

Business Model Canvas for the Ecotourism Museum

Nashirah Abu Bakar¹, SofianRosbi²,

¹Islamic Business School, College of Business, Universiti Utara Malaysia, 06010 Sintok, Kedah, Malaysia

²Faculty of Business & Communication, Universiti Malaysia Perlis, 01000 Kangar, Perlis, Malaysia

Abstract:

Ecotourism is a sustainable form of natural resource-based tourism that focuses primarily on experiencing and learning about nature and is ethically managed to be low-impact, non-consumptive, and locally oriented. This study analyzed one museum that implemented ecotourism as its niche to attract tourists. The operation of the ecotourism museum was highly affected by the COVID-19 spread because of the movement control act to reduce the spreading of the disease. Therefore, there is a need to evaluate the museum's business model to ensure it can regain good revenue and public acceptance among tourists. This study uses Business Model Canvas (BMC) to analyze the operation of the museum for eco-tourism. The nine components of the BMC are Customer Segments (CS), Value Propositions (VP), Channels (CH), Customer Relationships (CR), Revenue Streams (RS), Key Activities (KA), Key Resources (KR), Key Partners (KP), and Costs (C). The visual nature of the business model canvas makes it easier to refer to and understand by any user and business person. BMC clarifies how different aspects of the business are related to each other. The BMC is important for a business owner to analyze their business plan to deliver optimal value for their customer.

Key Word: Business Model Canvas (BMC); Museum; Ecotourism; COVID-19; Value propositions.

Date of Submission: 05-12-2022

Date of Acceptance: 17-12-2022

I. Introduction

The COVID-19 pandemic has resulted in global challenges in economic and healthcare crises. It also posed spillover impacts on the global industries, including tourism and travel industries. The tourism industry contributed a major contribution to the global gross domestic product (GDP) of the countries. Statista (2022) reported that the total contribution of travel and tourism industries to the GDP rose by 21.7 percent in the year 2021 over the previous year, after dropping sharply in the year 2020 due to the COVID-19 pandemic. Overall, the contribution of travel and tourism to the global GDP amounted to 5.81 trillion U.S. dollars in the year 2021, denoting an increase of around one trillion U.S. dollars from the year 2020, which is 4.7 trillion U.S. dollars.

Malaysia also was affected by the spread of the COVID-19 virus. A report by the Department of Statistics Malaysia (2022), the Malaysian GDP was fallen by -5.5% during the COVID-19 pandemic. Figure 1 shows the dynamic movement of GDP in Malaysia since the year 2005 until 2021. The figure indicated that the COVID-19 pandemic gives a huge impact on the performance of GDP in Malaysia. Thus, all the industries in Malaysia need to plan a new business model strategy to overcome the losses that happened during the COVID-19 pandemic.

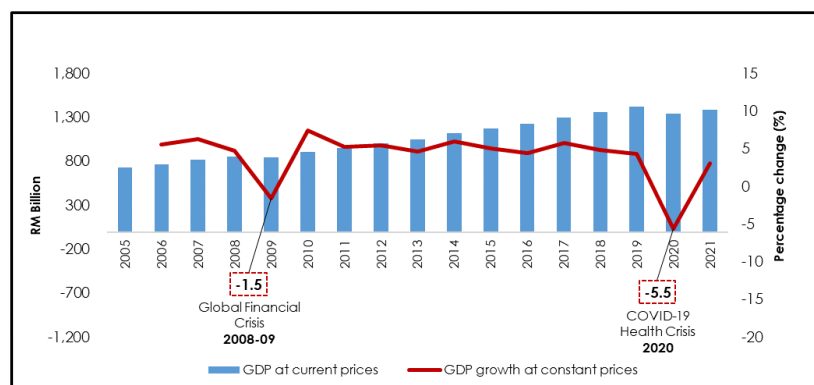


Figure 1: The Dynamic Movement of GDP in Malaysia since the year 2005 until 2021

The tourism industry was also impressed by the spread of the COVID-19 pandemic. Malaysia implemented a movement control act for reducing the spread of the COVID-19 virus. Therefore, most of the industry cannot operate their business as usual.

The tourism industry in Malaysia such as museum ecotourism is one of the most beautiful and interesting places to visit. A museum is a building or institution that cares for and displays a collection of artifacts and other objects related to artistic, cultural, historical, or scientific. Every year, most visitors visit museums because they are interested in learning about history, and places or would like to enjoy culture and history. Thus, the museum is an interesting place that visitors can visit during their vacation time.

However, the implementation of the movement control act due to the COVID-19 pandemic affected domestic tourism activities in Malaysia in the year 2020. Figure 2 shows the overall domestic tourism expenditure decreased to RM40.4 billion in 2020 compared with RM103.2 billion in 2019.

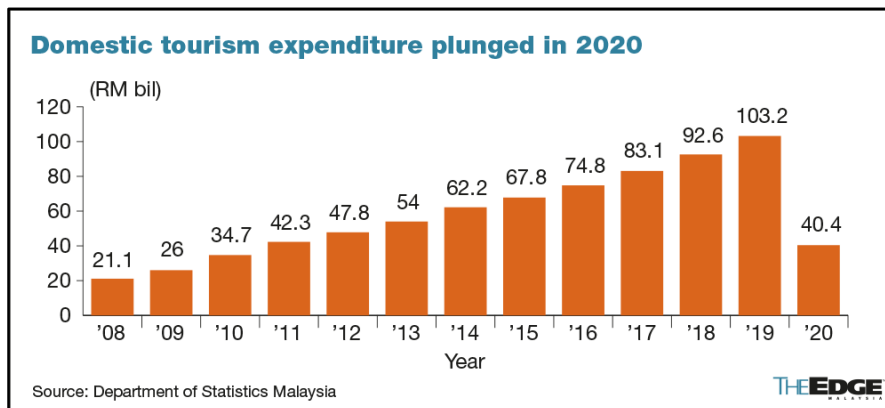


Figure 2: Domestic Tourism Expenditure Plunged in 2020

Currently, the year 2022 shows good news for all industries when the government of Malaysia allowed industries to operate their business as usual because the number of COVID-19 cases decreased. Therefore, the industries need to plan a good business model strategy to overcome the losses that happened during the lockdown policy. For museums in ecotourism, many strategies can be planned to increase the number of tourists. Therefore, this study suggested a Business Model Canvas (BMC) strategy to evaluate and improve the management strategy of businesses in order to increase the number of tourists.

According to Ojasalo and Ojasalo (2018), BMC can create a customer-centered business culture. Sort and Nielsen (2018) introduce BMC as a mitigating framework to help entrepreneurs in communicating and structuring the information desired by businesses. They found that BMC can improve its management strategy. While Kadir (2018), suggested that BMC is a good strategy for businesses because this strategy can create progress and develop a business achievement.

II. Literature review

The COVID-19 pandemic occurs in the year 2020, and give a huge impact on the economics, education, business, and all industries worldwide (Abu Bakar, et al., 2022a; Abu Bakar and Rosbi, 2021a; Abu Bakar and Rosbi, 2020a). Most of the country implemented a lockdown policy in order to reduce the spread of the COVID-19 virus. The implementation of lockdown policy by most countries worldwide give a serious impact on the airline industry (Abu Bakar, et al., 2022b; Pascual and Cain, 2021; Abu Bakar and Rosbi, 2020b).

Thus, the tourism industry was also affected by the spread of the COVID-19 pandemic, when the government of Malaysia implemented a lockdown policy (Abu Bakar and Rosbi, 2021b; Abu Bakar and Rosbi, 2020c). This policy gives restrictions to all industries for open their business. However, in the year 2022, most businesses started operating their business due to the reducing the number of COVID-19 cases. Thus, businesses need to plan a good strategy to attract visitors to visit their place. BMC is one of the good strategic models that a company can use in evaluating the customers, resources, cost, and others.

The BMC method is proposed by Osterwalder and Pigneur (2013) based on research results on business model ontology, which is popular recently (Jin, et al., 2022). BMC is a simple business model that must be understood and considered in running a business (Mukherjee, 2021). Therefore, it is important for businesses to apply a BMC that can help businesses to understand the whole of their business operation including their customers.

Ladd (2018) explore the efficacy of Osterwalder and Pigneur's BMC for 271 teams competing in a venture pitch competition during a cleantech accelerator program and found that the team used the elements of

customer segment, value proposition, key activities or key partnerships performed significantly better in the competition.

III. Definition and Procedure of Business Model Canvas

The Business Model Canvas (BMC) is a strategic tool used for visually developing or displaying a business model. A BMC template helps determine and align the key business activities and their relationship to a business value proposition. The BMC is also defined as a strategic planning tool for managers to use to illustrate and develop their business models. The business model canvas template clearly identifies the key elements that make up a business. Additionally, it simplifies a business plan into a condensed form. In this way, the business model canvas template acts as an executive summary for the business plan. The BMC also acts as an important tool for startup entrepreneurship. The component of Business Model Canvas (BMC) consists of 9 procedures.

(1) Customer Segments (CS):

The first procedure is to evaluate and analyze the customer segments for a museum. Customer Segmenting is the practice of dividing a customer base into groups of individuals that are similar in specific ways, such as age, gender, interests, and spending habits. Customer segmentation is the process of evaluating customers based on common characteristics such as demographics or behaviors. Therefore, the company can market to those customers more effectively.

Compared to customer segmentation, market segmentation is more general and looks at all marketplaces. Whereas market segmentation relates to the whole market, customer segmentation is the focus part of the market for a particular company.

There are two types of customer segmentation. The first approach is describing what are the characteristics of customers. The process of understanding customers who are typically focused on demographics. This will include factors such as:

- (i) Age
- (ii) Geography
- (iii) Urbanization
- (iv) Income
- (v) Relationship status
- (vi) Family
- (vii) Job type

The second approach of customer segmentation is based on their preferences and behavior. The customers are segmented based on how much money they spend, how often, and what products. This is more behavior-focused. Breaking this down even further, behavior can be classified as multiple elements as follows:

- (i) Order size
- (ii) Amount of spending
- (iii) Tenure
- (iv) Long-term loyalty

Customer segmentation is popular because it helps a company market and sells more effectively. This is because a company can better understand its customers' needs and desires. The business impact of doing this is even more important, and effective customer segmentation will help a company to increase customer lifetime value. This means they will stay longer and spend more. By better understanding the customer, and therefore being able to target them more effectively, a company can drive greater loyalty.

To develop good customer segments, a company needs to look at industry-wide data on the marketplace, and then dig deeper and look at data on customer population. The parameters that are important to consider in developing the critical analysis of Customer Segments (CS) are:

- (i) Who are their customer including demographic and social status?
- (ii) What is the behavior of their customer including job, position, and behavior?
- (iii) What is their need, problem, and their focus?
- (iv) Who are the people that will value my value proposition?
- (v) What are the characteristics of the people who are looking for my value proposition?
- (vi) Who are we solving the problem for?

(2) Value Proposition (VP):

The second procedure for BMC is a value proposition that delivers through services or products. The value proposition provides a clear, simple statement of the benefits, both tangible and intangible, that the company will provide, along with the approximate price it will charge each customer segment for those benefits.

A company's value proposition tells a customer the valid reason why a product or service is best suited for that particular customer. A successful value proposition should be persuasive and help turn a prospect into a paying customer. This section summarizes the different value propositions that set your business apart from your competition.

Value propositions are arguably the most important element of the business model canvas template. The value proposition determines the fundamental offering the company is trying to give its customers. It is the primary driver of business operations.

In determining the Value Propositions (VP), the company needs to evaluate the problems or needs that are identified in the target market and customer segments. The product uniqueness of Value Propositions (VP) needs to answer why your customer prefer them to their current alternatives.

There are a few parameters to consider about value propositions, which are:

- (i) What exactly is your company trying to give products or services to customers?
- (ii) What problem is your company trying to solve and what needs is the company satisfying?
- (iii) How do you offer something different that satisfies the demands of your customer segments (The elements including price, quality, design, and status)?

The value proposition can be categorized into these four elements:

- (i) **Functional outcomes**
In the parameter of functional value, what would the customer be able to do differently if they could?
- (ii) **Social-Emotional outcomes**
In the element of emotional value, how would the customer feel if they were able to do things differently?
- (iii) **Pain relief**
What obstacle or problem would the customer like to see diminished or eliminated?
- (iv) **Initial solution concept**
Does the product or services bring a solution that has a unique value proposition?

(3) Channels (CH):

Channel is defined as entities that a company use to communicate the value proposition towards customer segments, as well as entities through which a company sell product and later service customers. Channel (CH) describes how customers are reached, how company services are provided, the distribution channels and how your value proposition is delivered. Channels also are defined as the avenues through which your customer comes into contact with your business and becomes part of your sales cycle.

The most important consideration is whether your channels will give you enough visibility into the user. The channel can be involving business activities such as promotion, sales, and service. The channel function to be as a medium for communication, distribution, and sales. Channels comprise the tool for interfacing with customers. The Channels are customer touch points that play an important role in the customer experience. The Channels serve several functions, including:

- (i) Raising awareness among customers about a company's products and services
- (ii) Helping customers evaluate a company's Value Proposition
- (iii) Allowing customers to purchase specific products and services
- (iv) Delivering a Value Proposition to customers
- (v) Providing post-purchase customer support

Channels describe how your company communicates with and reaches your Customer Segments to deliver your Value Proposition. Therefore, the efficient channel should comply with these questions:

- (i) Through which Channels do our Customer Segments want to be reached?
- (ii) How are we reaching them now?
- (iii) How are our Channels integrated? Which ones work best?

- (iv) Which ones are most cost-efficient?
- (v) How are we integrating them with customer routines?

There are three types of channel structures. The company can choose between reaching its customers through its own Channels, through partner Channels, or through a mix of both. Finding the right mix of Channels to satisfy how customers want to be reached is crucial in bringing a Value Proposition to market.

(i) Owned Direct Channels

Owned Channels can be an in-house sales force, a Web site, or retail stores owned or operated by the organization. Owned Channels have higher margins but can be costly to put in place and operate. Examples of owned channels are the company website and social media. The company needs to have a workforce group to manage and maintain these channels for company products and services.

(ii) Partner Indirect Channels

Partner Channels are indirect and span a whole range of options, such as wholesale distribution, retail, or partner-owned Web sites. Partner Channels lead to lower margins, but they allow an organization to expand its reach and benefit from partner strengths.

(4) Customer Relationships (CR):

Customer relationships are the different types of interactions a company has with its customers. Customer relationship is defined as a method for the customer to interact with the company through the sales and product lifecycle. Customer Relationships (CR) also can be considered Touch Points (TP). The Touch Point (TP) is how often and what method to reach the customer to ask about their experience using particular products and services. This helps clarify the points of engagement between a company and customers, and the modes used to relate to customers.

There are a few elements that need to consider to develop good Customer Relationships, as below:

- (i) Is there a premium support product you need to create or test?
- (ii) How are they integrated with the rest of our business model?
- (iii) Can the Value Proposition be delivered to the Customer this way?

Customer Relationship (CR) is to define and describe the primary relationships the company have with its customers, including company interaction with a customer, how these interactions differ among different types of customers, what different customer needs are, and the level of support the different customers receive.

(5) Revenue Streams (RS):

In this section, the company needs to evaluate what value in each Customer Segment truly willing to pay. Revenue Streams are defined as the way by which the business converts Value Propositions or solutions to the customer's problem into financial gain. The company generates one or more Revenue Streams from each Customer Segment. Each Revenue Stream may have different pricing mechanisms, such as fixed list prices, bargaining, auctioning, market-dependent, volume-dependent, or yield management.

A business model can involve transactional revenues resulting from one-time customer payments (an example is sales), or recurring revenues (an example is a subscription). Revenue streams are a company's source of cash flows.

There are several ways to generate Revenue Streams:

- (i) Asset sale
- (ii) Usage fee
- (iii) Subscription fee
- (iv) Lending/Renting/Leasing
- (v) Advertising
- (vi) Fee for service

(6) Key Activities (KA):

The Key Activities (KA) are the most important actions a company must perform to operate successfully from a financial perspective. The Key Activities of a business are the actions that a company undertakes to achieve the value proposition for its customers. The Key Activities (KA) are required to create and offer a Value Proposition, reach markets, maintain Customer Relationships, and earn revenues.

In developing Key Activities, a company needs to answer these questions:

- (i) How do your Revenue Streams (RS), distribution channels, and customer relationships differ from competitors? How do your key activities affect these?
- (ii) What key activities are necessary to deliver your value proposition?
- (iii) What are the crucial things the business needs to do to deliver on its propositions and make the rest of the business work?

(7) Key Resources (KR):

In this section, a company needs to evaluate the practical resources needed to achieve the key activities of the business. Key resources are the assets necessary to operate and deliver the value proposition. Key resources are the strategic assets that a company needs in place, to achieve greater or more targeted degrees than its competitors. The Business Model Canvas proposes that there are three core business types: product, scope, and infrastructure. The Key Resources include human capital and expertise. The Key Resources need to be set up linked to Key Activities.

The elements of Key Resources are:

- (i) Physical infrastructure
- (ii) Service center
- (iii) Human capital of key talent in critical areas of expertise
- (iv) Financial
- (v) Intellectual property

(8) Key Partners (KP):

Key Partners (KP) is a list of the key collaboration for business leverage and success. The partners include the resources or value the business attains from these partnerships. Key Partners are external companies that the company may need to achieve key activities and deliver value to the customer.

A key partner is important to achieve the value a business promises to the customer. Companies create alliances to optimize their business models, reduce risk, or acquire resources. Key partners are the companies or people your business works with to create a strategic relationship. A few examples of key partners are suppliers or distribution partners in the supply chain.

(9) Cost (C):

The cost structure refers to how a company spends money on operations. Two broad classes of business model Cost Structures are cost-driven and value-driven.

If a company is cost-driven, it focuses on minimizing costs and, thus, prices for customers. Cost-driven business models focus on minimizing costs wherever possible. This approach aims at creating and maintaining the leanest possible Cost Structure, using low-price Value Propositions, maximum automation, and extensive outsourcing.

Alternatively, if a company is value-driven, it focuses on creating value for its customers, with less focus on cost. Some companies are less concerned with the cost implications of a particular business model design, instead the company focus on value creation. Premium Value Propositions and a high degree of personalized service usually characterize value-driven business models.

There are elements that need to be considered in evaluating cost structure, as below:

- (i) Are those costs well aligned with the key Value Propositions?
- (ii) What are the economics of scale and economics of scope?
- (iii) How to optimize the fixed and variable costs?

IV. Business model canvas for ecotourism museum

This section describes the Business Model Canvas (BMC) for the ecotourism museum. The paper is focused on ecotourism that involved with nature and agriculture. Figure 3 shows the analysis of Business Model Canvas (BMC) for ecotourism museum.

<p>Key Partners (KP):</p> <ol style="list-style-type: none"> 1. Local community 2. Education Department of Government 3. Kindergartens and Schools 4. Tourist Guide 5. Hotels and homestay providers 6. Travel agency 7. Digital marketing provider 8. Radio and TV Station 9. Travel Magazine 	<p>Key Activities (KA):</p> <ol style="list-style-type: none"> 1. Develop exhibition about ecotourism 2. Manage event with local community and schools 4. Develop computer games and digital presentation regarding ecotourism 5. Promote traditional and locality uniqueness like local food and cultures 6. Develop experiential engagement with 	<p>Value Proposition (VP):</p> <ol style="list-style-type: none"> 1. Family bonded experience 2. Experiential learning for kindergarten students 3. Experiential learning for kindergarten students 4. Experiential learning for kindergarten students 5. New experience engagement that exciting and fun. 	<p>Customer Relationship (CR):</p> <ol style="list-style-type: none"> 1. Facebook as medium of interaction 2. Attractive Website 4. Face to face during event 5. Promotion to schools 	<p>Customer Segments (CS):</p> <ol style="list-style-type: none"> 1. Family with young children 2. Kindergarten students 3. Primary school students 4. Secondary school students 5. Tourists
<p>Cost structure (C):</p> <ol style="list-style-type: none"> 1. Staffs salary 2. Material for exhibition 3. Utilities 4. Maintenance 		<p>Revenue stream (RS):</p> <ol style="list-style-type: none"> 1. State government 2. Admission fee 3. Merchandize items selling 4. Grant 		

Figure 3: Business Model Canvas (BMC) for ecotourism museum.

V. Conclusion

This paper was developed to analyze the Business Model Canvas (BMC) for the ecotourism museum. The importance of the BMC is stated as follows:

- (i) Provides a framework that lays out the fundamental elements that help the company make money while delivering its unique value proposition.
- (ii) A business model canvas allows a company to create something more intuitive and engaging, while still covering all the topics that the company needs to cover.
- (iii) There are 9 key elements in the business model canvas template namely key partners, key activities, key resources, value propositions, customer relationships, channels, customer segments, cost structure, and revenue streams.

- (iv) The Business Model Canvas provides entrepreneurs, business owners, and strategists with a tool to analyze, structure, and evolve a business while always keeping the bigger picture front of mind.
- (v) The alignment between the customer segment information and value proposition elements is typically considered the degree that the product offering meets the market's needs, labeled as product-market fit.
- (vi) The BMC gives a company the competitive edge to launch a profitable business not only through product innovation but also through designing a business correctly.

Acknowledgment

The authors gratefully acknowledge the use of the services and facilities at the Universiti Utara Malaysia (UUM) and Universiti Malaysia Perlis (UniMAP), funded by Case Study Grant (Code SO: 14501) and External Research Grant LZNK (Code SO: 14737).

References

- [1]. Abu Bakar, N. and Rosbi, S. (2020a). Impact of Coronavirus Disease 2019 (COVID-19) to Equity Market and Currency Exchange Rate. *IOSR Journal of Economics and Finance*, 11(2), 17-26.
- [2]. Abu Bakar, N. and Rosbi, S. (2020b). Effectiveness of Lockdown Policy to Control Spreading of Coronavirus Disease 2019 (COVID-19). *IOSR Journal of Business and Management*, 22(8), 34-41.
- [3]. Abu Bakar, N. and Rosbi, S. (2020c). Effect of Coronavirus Disease (COVID-19) to Tourism Industry. *International Journal of Advanced Engineering Research and Science*, 7(4), 189-193.
- [4]. Abu Bakar, N. and Rosbi, S. (2021a). Effect of COVID-19 Outbreak towards Banking and Finance Industry. *International Journal of Advanced Engineering, Management and Science*, 7(3), 1-5.
- [5]. Abu Bakar, N. and Rosbi, S. (2021b). Impact of Coronavirus Disease (COVID-19) towards Economy and Vaccine Industry. *International Journal of Advanced Engineering Research and Science*, 8(2), 68-72.
- [6]. Abu Bakar, N., Rosbi, S. and Uzaki, K. (2022a). Impact of Coronavirus Disease (COVID-19) towards Hotel Tourism Industry, *International Journal of Advanced Engineering Research and Science*, 9(3), 43-50.
- [7]. Abu Bakar, N., Rosbi, S. and Uzaki, K. (2022b). GARCH Model for Evaluating Volatility Based on the Share Price of Airlines Company During the COVID-19 Outbreak, *International Journal of Management Science and Business Administration*, 8(7), 42-52.
- [8]. Jin, Y., Ji, S., Liu, L. and Wang, W. (2022). Business model innovation canvas: a visual business model innovation model. *European Journal of Innovation Management*, 25(5), 1469-1493.
- [9]. Kadir, N. (2018). Analysis of entrepreneurship perception and business developmental strategy of silk in Wajo Regency, South Sulawesi, Indonesia. *International Journal of Law and Management*, 60(1), 102-113.
- [10]. Ladd, T. (2018). Does the business model canvas drive venture success?. *Journal of Research in Marketing and Entrepreneurship*, 20(1), 57-69.
- [11]. Mukherjee, S. (2021). The business model canvas of women owned micro enterprises in the urban informal sector. *Journal of Enterprising Communities: People and Places in the Global Economy*, 1-21.
- [12]. Ojasalo, J. and Ojasalo, K. (2018). Service Logic Business Model Canvas. *Journal of Research in Marketing and Entrepreneurship*, 20(1), 70-98.
- [13]. Osterwalder, A. and Pigneur, Y. (2013), *Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers*, John Wiley, New Jersey.
- [14]. Pascual, M.E. and Cain, L.N. (2021). Loyalty Programs: The Vital Safety Feature for Airlines to Survive COVID-19. *International Hospitality Review*, 1-7.
- [15]. Sort, J.C. and Nielsen, C. (2018). Using the business model canvas to improve investment processes. *Journal of Research in Marketing and Entrepreneurship*, 20(1), 10-33.
- [16]. Department of Statistics Malaysia(2022). Available at: https://www.dosm.gov.my/v1/index.php?r=column/cthemeByCat&cat=491&bul_id=L3NnMU44VnA0YjRxVXhuYUpZTmVnZz09&menu_id=TE5CRUZCb1h4ZTZMODZlbnk2aWRRRQT09
- [17]. Statista (2022). Available at: <https://www.statista.com/statistics/233223/travel-and-tourism--total-economic-contribution-worldwide/>