs of their customers. In addition to enabling greater operational efficiency, streamlining the value chain, and delivering real business intelligence, new technologies will leapfrog new business models, opening doors for sale cross, buy insurance, experience, etc., only during the holiday, but all year round.

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