Innovation in the Tourism Industry: the Case of Tripadvisor

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Abstract

This thesis analyzes innovation in the tourism industry by showing how this sector has been subject to continuous business model innovations, which in turn have been impacted by technological and consumer behavior changes.

Starting from the traditional offline travel agencies’ business model to the introduction of an online-based business model, this thesis illustrates how “doing business” in this sector has been influenced by the Internet. Specifically, the thesis underlines the role of Tripadvisor – the world’s leading travel website – as a business model innovator, able to alter the value chain between the suppliers, distributors and consumers of travel-related products.

Tripadvisor’s genius lies in the notion of giving ordinary people the power to review a restaurant, hotel and attraction. The shift from the experts’ opinion to the consumers’ opinion hindered the traditional travel agencies’ business model as well as the traditional marketing and branding techniques used in the travel industry, presenting a digital word-of-mouth promotion.

The early adoption of user-generated content allowed Tripadvisor to gain a competitive advantage, becoming the world’s leading travel community, attracting 315 million monthly visitors.

This thesis examines the tourism industry before and after the emergence of the Internet, analyzing the different business models and sources of revenues, and places particular emphasis on the arrival of Tripadvisor. Moreover, the thesis underlines the effect of Open Innovation in this industry, portraying Tripadvisor as the pioneer of joint value creation for customers and suppliers.

Most of the literature is connected to business model innovation and the impact of technology on new sources of profit. The main focus is Tripadvisor’s ability to capture the full potential of the technology, creating a travel user-generated database and a novel business model where the company, the customers and the advertisers contribute to the achievement of a network-effect business.
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Introduction

This thesis analyzes the evolving patterns of business model innovation in the tourism industry after the introduction of Information Technologies, placing particular emphasis on the case of Tripadvisor.

Because Business Model Innovation is a relatively new concept that has been deemed important in the last decade, the literature present is mostly recent, and portrays the different views on what defines a business model. Although the concept of “business model” has not reached a widespread definition among academics, most of the authors agree on the most important factors that define it such as the concept of joint value creation among parties in the value chain. Throughout the thesis, there will be a recurring reference to Osterwalder and Pigneur’s Business Model Canvas, which will be applied to the different business models presented, and to the literature of Raphael Amit and Christoph Zott, which highlights e-business models. Furthermore, the literature will show that business model innovation plays a key role in achieving a competitive advantage: how companies “do business” has become extremely important in a world where consumers are presented with a wide range of products and services.

The objective of this thesis is to show that innovation in this sector is driven by business model innovation, which is in turn considerably impacted by changing consumer behaviors and the emergence of technological innovations. With the emergence of the Internet as a new source of information, consumers are faced with a platform that allows them to access and trade information instantly; hence the goal is to show that the business model of the offline travel agencies has been negatively affected by technological changes. In particular, the thesis will show how Tripadvisor has been extremely successful in integrating consumers and service-providers in its value chain, and in creating an innovative business model that is aligned with technological potential and changing consumer needs.

Section 2 will concentrate on innovation, placing much emphasis on the different views on business models, following with a brief overview on product innovation,
service innovation, process innovation, position innovation, technological innovation and open innovation.

Section 3 is the description of the case, and represents the most important chapter of the thesis. This section begins with a brief history of the travel industry, understanding how this sector has evolved throughout the centuries, and which factors have caused its growth and innovation. The chapter continues with the description of the different business models that have characterized the travel sector, starting with the traditional offline travel agencies’ business model and its value chain, and following with the introduction of the Internet that led to the emergence of the online travel agencies. The thesis places emphasis on the fact that traditional travel agencies are losing key points of their value proposition with each new business model, especially with the introduction of Tripadvisor, the leading travel website in the world. In this section, the thesis underlines the fact that Tripadvisor embraced co-creation with its users and service providers, and perceives as fundamental in today’s world the creation of an innovative business model that is aligned to environmental changes.

Section 4 is the interpretation of the case based on the literature and shows how different business model perspectives are relevant to Tripadvisor and the tourism industry in general. Firstly, this section will answer Peter Drucker’s business model questions, followed by the application of Raphael Amit and Christoph Zott’s e-business model to the Tripadvisor case. Moreover, Tripadvisor’s business model will be analyzed using Chesbrough and Rosenbloom’s six functions of a business model to understand how the leading travel website exploited the Internet’s technological potential to create its successful business model. Lastly, there will be an overview of the impact of Information Technologies on the evolution of business models in the tourism industry, as well as the importance and application of the Open Innovation concept in this sector.

Lastly, there will be the conclusion, which will summarize the results obtained throughout the thesis and explain why it is important to analyze the innovation patterns in the tourism sector.
The thesis intends to provide the answer to three questions: How and why has the tourism sector changed and why have offline travel agencies lost significant value? How has the travel agencies’ value chain changed throughout the decades? What factors have caused TripAdvisor to become the leading travel website in the world?
Section 1: Literature Review

1. Definitions:

The World Tourism Organization defines Tourism as an activity that “comprises the activities of persons traveling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes”\(^1\)

On the other hand, innovation has been a complex process to define. People often confuse the process of innovation with inventions, but it is fundamental that we separate the two. David O’Sullivan and Lawrence Dooley define innovation as “the process of making changes, large and small, radical and incremental, to products, processes, and services that results in the introduction of something new for the organization that adds value to customers and contributes to the knowledge store of the organization (O’Sullivan & Dooley, 2009, p. 5).”

2. Giving Rise to Innovation

Innovation can take different forms, most commonly known as product, service, process, position and business model innovation. According to the circumstance, companies need to exploit their capabilities, resources, distribution channels and R&D to create value for consumers and themselves. Nowadays, with fierce competition, globalization that eliminates all boundaries for companies and a rapidly changing environment, it is extremely important that firms innovate to gain competitive advantages.

2.1 – Business Model Innovation

A business model can be defined as the approach taken by an organization to extract value from its businesses. It describes the way in which the company creates,
positions, advertises and distributes its products or services and selects which market segments and customers it wants to serve.

The business model is the blueprint of an organization; it shows the way in which the business will compete in the market, how it will generate revenue and how it will interact with internal and external actors. Specifically, a business model must consider the needs of the target market, identify the businesses that offer those needs and understand how the activities are connected (Amit and Zott, 2010). Following this explanation, a business model must concentrate on (Amit and Zott, 2010):

- **How** the company is going to achieve this, instead of focusing on what they are going to do, where and when;
- A **holistic** approach on the way the business is performed, instead of a functional approach on marketing, operations and product;
- The way they will **create value** not only for themselves, but for all of the parties involved in the activities;
- Raise awareness that **partners** can contribute to the activities conducted by the firm.

As stated by Amit and Zott: “the purposeful weaving together of interdependent activities – performed by the firm itself or by its suppliers, partners and/or customers – is the essence of the business model design (Amit and Zott, 2010, p.218).”

The key point of focus in a business model is the value creation, hence the value added through each step of the value chain: “A business model is geared toward total value creation for all parties...the greater the total, the greater the focal firm’s bargaining power, and the greater the amount of value it can appropriate (Amit and Zott, 2010, p. 219).”

The term business model was first used by the management author, Peter Drucker, in 1954, who defined it as a tool capable of answering the questions of: (1) “who is the
customer and what does the customer value?” (2) “What is the underlying economic logic that explains how we can deliver value to customers at an appropriate cost?”

Drucker’s definition was later used by other authors to describe the concept of business model. However, there is still not a widespread definition assigned to business model, as it has not received much focus until the beginning of the 21st century.

One of the first authors to pick up Drucker’s term was Joan Magretta, who defines business models as “stories that explain how enterprises work.” Magretta argued that a business model should answer the questions of what is valued by the customers and how the organization can extract value throughout the processes conducted to serve customers. Hence, in her definition of a business model, she associates it to a value chain composed of two parts: “part one includes all the activities associated with making something: designing it, purchasing raw materials, manufacturing, etc. Part two includes all the activities associated with selling something: finding and reaching customers, transacting a sale, distributing the product, or delivering the service. A new business model may turn on designing a new product for an unmet need or on a process innovation.”

Therefore, managers should start prioritizing business model innovation, as it embodies a frequently disregarded source of value for businesses and a new source of profits and revenues.

Unlike products, services, position and process innovations, business model innovation represents a higher hurdle for competitors trying to imitate the company’s innovative activity system, since the processes and systems may not be visible to see or understand (Teece, 2010). As a result, competitors will try to imitate products and services to gain a temporary competitive advantage, while the business model innovator will be able to gain a sustained competitive advantage. Nevertheless, since business model innovation goes beyond the traditional Porterian industry boundaries, managers must keep their eyes open and beware of the potential threats posed by
competitors (Casadesus-Masanell and Ricart, 2007).
Companies must always keep their eyes open for opportunities that offer new sources of profitability and growth (Trapp, 2010). McGrath (2010) highlights that managers should have the capabilities of spotting threats to their business model before the business model’s potential of creating value has deteriorated, hence analyzing environmental changes is fundamental. McGrath (2010) suggests companies engage in “critical conversations” with internal or external technologists who can provide an outlook on future possibilities. Teece states that companies that undertake business model innovation on their own instead of undertaking it due to outside events have greater advantages (Teece, 2010). While Nunes and Breene argue that managers need to innovate their business model while the revenues and profits deriving from it are still strong, stating that the problem is not that companies are not efficient in fixing problems, but that they fix them when it is already too late: “[successful firms] turn conventional wisdom on its head and learn to focus on fixing what doesn’t yet appear to be broken (Nunes/Breene, 2011, p.84).” They use the S-curve – which tracks the lifecycle of a business model, industry or product involved in the introduction, growth, maturity and decline stages – to back up their discussion:

![Fig. 2.1: The Hidden S Curves of High Performance. Source: Nunes and Breene, 2011](image)

Nunes and Breene argue that there are “three hidden s-curves”: competition,
regeneration of capabilities and the cultivation of talent, which are hidden by the “financial performance s-curve”, which shows the profits generated from a specific business model. The three hidden s-curves decline before the financial performance s-curve, thus it is fundamental that managers pay great attention to these hidden curves and are prepared to provide a new value creation for changing customer needs before the business model reaches its climax (McGrath, 2010).

McGrath argues that in order to result in successful business model innovation, companies should experiment since existing business models will only be effective in particular circumstances. When a new technology arises or customer needs change, for example, new business models emerge because the constraints have changed. Teece continues stating that once managers start understanding what customers want, they will be able to work out a business model (Teece, 2010).

Chesbrough claims that when deciding on which business model to implement, visual mapping may be of great help: conceptualizing may clear up the layout of elements and the central processes needed to implement the business model (Chesbrough, 2010). After conducting a study, Hoffman et al. concluded that companies and groups who used the business model canvas ended up with ideas of higher quality and were competent in selecting the best one, while groups who did not use the business model canvas and generated ideas through brainstorming had lower quality ideas and were not able to select the best one (Trapp, 2010).

We need to recall that business model innovation is not directly related to what you are offering to the market, but how you are offering it. Thus, the business model innovator is not the one that investing great amounts of resources in R&D to discover new technologies, rather it exploits new technologies, such as the Internet or social networks that enable organizations to interact in novel ways with their partners, customers and sellers, in an innovative manner (Amit and Zott, 2010).

Chesbrough and Rosenbloom associate technology and business model to an intertwined process defined as the “heuristic logic that connects technical potential with the realization of economic value” (Chesbrough and Rosenbloom, 2002, p. 532-
According to them, business model “translates between the technical and the social domains, selecting and filtering technologies, packaging them into particular configurations to be offered to the market (Chesbrough and Rosenbloom, 2002, p.26).”

Chesbrough and Rosenbloom divide the business model in six functions (Chesbrough and Rosenbloom, 2002):

1. **Value proposition** – how the use of the technology helps create value for users.
2. **Market segment** – addresses which customers are going to benefit from the technology and for what reasons, each market segment specifies the revenue mechanism. “A customer can value a technology according to its ability to reduce the cost of a solution to an existing problem, or its ability to create new possibilities and solutions (Chesbrough and Rosenbloom, 2002, p.534).”
3. **Value chain** – describes which steps are needed to deliver the value proposition, determining which assets will be needed to sustain the firm’s position in the chain.
4. **Cost structure and profit potential** – estimation of the costs that will be incurred by the company to produce and deliver the value proposition, and the potential profits that can be made.
5. **Value network** – identifies the firm’s position within the value network made up of customers, suppliers and competitors. The latter impacts how value is captured through commercialization of an innovation.
6. **Competitive strategy** – the formula through which the firm will obtain a competitive advantage.

On the other hand, Amit and Zott place emphasis on e-business and describe the business model as “the content, structure and governance of transactions designed so as to create value through the exploitation of business opportunities Amit and Zott 2010, p.219).”
They argue that for a business model to be successful, it is crucial that companies create an effective *activity system design*. The *design elements* characterize the architecture of the activity system (Amit and Zott, 2010, p. 220):

1. The *activity system content* – the range of activities that will be performed by the company.
2. The *activity system structure* – explains how each activity performed by the company is linked to one another and presents the order in which they will be conducted.
3. The *activity system governance* – denotes who is going to perform the activities, how resources and information is controlled and flows across actors, and what are the incentives of the members.

While the *design themes (NICE)* denote the factors that allow the activity systems to create value (Amit and Zott, 2010):

1. *Novelty* – the way in which the company selects novel activities/novel ways of performing and linking activities/novel ways of controlling the activities.
2. *Lock-in* – the ability to capture and maintain customers and partners attracted to the business model. Companies can secure lock-ins by providing positive network externalities or switching costs.
3. *Complementarities* – the bundling of activities inside an activity system that creates more value than the separation of these activities.
4. *Efficiency* – the exploitation of activities by the firm to achieve better efficiency by decreasing transaction costs.
One of the most recent views on business model is that of Alexander Osterwalder and Yves Pigneur, who have represented the business model in a simple and precise manner in their famous book *Business Model Generation*. The two authors define a business model as “the rationale of how an organization creates, delivers and captures value (Osterwalder and Pigneur, 2010, p. 14).” They conceptualized the business model as a canvas divided into nine sections:

1. The *Customer Segments* the company wants to serve
2. The *Customer Relations* – the relationships built in each customer segment
3. The *Channels* – represent distribution and communication channels
4. The *Value Proposition* – the reasons why clients select the company instead of another. This is the part that provides a solution to a problem or satisfies a consumer need and provides benefits the company offers its clients.
5. The *Key Partners* – strategic alliances with partners to reduce risks, focus on activities and optimize operations.
6. The **Key Activities** – the central activities in order to execute the value proposition

7. The **Key Resources** – the necessary human, financial, intellectual and physical resources necessary to create value for customers, they can be in-house or outsourced.

8. The **Cost Structure** – the fixed and variable costs related to the business

9. The **Revenue Streams** – outcome of a successful value propositions for customers

Fig. 2.3: The Business Model Canvas. Source: Osterwalder and Pigneur, 2010

According to Eppler et al., a mix of creative and structural methods, such as the business model canvas, is the most effective when trying to create an innovative business model (Eppler et al., 2011).
Hence, business model innovation can be defined as the process through which an organization redefines the value its offering to its customers and how they will deliver it to exploit a new source of profit.6 Business model innovation is especially important in a world where technological changes present new ways of doing businesses, competition is fierce, customers’ demand present opportunities to differentiate and business cycles mature rapidly.

As stated by Nidumolu, Prahalad and Rangaswami, business model innovation occurs through the development of a delivery technology that alters the value chain, the combination of digital and physical framework, or in transforming products into services.

At the same time, Johnson, Christiansen and Kagermann concentrate on de-novo business models, pointing out that there is no sense in implementing new business models that are not revolutionizing in the market or industry, but are only new to the firm (Johnson et al., 2008).

The Economist Intelligence Unit, after conducting a survey on which sources of competitive advantage will be the most significant in the upcoming years, concluded that “the overall message is clear: how companies do business will often be as or more important than what they do (The Economist Intelligence Unit, 2005, p.9).” They found that this conclusion is a natural response to the vast choice of products and services in the market, which has made it harder to differentiate products according to functionality.

Business models have begun to be seen as a source of innovation after they started to connect formerly independent parties in novel ways by introducing new transaction processes. Therefore, business model innovation may accompany product, service, process, and position innovation and also create new opportunities to exploit existing markets or even create new ones (Amit and Zott, 2010).
2.2 – Product Innovation

Product innovation can be defined as the development of a new product or service, or as the improvement of a previous product or service that is later launched into the marketplace.\(^7\)

Product innovation can run along a trajectory of improvement by offering advanced performance attributes such as upgraded technological features, sleek design, additional services and other elements, or it can completely change the direction of its trajectory, and shift to a new paradigm with the emergence of novel technologies and vanguard characteristics. Products are innovative whether they are represented by incremental or breakthrough innovations, as long as they bring a new combination to the marketplace. With increased R&D across firms, it is essential that companies compete on features that are novel and that can open up new opportunities for consumers. Because the growth and continuation of companies shows that they need to keep up with new products, it is essential that firms introduce new products faster than their competitors to keep margins high, as imitation of products occurs at a fast pace, and thus the margins of the innovator rapidly become available to all the competitors in the industry.\(^8\)

2.3 – Service Innovation

Service innovation is defined as a novel or extremely refined service concept that is carried out by organizations. This concept can be linked to different functions in the firm such as a customer interaction channel, a distribution system or a combination of technological concepts that allows the firm to deliver a new product or service to the market that entails the company to acquire new capabilities, both in the human, technological and organizational dimensions (Van Ark et al., 2003).

Service innovation is characterized by factors that are easily replicated, as they are often not linked to technological progress, and can be identified and thus applied in different environments and scenarios. As a result, this type of innovation does not
necessarily occur in traditional R&D labs, but it could be a result of marketing, staff training and resources and competencies present in the organization. It is important to emphasize the significance of service innovation in today’s business landscape: with growing demand and fierce competition, companies need more than just a good product to win over customers. The need for an exemplary service to align the business interests with the customers’ along with the fact that technology alone is not enough to create new jobs, business designs and services, is becoming more and more important in order for companies to differentiate themselves (HCL Technologies, 2008). In many industries, products and services are complementary; this concept is referred to as service availability.

2.4 – Process Innovation

Process innovation is simply the creation of a new or improved production or delivery method. This in turn requires modifications in the techniques, software and equipments used to deliver products. The purpose of process innovations is to reduce production or delivery costs, or to increase the quality of the products delivered.

2.5 – Position Innovation

Position innovation is simply the process through which new products, concepts or technologies are conceived and communicated in different contexts. It is the redefinition of how a product or technology can be used by the user, and it often opens new channels through which users can exploit opportunities and knowledge. Often, customers are not able to perceive the benefits that a technology or product may have in a different context, as they may not know the advantages they can gain from it. Firms are able to position products, concepts and technologies in different contexts when a particular need has been already identified.
2.6 – Open Innovation vs. Closed Innovation

The American organizational theorist, Henry Chesbrough, argued that Closed Innovation, namely the achievement of a competitive advantage through the funding of R&D by large firms that develop technologies that become the core of new products, is a paradigm that worked until the end of the 20th century. Towards the end of the 20th century, factors in the business landscape started to change that gave rise to Open Innovation described by Henry Chesbrough as “the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and expand the markets for external use of innovation, respectively. [This paradigm] assumes that firms can and should use external ideas as well as internal ideas, and internal and external paths to market, as they look to advance their technology.”

Availability of outsourcing, a highly skilled mobile workforce and the emergence of venture capital, allowed competitors to have new sources of knowledge, funds and horizons (Chesbrough, 2003). Open Innovation emphasizes the importance on “doing business”, by creating an innovative business model that can aid the firm in maintaining a sustained competitive advantage.

The following table portrays the main difference between Closed and Open Innovation systems.
3. Overview of the Sources, Rate and Direction of Technological Change

As technological change impacts business models and allows for novel ways of doing business, it is important to understand what it is and how it works.

3.1 – Definition of Technology and Information Technology

Technology is defined as “the use of science in industry, engineering, etc., to invent useful things or to solve problems" or as “a machine, piece of equipment, method, etc., that is created by technology”. 12 While Information technology is defined as “the technology involving the development, maintenance, and use of computer systems, software, and networks for the processing and distribution of data”. 13

Fig. 4.4: Contrasting Principles of Closed and Open Innovation. Source: Chesbrough, 2003
The emergence of Internet and other technological advancements has allowed businesses to exploit new sources of payments, implement more efficient cost structures and also reduce transaction costs. Specifically, the emergence of information technology has allowed for the appearance of novel business models. In fact, IT has been one of the drivers of business model innovation. More and more businesses are located on the Internet, and are either fully positioned on the Internet or partly. This gives companies the possibility of having new sales channels, new means for customer research and especially the possibility to co-create with customers (Comes and Berniker, 2008). An example of an industry who has changed their business model and who co-creates with consumers is the online newspaper industry, which allows people to post videos of the latest breakthroughs when they happen, so as to be the first to air the news. Although business model innovation is impacted greatly by IT and technological advancements, it is not dependent on them.

3.2 – Technological Innovation

According to the Italian economist, Giovanni Dosi, technological innovation “involves the solution of problems ... typically the problems are ill structured, in that the available information does not provide itself a solution to the problem ... an innovative solution to a certain problem involves discovery and creation (Dosi, 1988, p. 1125 – 6).” Dosi argues that the search and application of technological innovation depends on different aspects such as the firms’ and industry’s capabilities and incentives as well as factors that are outside the control of the industries such as the current level of technology, the knowledge base and the scientific stage throughout industries, the availability of human capital and the macroeconomic and market factors present (Dosi, 1988, p.1121).
Technological innovation is simply the activity through which new or improved technologies in the form of products, services and processes, are unfolded and introduced into the market.

### 3.3 – Technological Paradigms

Each technology lies on a body of technological knowledge that is used to solve the problem that was previously identified. However, a point arrives when the product or service used is no longer fit to solve the ill-structured problems, and a new technological paradigm emerges – “a pattern of solution of selected technoeconomic problems based on highly selected principles derived from the natural sciences, jointly with specific rules aimed to acquire new knowledge and safeguard it, whenever possible, against rapid diffusion to the competitors (Dosi, 1988, p. 1127).”

A technological paradigm represents an outlook, an opportunity to innovate a sector through its technological attributes and by exploiting the knowledge acquired to determine the future direction of the attributes (Dosi, 1988).

The emergence of new technological paradigms arises when the previous technology is no longer able to address the problem in a satisfactory manner, hence when the technological trajectory – “the activity of technological process along the economic and technological trade-offs defined by a paradigm (Dosi, 1988, p. 1128)” – has been exhausted. At that point, a paradigm shift occurs, where the technology from a new technological paradigm arises and the technology changes direction and moves along a different technological trajectory.

According to Dosi, the factors that cause the appearance of new technological paradigms are a result of:

a. The emergence of new scientific or nature knowledge that provides a link to new implementations contexts
b. The exhaustion of technological opportunities associated to the technological paradigm

c. Serendipity

d. “The nature and interests of bridging institutions (Freeman, 1982)”

e. Structure of national institutions

f. Schumpeterian entrepreneurship whereby firms experiment with new technologies

g. “The selection criteria of markets and/or technoeconomic requirements of early users (Dosi, 1988, p. 1137)”

In addition, once the technological paradigms are established, they spill over into other sectors, supplying other industries the opportunity to exploit new sources by developing new products, services, processes or business models (Dosi, 1988).
Section 3: Description of the Case

As mentioned before, the World Tourism Organization defines Tourism as “the activities of persons traveling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes.”

Tourism greatly influences the movement of people from one place to the other, it allows for consumption, mobility, and the creation of jobs and is thus one of the most attractive economic sectors due to its high growth.

But in order to understand why this sector is growing so much, we need to grasp some of its basic dynamics, and comprehend the factors that have caused its development throughout the years. In the last couple of decades, this industry’s business model has changed radically, integrating technological innovations and changing customer demands.

We will analyze how the tourism sector’s business model has changed throughout the decades and which factors have contributed to its evolution.

1. History of the Tourism Industry

1.1 – Increased traveling due to technological innovations

In ancient Rome and Greece, people traveled for the sole purpose of war, trade and religious crusades and expeditions. Throughout the Roman Empire people were free to travel from one country to the other, without having to worry about border restrictions. The Romans built roads and even recreational facilities, but only the richest people could travel for leisure. While after the fall of the Roman Empire, people rarely traveled unless they were involved in religious pilgrimage or international trade, and most of the traveling occurred only by foot or horseback.
In the 15th century, galleons were built, initially for war purposes, then for trade and colonization. While in the 1600s carriages were introduced, only affordable to the rich, which allowed for a more comfortable way of traveling and thus an increased number of people moving. A few years later, aristocratic families who had finished university started engaging in the Grand Tour, consisting in voyages throughout the European capitals, searching for art and culture.\textsuperscript{14} As more roads were being built, more people started moving from one country to the other, especially after the inauguration of the first railroads, which brought increased opportunities to travel at a faster pace. After the industrial revolution, also the lower classes started traveling, and could only do so thanks to the introduction of railroads and ships.

Finally, in 1908 Ford launched the first motorcar and in 1919 the first air-traveling experiences initiated.

All of the above technological innovations increased traveling across countries, laying down the footsteps for our modern trains, ships, ferries, cruises and airplanes, which have allowed countless numbers of people to travel at low cost.

But certainly, the improvements in technological innovations cannot be the only source of increased tourism throughout the centuries. Other factors that have impacted greatly the tourism industry are the socio-economic changes.

\textbf{1.2 – Increased Traveling due to Socio-Economic Changes}

As mentioned above, before the 20th century, mainly rich people had the opportunity to travel across countries, while the lower classes were busy working in factories being paid poorly and not having access to the right means to travel. As a result, the tourism industry had minor growth as only a small percentage of the population could afford to travel.

This situation changed when the standards of living started rising and when even the lower classes were being paid more, thus allowing them to have a disposable income to spend on holidays or leisure time (Pearson, 2010).
Increased income, leisure time and paid holidays have allowed for higher demand to travel, hence people do not travel only for business, as it occurred in the centuries before when merchants traveled for trade.

2. Before the Internet: The Business Model of the Traditional Travel Agency

With increased travel demand due to the rise in technological developments that provided faster and more convenient ways to move from one place to another, more hotels, resorts and restaurants started emerging to meet the high customer demand. Because going on holiday meant that you had to find the right accommodation, transportation and transfer that would take you from one place to the next, traditional travel agencies were able to capture an immense opportunity by offering this service to customers. Tour operators - whose role is to assemble all of the components of a holiday and reach out to hoteliers and transportation companies - and travel agencies – whose role is to advice tourists on locations, accommodation and transportation and to sell and operate bookings for several tour operators -functioned as the middleman selling tourism products and services to customers in the name of tourism suppliers such as hotels, resorts and transportation companies like airlines and car rental. Most of the time, holidays would be sold by travel agencies in the form of mass “packages”, which included accommodation, transportation such as flight and car rental and planned activities throughout the day. However, as consumer behavior began to change, these “packages” started becoming less attractive, as more people wanted customized holidays based on their needs (Kim et al., 2007). By having a database with all of the possible accommodations, transportations, restaurants and activities, the travel agent could pick out the best-customized package according to the customer need. Additionally, this face-to-face experience created a sense of trust for the customer, although, as stated by Stephen Kauffman (2012), travel agencies that perform their activities offline often keep information to themselves: favoring well-known service providers and often charging a surplus to customers since they have control over the information and can limit its transparency.
The position of the travel agencies became even more important with the introduction of the computer reservation system (CRS) in the 1970s. The CRS increased efficiency by “allowing [the travel agency] real-time access to airline fares, schedules, and seating availability and offering the capability of booking reservations and generating tickets.” The CRS created a network between the service providers and the travel agencies. Furthermore, in the 1980s, the Global Distribution System (GDS) was introduced, which connected several CRS systems, making the database of the vendor’s inventory available to the travel agencies. GDS and CRS represent the most important connection between travel agents and tour operators (Rabanser and Ricci, 2005).

The traditional travel agency’s business model consisted in:

![Business Model Canvas](image)

Fig.2.1: The Business Model Canvas of the Traditional Travel Agency. Source: Personal elaboration
Following the Business Model Canvas introduced by Alexander Osterwalder and Yves Pigneur, the traditional travel agency's business model, with the integration of CRS and GDS, was described in this way:

1. **Customer Segments** – traditional travel agencies were the middleman between the supplier of tourism and the consumers who demanded. They were the ones that sold tourism “products” and services. As a result, their customer segments are the tourists, traveling for either business or leisure, and the suppliers of tourism, thus the service providers, hotels, restaurants, etc.

2. **Customer Relations** – the travel agency had relationships built with each of the customer segments. It had a face-to-face relation with the tourists looking to book their vacation, and a direct relation with the suppliers of tourism, through partnerships, CRS and GDS.

3. **Channels** – Travel agencies had omni-channel distribution – “viewing the experience through the eyes of your customer, orchestrating the customer experience across all channels so that it is seamless, integrated, and consistent with its customers. (John Bowden, Senior VP of Customer Care at Time Warner Cable).”

4. **Value Proposition** – Clients selected travel agencies to book their vacation because they were one of the only source from which they could reserve a trip, as they were the ones that connected tourism supply with tourism demand. Moreover, travel agencies provided an “expert” opinion as they had knowledge on the places they were suggesting, they personalized vacations, provided customer service, which would result in upgrades and perks, and offered exclusive vacation packages.

5. **Key Partners** – Travel agencies had partnerships with tour operators who would then deal with all the details necessary to book a trip, and with service providers who gave them access to their accommodation and transportation database.
6. **Key Activities** – In order to carry out the value proposition, travel agencies had access to CRS and GDS to book and view options and prices. Also, they had partnerships with tour operators and provided customer service.

7. **Key Resources** – to create value for customers, they had resources such as knowledge on holiday locations, exclusive deals and customer service to provide a perfect vacation planned to the last detail.

8. **Cost structure** – the fixed and variable costs of travel agencies consisted in the brick and mortar rent, the travel agents’ salaries, the acquisition/development of CRS and GDS platforms.

9. **Revenue Streams** – as they were the ones selling the tourism products provided by service providers to tourists, they received a commission from the service providers and a mark-up for the agency service from the customers.

Thus the value chain in the tourism sector can be represented by figure 2.3; where the travel agent serves as the “retailer”, and links travelers to service providers (the wholesalers) by controlling the flow of information in the value chain and selling the information to travelers (Liu, 2005).

![Fig. 2.3: The Value Chain in the Tourism Industry before the Emergence of the Internet. Source: personal elaboration.](image)
3. The Emergence of the Internet: the Shift to an Online Travel Agency

The integration of technological innovations such as the CRS and GDS facilitated the connection between tour operators and travel agents, however, the emergence of the Internet in the 1990s, created a hurdle for traditional travel agencies.

Before the emergence of Internet, travelers generally had to rely on the service provided by the travel agent in order to reserve a vacation: the travel agent could inform customers on flights, accommodation and complementary services. Additionally, one of the travel agencies’ most valuable resources was the knowledge and advice they could give customers who wanted to travel.

However, things started to change for traditional travel agencies when pioneers started entering the tourism industry by applying Internet to their business models, creating e-commerce websites dedicated to travel. These sites, known as online travel agencies (OTAs), were a threat to the traditional travel agencies as they eliminated the role of the middleman, which until then was played by the offline travel agencies.

OTAs allowed for the elimination of the middleman even though they performed the same service – acting as the middleman between travel products and customers and information – but instead of being in a brick and mortar, they are located on the Internet (Kim et al., 2007). Online travel agencies only function online and provide customers the opportunity to create their customized holiday by choosing their flight, accommodation and car rental if needed. In comparison to the traditional travel agency, OTAs have reduced costs since they only operate online and are also more convenient to the traveler in terms of travel agent costs.

The OTA business model consists in:
1. **Customer Segments** – OTAs act as the middleman between service providers and travelers. Thus, their customer segments are the tourists, traveling for either business or leisure, and the suppliers of tourism, thus the service providers, hotels, restaurants, etc.

2. **Customer Relations** – OTAs only have online relations with their customers.

3. **Channels** – OTAs distribute their services only through online channels.

4. **Value Proposition** – OTAs allow travelers to customize their holiday, supplying them with accommodation, transportation and complementary services options. It allows travelers to be more independent and flexible since you can access OTAs at any time of the day.

5. **Key Partners** – OTAs have partnerships with service providers such as hotels, transportation companies and complementary service providers.

6. **Key Activities** – In order to carry out the value proposition, travel agencies need to have a network with the service providers.
7. **Key Resources** – to create value for customers, OTAs offer reduced prices, holiday customization and convenience (access Internet any time).

8. **Cost structure** – OTAs’ cost structure depends on the costs of platform development and maintenance.

9. **Revenue Streams** – They get revenues from booking fees and by buying inventory at discounted price and selling it at a premium price.

Online travel agencies, such as Expedia, were great at implementing Internet to their value chain. As stated by Nidumolu, Prahalad and Rangaswami, business model innovation occurs through the development of a delivery technology that alters the value chain, the combination of digital and physical framework or in transforming products into services.

OTAs were successful in applying the Internet as a new delivery technology thus altering the value chain, and eliminating the need for travelers to go to offline travel agencies to book their trip.

Additionally, the emergence of Meta-searches – that run searches on top of the OTAs searches – created an even higher hurdle for the traditional travel agencies, as well as to the OTAs, as it allowed customers to compare travel information all on one platform, instead of having to go to multiple OTAs.¹⁷

The strengths and weaknesses of the traditional travel agencies and the OTAs are therefore:

Traditional travel agencies have the advantage of having travel expertise, they can provide advice based on local knowledge and save travelers enormous amounts of time searching on the Internet for the best alternative. Additionally, when it comes to the payment it is more secure and whatever happens throughout the holiday, you have someone that you can contact for help. Traditional travel agencies also have the
advantage that they can negotiate better deals for travelers, and according to the type of itinerary they can provide complementary offers (Benckendorff et al., 2014,p. 72). Lastly, as travel agencies have partnerships with service providers, they can book holidays at discounted prices and can also personalize your trip according to your special needs. Nonetheless, as they are losing much volume to OTAs, traditional travel agencies may charge higher booking and cancellation fees. Furthermore, when it comes to comparing hotels, travel agents may be bias due to the agreements made with service providers, and thus present you with less choice on your type of accommodation (Benckendorff et al., 2014,p. 72).

Moreover, as they operate offline, they are less transparent with pricing information. Lastly, traditional travel agencies have high fixed costs due to real estate and personnel and are only open during normal business hours.

On the other hand, OTAs do not have high entry costs as they operate online. The advantages presented to customers are the convenience of being able to access information at any time of the day, as well as being able to customize their vacation on user-friendly sites that filter the information according to their needs (Benckendorff et al., 2014,p. 79).

Unlike the traditional travel agencies, OTAs allow you to select from a lot of options and confirms instantly the availability and booking. With OTAs and also with meta-search engines, it is much easier for the traveler to compare prices and to decide where they want to go according to visual aids such as pictures, videos and maps (Benckendorff et al., 2014,p. 79).

While traditional travel agencies may not be transparent with pricing information, some OTAs also lack transparency as they do not display taxes and other fees on their initial price. Additionally, customers feel less secure paying on the Internet due to fraud and information theft, they cannot have a serious customer support and often do not have the possibility to request special features. Because OTAs do not provide professional expertise and important information such as visas and insurance, travelers waste a lot of time comparing their options (Benckendorff et al., 2014,p. 79).
4. The Arrival of Tripadvisor

Founded in 2000, Tripadvisor is the largest travel website in the world, allowing travelers to plan and book their personalized trip with the help of millions of users who provide advice on a range of travel options and reviews on countless venues. Tripadvisor’s travel community reaches 340 million unique visitors each month, and over 250 million reviews that cover more than 4.9 million attractions, accommodations and restaurants. Operating in 45 countries, Tripadvisor has become a must before booking a holiday.

4.1 – The Opportunity

Steve Kaufer, co-founder and CEO of Tripadvisor, while planning a trip with his wife in 1999, consulted a traditional travel agency on the available travel options in Mexico. He arrived home with three resort brochures: one economical, one medium-priced and the last luxury. Kaufer was interested in the economical solution, yet his wife asked him to check on the Internet the resort’s reputation before booking. Many websites were talking about the resort, yet all of them used the same exact language and the same two photos to describe it. With his computer science skills, Kaufer ran a search using Boolean logic excluding all of the websites that had a fax or telephone number, as they would be linked to travel agencies. After running the search, he found a personal page regarding the inexpensive resort he was interested in, yet the pictures of the resort were completely different from the ones displayed in the travel agency brochure. As Steve Kaufer and his wife returned home from the travel agency after booking the medium-priced resort, his wife said: “You should think about starting a company that would make that type of search easier. This really impacted our vacation decision; we decided based on what you had found, not what the travel agency recommended.”
4.2 – The Execution of the Opportunity and the Pivot

After having the idea, Kaufer created a seven-person company and a business plan, and received a seed fund of 1.3 millions and an extra 2 million during the summer. The business model was B2B – conducting business and transactions between businesses and not consumers such as a wholesaler and a retailer. The idea was to use computer-engineering skills and apply them to a vertical search engine – “Web-based search engine that indexes content specialized by location (local venues and activities), by topic, typically for consumers, or by industry, geared to businesses (B2B).” The result was a colossal travel information database that provided a white label search engine – namely a product from another source purchased by a service provider subsequently branded as its own – for OTAs like Travelocity and Expedia. Nearly a year and a half later, the company was running out of funds and was not making any revenue. Additionally, after September 11th the tourism industry was hit hard and started collapsing.

As luck would have it, the company had created Tripadvisor.com, initially meant to show their potential clients the power of the vertical engine. As Tripadvisor.com started getting traffic, Kaufer decided to implement a business model based on online advertisements with banner adds, and thus pivoting to a B2C model – conducting business and transactions between businesses and consumers, the latter being the end-users of the businesses’ products and services.

4.3 – Changing Business Model

The online advertisement and banner ad model did not generate any revenue, thus Tripadvisor went with a different revenue model: the cost per click (CPC) – whereby a website earns revenue based on the visitors’ amounts of clicks on the banner rather than on the number of impressions. Hence, each time a visitor clicked on a hotel to book a room, Tripadvisor charged the hotel a fee, resulting in monthly revenue of $70,000 after only three months.
With the successful implementation of the CPC revenue model, Tripadvisor faced one of its most important pivots regarding its cost structure and value proposition. At first, Tripadvisor provided links to relevant travel articles selected by editors on the Internet, and once the article was up on the website, users could post their personal reviews of the venue. It did not take long for the company to notice that all of the traffic was being generated by the user reviews, thus Tripadvisor pivoted: focusing their business model on user reviews that provided authentic user experiences to customers. This adjustment also had an impact on the company’s cost structure, which at first hired editors to search for reliable travel articles, now it did not need those editors, as users themselves were producing genuine content; hence Tripadvisor had user-generated content that cost the company zero to produce.

4.5 – The Network-Effect Business

Tripadvisor is the perfect example of a network-effect business – whereby the value of a good or service increases as more people use it. The implementation of its innovative business model, which provided free user-generated content integrated with social media, allowed for the company to have an enormous scale effect.

Tripadvisor’s network-effect business is composed of three major members: the venue (Tripadvisor), the users and the advertisers. As this three-sided network grows in scale, it creates additional value to all of the parties: consumers provide more reliable user-generated content which leads to Tripadvisor providing increased user access to travel options which leads to advertisers offering an increased amount of deals and bookings.

Tripadvisor’s genius lies in their business model innovation. The fact that users supply free content and allow Tripadvisor to monetize it without asking for a return is remarkable. Add to that the elimination of the costs that would result in having a sales force or account management team, which Tripadvisor does not need as advertisers are guided through self-service channels. Moreover, the company’s ability to exploit
the Google search algorithm has allowed them to be on the top page of search engines.

Tripadvisor’s network-effects and scale effects can be seen in figure 4.5.1.:

![Diagram](image)

**Fig. 4.5.1: Significant Network Effects and Economies of Scale. Source: Securities and Exchange Commission**

Below is a description of Tripadvisor’s e-business model, following Osterwalder and Pigneur’s Business Model Canvas:

1. **Customer Segments** – Tripadvisor serves both business and leisure travelers as well as short getaways. Also, it provides a platform for OTAs, restaurants, hotels and other complementary service providers to be seen. The multiple languages used on Tripadvisor have allowed it to reach a global audience.

2. **Customer Relations** – Tripadvisor only has online relations with their customers.
3. **Channels** – Tripadvisor distributes their services only through their website which is linked to other online channels such as the OTAs’ platforms, social media such as Facebook and Twitter and self-service channels.

4. **Value Proposition** – Tripadvisor allows users to post reliable user-generated content based on authentic reviews on venues, which aid travelers when making their holiday decisions. The interactive forums and travel community introduced by Tripadvisor is another service that allows travelers worldwide to interact amongst each other, sharing their travel experiences and creating a sense of community. The reviews and interactive forums together create a massive travel database that can be accessed by anyone. Tripadvisor helps its users by providing them tools to rate hotels, restaurants, attractions and travel destinations, and also allowing them to post pictures. The amount of links to OTAs such as Expedia and Booking.com allows consumers to compare prices and availability in a fast way. While the adoption of the Amazon smart recommendation engine helps users find other possible venues they might like based on the interests of the consumers who displayed similar interests. The sense of community, ease of booking and reviewing venues and the transparency provided by users cannot be replicated by traditional travel agencies. On the other side, Tripadvisor also creates value for OTAs as they provide direct links to their websites, advertisers and especially generates traffic and thus visibility to hotels, restaurants and other venues that did not have strong partnerships with traditional travel agencies.

5. **Key Partners** – Tripadvisor has partnerships with social media to increase visibility and also with OTAs and advertisers.

6. **Key Activities** – In order to carry out the value proposition, Tripadvisor must have partnerships with OTAs, social media, advertisers and have skilled engineers to create appropriate platforms worldwide.

7. **Key Resources** – Tripadvisor’s resources include its authentic user-generated content, its team of skilled engineers and its international expansion.
8. **Cost structure** – Tripadvisor’s structure depends on the costs of platform development and maintenance, engineering, costs of international expansion and traffic acquisition. The sales and marketing department also has costs, but in general, Tripadvisor has low fixed costs.

9. **Revenue Streams** – Tripadvisor does not generate revenues from its online customers, but through service providers such as OTAs and owners of hotels, restaurants, attractions, airlines etc. Tripadvisor uses:
   a. *Click-based advertising* – main source of revenue (CPC) where each time a user clicks on an ad or hotel to make a reservation, a fee is charged.\(^{33}\)
   b. *Display-based advertising* – when advertisers and hoteliers pay a fixed fee to advertise a section on Tripadvisor.\(^{34}\)
   c. *Subscription model* – restaurants, hotels, attractions and other complementary services pay a fixed fee to have exposure on Tripadvisor.\(^{35}\)

The following figure displays Tripadvisor’s revenue streams until 2010:

![Increasing Revenue Diversification](image)

*Fig. 4.5.2: Increasing Revenue Diversification. Source: the Security and Exchange Commission*
Following the business model canvas, Tripadvisor’s business model can be depicted as the following:

![Business Model Canvas](image)

**Fig. 4.5.3: Tripadvisor’s Business Model Canvas. Source: personal elaboration adapted from Tripadvisor’s Investor Presentation**

### 4.6 – The Value Added

Tripadvisor’s business model has been able to generate great value to all of the participants in its network-effect business.

Customers can now be heard. Before Tripadvisor, travelers generally went to traditional travel agencies to get advice, where they were dependent on the travel agent’s suggestions and options. Nowadays, travelers can book their vacations online, going to OTAs such as Expedia or Booking.com, or they can directly go to Tripadvisor and consult the interactive community for travel advice, read authentic reviews on different venues and be redirected to OTAs or other service providers. Tripadvisor has
introduced transparency and the power of word-of-mouth, which provides positive externalities for customers, as they can file a complaint on TripAdvisor and finally be heard; and for hoteliers, as they can understand in which areas they need to improve. The partnerships TripAdvisor has created add even more value to users. Being partners with Facebook, TripAdvisor can show its users if their friends have been to the venue they are interested in, increasing the experience due to social integration, the engagement, the possibility of the user writing a review and the monetization.

Furthermore, Steven Kaufer stated that user-generated pictures are becoming even more popular than the luxurious professional pictures posted by venues. The reason is that consumers are becoming more doubtful on traditional marketing and branding, and perceive personal pictures as authentic. Hence, the possibility to post personal pictures of the venue further increases the value TripAdvisor gives to consumers.

Tripadvisor’s interface and features can be seen through figure 4.6.1:

![TripAdvisor’s Business Model](image)

Fig. 4.6.1: Tripadvisor’s Business Model. Source: the Security and Exchange Commission
Tripadvisor has been able to exploit a tremendous opportunity: the travel sector is a gigantic and growing market that did not harness the Web to its full potential. Referring to 2011 market figures, travel comprises half of the e-commerce business worldwide. Furthermore, Tripadvisor played its winning card by creating a product-focused culture, where users go online to read user-generated reviews on a wide range of worldwide destinations, resulting in a huge database that can be accessed online. Tripadvisor offers its users a full travel experience by providing rich user-generated reviews that are of great value to consumers, a sense of community in the interactive travel forums and a place where consumers can have access to prices and compare which one is most convenient for them.

Add to this the possibility to be connected to Tripadvisor not only through its main website, but also through other channels such as social media. Moreover, Tripadvisor has also opened a mobile channel through which they can connect with their users, thus being more reachable and increasing their community. Tripadvisor’s strategy is to improve users’ experience by investing in technological features that can enhance their experience, increasing global reach by acquiring traffic, acquiring strategic companies such as Lafourchette – a leading table booking platform in Europe – and Viator – a leading online company for booking and searching global destinations.

Even at scale, Steve Kaufer has been able to implement a product culture that highlights the importance of the sense of changing technologies, consumer behavior and sense of urgency. Tripadvisor’s CEO states that: “no matter how large we are, I always want to maintain a startup mentality.”
4.8 – The Business Model Evolution

After analyzing the most important business models that preceded Tripadvisor, we have seen that starting from the offline travel agencies, each business model has eliminated one of its key value propositions. The OTAs offered a new channel where consumers can compare prices, personalize their vacations and book instantly their trips. Nonetheless, traditional travel agencies maintained the exclusivity, the customer service and the local knowledge that was often needed by travelers to plan their trip.

However, with the arrival of Tripadvisor, the offline travel agencies’ value proposition was further reduced, as ordinary users provided the local knowledge wanted by travelers based on their personal experience, at no cost to the consumers. In contrast to reviews published in travel guides, reviews written by ordinary people are founded on recommendations of people similar to them that give objective opinions on their experience. Additionally, Tripadvisor represents an opportunity for travel businesses...
to distinguish themselves and to be recognized as quality brands by customers, and to acquire unbiased feedback in order to improve themselves. Tripadvisor has been able to adapt perfectly to changes in technologies and consumer behavior, resulting in a fantastic business model that allows the company to have strong revenues.

4.9 – Consumer changes

Consumer behavior is defined as: “the behavior that consumers display in searching for, purchasing, using, evaluating and disposing of products and services that they expect will satisfy their needs” (Schiffman et al. 2012, p.2)."

The changing consumer behavior is due to the increased standards of living and as a consequence, to the growing demand for luxury when going on a trip and staying in various venues. The advancement in technology also drives travelers to demand hotel rooms with modern features and exemplary services (Swarbrooke et al. 2007, 219.) Therefore, service providers have to consider changing consumer behavior and work hard to improve their services and products to exceed customers’ expectations (ibid.)

Consumer behavior can be divided into two generations, X and Y, presenting a generation gap. Generation X (born from 1960-1980) prefers to acquire information from a store or a webpage, while Generation Y (born from 1981-2000) prefers to acquire information through other people’s opinions. Generation Y is social and engaged in all of the purchasing phases, displaying a different decision making process from that of Generation X.

Consumers depend on online reviews provided by companies such as Tripadvisor, because they firmly believe that the information displayed is more recent and more reliable than that communicated through traditional marketing and branding. The Online Travel Review Study found that 77.9% of the people surveyed state that online reviews have a significant impact on their traveling decisions.
Hence, websites such as Tripadvisor increase credibility and trust amongst travel reviewers.

During the digital revolution, we have seen a change in the behavior of consumers that has caused them to enjoy doing their own research on tourism destinations based on ordinary people’s travel experiences. This is a result of the convenience presented through the Internet and websites such as Tripadvisor, where people can access information on deals, booking and advise at all times. According to Conlumino for Webroyalty, 74% of all travel bookings are conducted online.

On the other hand, traditional travel agencies are having a difficult time creating an innovative business model that adapts to technological and consumer behavior changes. According to ABTA, traditional travel agencies are mostly used by 35-44 year-olds when booking a holiday abroad and by families who prefer a face-to-face contact when planning their trip, this is because they generally require special needs that OTAs and Tripadvisor cannot address. Additionally, travelers who want to book a luxury holiday usually rely on offline travel agencies.
Section 4: Interpretation of the Case based on the Theoretical Contribution

1. Tripadvisor: an Innovative Company

After understanding the meaning of innovation, we can apply its definition to the case of Tripadvisor. The number one visited travel website in the world was remarkable in introducing changes in the way offline and online travel agencies did business, providing customers a full package and experience. As David O’Sullivan and Lawrence Dooley state: “...[innovation] results in the introduction of something new for the organization that adds value to customers and contributes to the knowledge store of the organization (O’Sullivan and Dooley, 2009, p. 5).”

This is exactly what Tripadvisor has achieved, they increased the value offered to customers and at the same time achieved a tremendous bargaining power and a database that people can always turn to when searching for travel advice.

2. Tripadvisor answers Peter Drucker’s Questions

According to Drucker, a business model answers two questions:

1. “Who is the customer and what does the customer value?”
2. “What is the underlying economic logic that explains how we can deliver value to customers at an appropriate cost?”

Tripadvisor answers Drucker’s questions:

1. Tripadvisor’s customers are business and leisure travelers as well as short getaways. Technological innovations have allowed us to travel at a faster pace and socio-economic factors have increased our standard of living, resulting in higher demand for travel. Hence, Tripadvisor has been able to capture the usual business and leisure travelers captured by the online and offline travel agencies, but also excursionists – people who go on day trips – by providing them handy travel information. Tripadvisor’s customers value authentic
reviews based on real travel experiences; a travel community where they can virtually interact with other travelers and get the best advice on their destination; an ease to book hotels, flights and restaurants; engagement with friends of social networks such as Facebook and Twitter and a recommendation engine that finds restaurants that may be of interest to the user.

2. After Tripadvisor’s second pivot, where it integrated user-generated content instead of having editors search for the best articles on the Internet, the cost to generate value was brought down to zero. Being able to monetize the user-generated reviews created a remarkable economic advantage for Tripadvisor, allowing it to reap the benefits of its customer travel experience by just providing them a platform where they can share those experiences. The total costs for Tripadvisor accounted for $906 millions in 2014, including costs for the global expansion of its platform, the traffic acquisition costs and sales and marketing. While its Internet click-based advertisement, display-based advertisement and subscription revenue model has allowed it constant revenue growth over the years, closing 2014 with revenue of $1,246 millions.

3. Applying Amit and Zott’s e-business Model

According to Amit and Zott, a business model must: focus on how a company is going to achieve their goals; have a holistic business approach; understand how they will create value for themselves and for the other participants; and be aware of the fact that partners can help in conducting activities that create value (Amit and Zott, 2010).

In fact, Tripadvisor’s business model focuses on how they can create value for users, advertisers and themselves through their network-effect business. Ever since users started posting user-generated content, which created value for millions of travelers, Tripadvisor started improving their platform in order to deliver their users the appropriate tools to fully extract their knowledge and experience. The leading travel website does this by offering features such as integration to social media, ability to
post pictures, ratings and so much more. Nonetheless, Tripadvisor’s platform also creates value for OTAs, hoteliers, restaurants and other complementary services, by linking their webpages to Tripadvisor, and thus allowing them to have increased traffic. Hotels, restaurants and other structures have the benefit of gaining exposure on the leading travel website, of improving their features based on customer feedback and of differentiating themselves. Tripadvisor’s platform created a network-effect business where all the parties participating were able to contribute to an increased value creation thanks to Tripadvisor’s interactive platform. As Amit and Zott argue: “the purposeful weaving together of interdependent activities – performed by the firm itself or by its suppliers, partners and/or customers – is the essence of the business model design (Amit and Zott, 2010, p.218).”

Amit and Zott’s business model description is defined as: “the content, structure and governance of transactions designed so as to create value through the exploitation of business opportunities (Amit and Zott, 2010, p.219).” We will apply the design themes (NICE) to Tripadvisor’s case, as they are the ones that allow the activity system to create value.

1. **Novelty** – Tripadvisor represents a novel way of doing business in the travel industry. As we saw in the last section, the business model evolution due to the emergence of technological innovations has stripped down the value proposition of the offline travel agencies, making them attractive mainly due to their travel knowledge. With the arrival of Tripadvisor, traditional travel agencies’ value further decreased, as Tripadvisor shifted the role from the “expert’s” opinion, to ordinary traveler’s opinion, now allowing travelers to consult reviews based on authentic experiences. This shift introduced a novel platform where travelers and tourism service providers could be connected through a click, allowing users to compare prices, reviews etc. The leading travel website created value for all of the members in its business, increasing its bargaining power. Tripadvisor’s novelty is in connecting all of the members
of the value chain – the suppliers, distributors and customers – into one platform, and relying on each member to contribute to the total value creation.

2. **Lock-in** – Tripadvisor is able to capture and maintain its customers and partners attracted to its business model by providing customers a user-friendly website with enhanced features and an online and mobile channel. Additionally, linking Tripadvisor to Facebook further locks-in users as they can connect with their friends and see which restaurants and other venues they like, thus providing a customized detailed city traveling experience. While for OTAs, advertisers and business owners, they remain locked-in as it is beneficial for them to have exposure on Tripadvisor, to have links to their pages, to have their information displayed, and to be redirected to their booking platforms. Tripadvisor offers business owners the opportunity to improve their services based on user feedback, gives them a platform where they can be praised and differentiated from others. Tripadvisor generates positive externalities for each party in their business.

3. **Complementarities** – Having different parties contribute to each step of Tripadvisor’s value chain is one of its competitive advantages. Without users generating genuine reviews, Tripadvisor linking venues to OTAs in order to compare prices and book instantly and restaurants and hotels exposed on the platform, there would be no network-effect business, and the virtuous circle would end instantly. As Amit and Zott argue: “A business model is geared toward total value creation for all parties...the greater the total, the greater the focal firm’s bargaining power, and the greater the amount of value it can appropriate (Amit and Zott, 2010, p. 219).”

4. **Efficiency** – Tripadvisor has brought transparency to the travel industry. For consumers, searching for their perfect hotel, restaurant, attraction has no search costs anymore, and comparing prices to see which one is most convenient, is free of charge. Tripadvisor had been able to achieve economies of scale due to its free user-generated content that they have been able to monetize at a global level.

According to Amit and Zott, the business model innovator is not that one that invests in great amounts of resources in R&D to create new technologies, rather it exploits
new technologies to enable organization to interact in novel ways with their partners, customers and sellers, in an innovative manner, which is exactly what Tirpadvisor has done.

4. Opportunities and Threats

As Casadesus-Masanell and Ricart argue, since business model innovation goes beyond the traditional Porterian industry boundaries, managers must keep their eyes open and beware of potential threats posed by competitors (Casadesus-Masanell and Ricart, 2007). Tripadvisor’s competition is for users, content and advertisers. Their main competitors are vast online gateways, OTAs, social network sites and search engines. Google, Yahoo, Yahoo Travel, Microsoft’s Bing and Bing Travel represent the chief search engine competition. Google is the highest hurdle for Tripadvisor because travelers start their research on Google and not directly on Tripadvisor, thus users could end up consulting other pages too, but it is a good thing that Tripadvisor has great SEO on Google.

While traditional travel agencies, tour operators and online travel agencies like Priceline and Expedia compete on users and bookings. Because Tripadvisor is the world’s leading travel website in terms of travel reviews and forums, it competes with Expedia for bookings because they also have a lot of reviews. Regarding the restaurant sector, Yelp is the biggest competitor, but it is more local-focused than travel-focused, and OpenTable.

McGrath highlights that it is fundamental that companies evaluate environmental changes and spot opportunities that can create value for the company. Tripadvisor has been remarkable in aligning their business model with technological changes and new trends. After launching their online website, they also created a partnership with Facebook, understanding the importance of social media in the 21st century, and the positive effects it could have in their business. Moreover, entering the mobile channel and creating their Tripadvisor app has allowed them to be even more connected with users.
5. Extracting Value from Innovation – Chesbrough and Rosenbloom

Chesbrough and Rosenbloom state that a business model is the: “heuristic logic that connects technical potential with the realization of economic value (Chesbrough and Rosenbloom, 2002, p. 532-534).” According to them, a successful business model is able to extract hidden value from an innovation technology.

In fact, this argument is perfectly aligned with Tripadvisor’s case. Although the Internet had already emerged, and online travel agencies already existed, Tripadvisor was able to use the Internet in a different way, allowing users to post their own reviews at no cost, generating economic value for the company through a network-effect business. Following Chesbrough and Rosenbloom’s six functions of a business model, Tripadvisor can be described as the following:

1. **Value proposition** – the use of the Internet enabled Tripadvisor to create a platform where users could generate their own content based on travel experiences, resulting in a massive database with handy travel information. The Internet then enabled Tripadvisor to connect with service-providers, business owners and OTAs to offer an enhanced user experience.

2. **Market segment** – leisure and business travelers as well as excursionists can benefit from Tripadvisor. Due to its value chain, where customers produce content, Tripadvisor provides increased user access to travel options and advertisers offer an increased amount of deals and bookings.

3. **Value chain** – for Tripadvisor to deliver its value proposition, it needs to have a user-friendly platform, partnerships with OTAs and advertisers, SEO, Internet traffic and an incentive for customers to keep on posting user-generated content.

4. **Cost structure and profit potential** – because Tripadvisor operates online and on mobile channels, its costs are minimized and include the global expansion, the development and maintenance of the platform, traffic acquisition,
engineering costs. While its profit potential depends mainly on the CPC model, and is thus highly dependent on advertisers and OTAs.

5. **Value network** – Tripadvisor is the player that allowed for suppliers and customers of tourism to connect online through its functional platforms.

6. **Competitive strategy** – maintain a product-focused culture that is in line with technological changes; expand channels through social media to increase engagement and visibility, make strategic acquisitions and provide an international platform in different languages.

Therefore, Tripadvisor has been successful in exploiting technological innovations to create value for themselves, the users and the advertisers.

6. **The Impact of IT on the Evolution of Business Models in the Tourism Industry**

In the literature review, we analyzed the importance of technological advancements that have allowed businesses to exploit new sources of payments, to implement more efficient cost structures and also to reduce transaction costs. Specifically, the emergence of information technologies has allowed for the appearance of novel business models, especially in the tourism industry.

The emergence of the Internet along with globalization has resulted in the development of e-business models, which have completely revolutionized the way this industry makes money (Osterwalder, 2004). Unlike the traditional travel agencies’ business models, where they served as distributors of tourism supply and demand, the adoption of the Internet and information technologies has led to novel ways to make money online and to integrate suppliers and customers in the value creation process (Osterwalder, 2004). Companies like Tripadvisor can reach their customers through a variety of channels thanks to the Internet and IT and directly sell their tourism products. Users can acquire information instantly and book hotels and other venues directly from the websites, without having to consult the traditional travel agencies. The increased engagement with customers on the Internet has also brought a new
“word-of-mouth” marketing, whereas the traditional marketing and branding techniques are no longer very efficient in the travel sector.

7. Open Innovation in the Tourism Industry

Henry Chesbrough describes Open Innovation as: “the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and expand the markets for external use of innovation, respectively. [This paradigm] assumes that firms can and should use external ideas as well as internal ideas, and internal and external paths to market, as they look to advance their technology.”

Open Innovation is when a firm opens its innovation process to external actors such as customers, suppliers and at times even competitors. Firms understand that integrating the knowledge base of the latter actors can increase the value created by the firm. Open Innovation can be applied perfectly to the evolution of the tourism industry and especially to the case of Tripadvisor. As mentioned before, globalization, Information Technologies and changing customer behaviors have impacted the way business is done in the travel sector. With each new business model introduced in the previous section, we have seen that the relationship between the firm, their customers and their suppliers kept becoming more important and integrated in the business process. Open Innovation recognizes the importance of including these external actors in the value chain, instead of just focusing on the needs of the customers. Tripadvisor is the best example in the tourism industry of a company that experienced Open Innovation: shifting the role of customers from a passive to an active role, where users contribute 100% in providing authentic advice for other fellow travelers on the Tripadvisor platform. Advertisers, service-providers and travel-related business owners are all linked to Tripadvisor due to its ability to capture so many customers and generate traffic, but Tripadvisor is also reliant on them for its revenue generation.
Conclusion

As the travel sector is characterized by the distribution and sales of tourism “products”, namely accommodations, transportation and complementary services, innovation in the tourism industry is driven by business model innovation. The thesis analyzed the evolving business patterns of the traditional travel agency, who served as the middleman between the service providers and the travelers, and showed how with the emergence of technologies its business model was no longer fit to successfully function in the new environment. The use of the Internet by online travel agencies disrupted the offline travel agencies’ value chain, providing customers and service providers the ability to interact on a new platform: the Web. Nonetheless, traditional travel agencies still had other valuable assets that allowed them to make money, most importantly, the local information and customer service that the OTAs were not able to offer its clients.

But with the entrance of TripAdvisor that included the travel service providers and the customers in its value chain, creating value for all the parties in its network-effect business, the traditional travel agency faced even harder times. The offline travel agencies’ local information that was extremely valued by consumers was undermined when TripAdvisor offered users the opportunity to post their personal travel advice and reviews based on personal experience. TripAdvisor’s ability to generate revenue through online channels, at no cost for the consumers, was a success. In its business model, all of the parties – the users, TripAdvisor and the advertisers – benefit from this three-member game: the users express their opinions and feel heard by generating more genuine content while TripAdvisor increases user access to travel options and advertisers offer more deals and bookings: it is a win-win situation. TripAdvisor has also been remarkable in adapting its business models to consumer behavior and technological changes: it understood the significance of integrating its platform with social media networks such as Facebook, and the importance of having a mobile channel that allows people to be easily and constantly connected to TripAdvisor.
Throughout the thesis, the questions posed in the introduction have all been answered. The tourism sector has changed throughout the decades with the introduction of technological innovations and consumer behavior changes, which have allowed users and suppliers of tourism to find new channels to communicate and exchange information. The offline travel agencies lost significant value as they were not able to adapt to the new opportunities presented by the changing environment, while other actors such as OTAs, meta-searches and companies like Tripadvisor were able to disrupt the traditional supplier-distributor-customer supply chain, providing a direct channel through which customers and suppliers could buy and sell tourism “products”. Tripadvisor’s product-focused culture, startup mentality, engineering skills and innovative business model that adapts to the changing environment, have allowed it to become the leading travel website in the world.

The subject of this thesis is extremely interesting and relevant in a world where technological breakthroughs introduce new distribution and sales channels for almost every industry. It is interesting to analyze how in an industry where there are no “technological” products to be sold, thus no R&D required by firms to be the first to market, the way companies “do business” impacts greatly their outcome in the market. Business model innovation is a concept that is becoming more relevant in a world where consumers are presented with a wide selection of products and services, and where having the best product is no longer enough to guarantee success.

In the tourism industry, and specifically in the case of Tripadvisor, the Business Model Canvas presented by Osterwalder and Pigneur is the perfect business model application. Furthermore, Amit and Zott’s e-business model fits very well with Tripadvisor’s case, as well as Chesbrough and Rosenbloom’s model that allows us to observe how Tripadvisor exploited technological potentials to deliver value. In general, Tripadvisor’s case is fairly well aligned with the literature presented, and with the concept of Open Innovation.

This thesis offers a framework of the evolution of the tourism industry and allows us to understand: why and how people started traveling, which business model prevailed in
the industry before the Internet, how the Internet disrupted the old models and how Tripadvisor further exploited the Internet with its innovative business model.
Bibliography

**Books:**


**Journals:**


Osterwalder, A. 2004. *The business model ontology: A proposition in a design science*


**Websites:**

5. [www.hbr.org/2015/01/what-is-a-business-model](http://www.hbr.org/2015/01/what-is-a-business-model) accessed 2/06/2015
6. [www.bcgperspectives.com/content/articles/growth_innovation_driving_growth_business_model_innovation/](http://www.bcgperspectives.com/content/articles/growth_innovation_driving_growth_business_model_innovation/) accessed 2/06/2015
7. [www.sagepub.com/upm-data/23137_Chapter_1.pdf](http://www.sagepub.com/upm-data/23137_Chapter_1.pdf) accessed 8/05/2015
11. [www.corporateinnovation.berkeley.edu/open-innovation-research/books/](http://www.corporateinnovation.berkeley.edu/open-innovation-research/books/) accessed 3/06/2015
18. [www.tripadvisor.com/PressCenter-c6-About_Us.html](http://www.tripadvisor.com/PressCenter-c6-About_Us.html) accessed 5/06/2015