

# FUTURE OF HOTEL INDUSTRY: THE CASE OF TECHNOLOGICAL INNOVATION, AND THE COMPETITIVENESS IN THE GLOBAL TOURISM MARKET

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**Abstract:** *The paper is based on an analysis of business model for online hotel reservation companies, the technology of used, analysis of tourist demand, competition between them, evaluation of innovative capabilities, and recommend of future strategy development of reservation systems. Findings of this study would benefit revenue managers, general managers, hotel owners, and corporate brand managers to make decisions and to formulate new policies concerning their online distribution, revenue, and brand optimization strategies.*

**Keywords:** *Tourism, computer reservation system (CRS), internet technology, mobile marketing.*

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## 1. INTRODUCTION

The subject of the paper is a business and technological analysis of online reservation systems, technology, market, and the impact of technological changes on the future development of reservation systems. The paper provides insights into the change of the structure of online tourism businesses distribution systems (Google, Priceline, and Expedia), that has not been extensively explored. The aim of the paper is to define the problem, analyze the existing conditions, define the recommendations for future goals of the firms' sustainable development, and the level of application of technologies and internet platforms. The paper includes research related to the operation of online firms for booking accommodation mainly from the onset of the global economic crisis in 2008 to date, anticipating development trends by 2018.

In the last few years, online booking and reservation systems in the world have faced a number of changes [1, 2], from technological changes and an increasing number of mobile Internet users, to changes in the strategy of leading firms in terms of price diversification and how to provide accommodation without payment commission or total price payment [3, 4]. The use of information technology systems (ITS) in tourism industry has been driven by the development of the size and complexity of demand, as well as the rapid expansion and sophistication of new tourism products, and mini market segments [5]. Today, business, technology and science have merged into one system, one conversation and the strategy of a single world and a single market. More and more, new, experienced, sophisticated, requiring travelers seeking information about exotic destinations and the authenticity of experience, as well as demands for interaction with suppliers in order to meet their specific needs and desires. In order to meet the needs of tourists to stay ITS in the long run, there is no other choice than to embed technology and improve market interaction. Managing the process of the technological innovation means that attention is

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directed to equally managing the processes of invention and innovation. The modern approach to firm technological innovation is based on conclusion that the technology dynamics is firmly linked to the strategic dynamics of the organization as a whole. The new future brings new science that will greatly influence the way business and global businesses work.

The rest of the work is organized in Chapter 2, a theoretical representation of Tourism industry and market, concept and specifications, as well as the concept and definition of Technology of reservation systems, and Management of information systems in the hotel management industry of online reservation systems. In the Chapter 3 and 4, methodological and hypothetical research frameworks will be set up through quantitative methods of direct data, testing methods, market research, competition research. Chapter 5 represent Discussion, and last Chapter 6 present Conclusion.

## 2. BACKGROUND

### 2.1. Tourism market

The market can most easily be defined as the universality of the relationship between supply and demand in a particular commercial space. From the aspect of tourism, the tourist market is defined as a “set of supply and demand relationships in the sphere that serves meet the tourist needs in a given area”, under the influence of tourism trends. Incoming or inbound tourism has become one of the world’s major tourism categories. Total revenue from exports generated by incoming tourism, including passenger transport, exceeded 7.6 trillion dollars in 2016 [6]. Export tourism accounts for as much as 30 percent of total exports in the world of commercial services and 6 percent of total exports of goods and services. On the global level, as a category of exports, tourism is in the fourth place after fuel, chemicals and automotive products. For many developing countries this is one of the main sources of foreign exchange income and number one export category, creating over the need for employment and the possibility of further development.

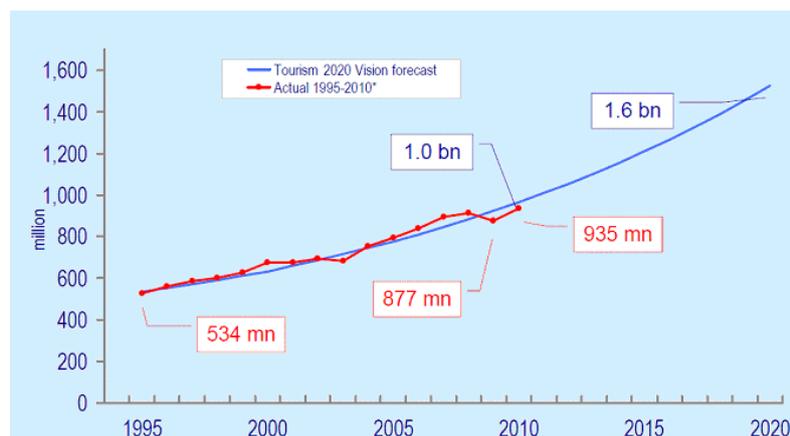


Figure 1: WTO - International tourist arrivals by 2020. Source: [7]

For the past six decades, tourism has experienced expansion and continues to diversify as one of the largest and fastest growing industries in the world. In recent years, many new destinations have appeared in Europe and North America. Despite the occasional shocks, the international number of tourist arrivals has shown practically steady growth: from 25 million in 1950 to currently 1,6 billion in 2018. Rapid growth was recorded especially in developing countries, with participation in international tourist arrivals from 31 percent in 1990 to 78 percent in 2018.

Today, tourists are exposed to the vast amount of information coming from all directions, in real 24/7 time, which extends to the exchange of “hyper-interactive information and content” (e-mail, Tweet, Instagram, Facebook, etc.) Google already serves content in real time from across the blogosphere, Twitter, Facebook and other social networks in its search results. This presents hospitality eMarketers with enormous new challenges, as well as opportunities. The following factors determine the future destiny of the online travel industry: (1) the macro-economic environment; (2) exchange rates; (3) fuel prices; (4) significant impact of unforeseen travel events; (5) Internet penetration; (6) airline industry; and (7) hotels and accommodation industry.

## 2.2. Information Technologies and Tourism requirements

The importance of the development of tourism and the hotel industry imposes hotels on the need for using the Internet as a means of communication and distribution of services. Computerized networks and electronic distribution in tourism appeared in the early 1970s, via internal Computerized Reservation System (CRS) [1, 4, 8]. CRS have become the central mix of distribution and company strategies. CRS integrates a range of business functions, and thus can contribute to profitability and long-term prosperity [3]. CRS also reduces communication costs, while providing information on demand and is of enormous importance to both operational and strategic management in the industry [3, 4, 9, 10]. Computerized reservation systems (CRSs) and more and more Internet providers meet the needs of consumers for practical, transparent access and easily comparable information [3, 9]. They cover the full spectrum of travel choices: accommodation and entertainment, destinations, vacation packages, as well as the actual price and availability of such services [3]. Services also provide immediate confirmation, which allows for a greater degree of flexibility for potential travelers to book last-minute accommodation [3].

Agencies have integrated their CRS systems with GDS, by developing interfaces [3]. Companies such as THISCO and WIZCOM, have facilitated internal connectivity, which enabled the display and purchase of most tourist products online [13]. The GDS connect around the world most travel agencies with agents, lead to process standardization and control a significant market share. GDS has emerged as a “circulation system” or “backbone” industry, establishing global communication standards and new tourist distribution of electronic channels [3]. Competition in the GDS industry has forced the merger and acquisition (M&A) of companies. It is predicted that only two or three major GDS systems will survive and that is why further concentration and integration is expected [3]. At present, the four systems, namely Galileo, Amadeus, Saber and Worldspan, dominate the global market. Each GDS has a stronger market share in its region, where its subsidiaries are located, as well as a traditional link with travel agencies used to penetrate this GDS [3]. GDS systems should aim to increase satisfaction with their stakeholders (i.e. customer satisfaction, managing directors, travel agencies and shareholders), offering superior products and enabling partners to make a profit.

Companies focused primarily on the degree of innovation of companies that respond to different knowledge, skills and intelligence factors in an efficient and effective way meet the requirements of work they are dealing with, such as Expedia, Priceline, Yahoo and Google, can be considered more innovative than others in the technical and organizational meaning. The corporate level system evolved faster than others because, above all, the brand’s effectiveness was derived from large, complex computer systems. The basic goals of technology management in the enterprise include achieving the efficiency of technology in the enterprise, and achieving the technology effectiveness of needs for products for which there is a high demand on the market. New

technologies allow web site visitors to compare prices in individual tourist destinations with a variety of criteria. It is possible to combine offers, sophisticated websites suggest actions and suggest the best choices, hotel visitors evaluate content and advise other travelers about vacation planning in a particular facility. Better access to information covering all aspects of tourism activity provides a framework for providing personalized service at a price that could be compared with the prices of standard packages. Therefore, the use of central reservation systems is not accessible to all hotels, because their implementation requires a lot of financial resources.

Based on the above research general hypothesis was observed by analyzing the comparative values of the competitors: “*The higher is the level of responsiveness to different competence factors in the environment, the company is more innovative in technical, organizational and business sense.*” Following hypotheses are proposed:

- **H1:** The faster changes in organizational factors, the higher the level of innovation in the company.
- **H2:** The faster the adoption of new ideas in the company, the greater the factor of technology and technological innovation.

The rest of the paper is organized in Chapter 3, which presents methodological and hypothetical research frameworks set up through quantitative methods of direct data, testing methods, market research, and competition research.

### 3. METHODOLOGY

In general, two main theories of research methods have been recognized: quantitative and qualitative. Quantitative data collection is based on numerical and standardized data, resulting in the use of statistical variables, diagrams and graphs [14] obtained from perceptual data. Qualitative data analysis is based on meaning expressed in words, culminates in the conceptualization of a model or theory [15], and results in non-standardized data that require classification in categories.

The research used a quantitative method of direct data, test methods, market research and competition. The financial data variable was collected from 2010 to 2017 on the websites NASDAQ Stock Market and Travis Stock Market Analysis for the three leading online tourism businesses companies: Google Priceline, and Expedia. Two surveys were conducted, the first being the segmentation of the future of hotels, the hotel industry and its development until 2020. The second annex relates to the research of the technology and market of the use of mobile marketing in the hotel industry. The *benchmark survey* “Mobile Marketing in the Hospitality Industry” was conducted in the period from 2012 to 2017, divided into the research of the hotel’s internet budget, the return on investment rate, the analysis of the exponential growth of mobile marketing, the percentage of use of mobile applications and searches, the impact of social media and marketing initiatives, and the analysis of the success of video integration on the site of the hotel or agency.

Empirical research is guided by specific research questions:

- Where will you spend the most money? Hotel total internet budget.
- Which internet marketing format gives you the best results and the highest return on investment (ROI)?
- What type of mobile marketing do you plan?

The hotel industry analysis was carried out in four key areas, through brand differentiation, guest experience, globalization and brand value. The idea of initiating research work was based on the fact that information technology and tourism have the most significant role in the development of new technologies and innovations. The aim is to obtain descriptive and objective input data to increase the ability to draw general conclusions, which can help us reduce the risk of biased results. The central indicator of the value of the brand represents the return of capital invested for the owners of a particular brand and the investors.

## 4. RESULTS

Considering the complexity of the hotel industry, technological innovation, and the competitiveness of Expedia, Priceline, and Google, today's trends in the development of online tourism businesses are mostly focused on the development of internet business and the development of digital marketing for hotels (social and mobile marketing). Also, investing in eCRM is a good choice to send more personalized marketing messages. Different needs for different users require a different structure, and sometimes even a different content of output information or statement of performance, but do not require different concepts of performance itself. All major airlines, hotels, travel agencies and car rental agencies offer their services online. Travel reservation services that offer comprehensive online services are Expedia.com, Travelocity.com and Orbitz.com. In addition to these services, Priceline.com allows the user to determine the price that he is willing to pay for the airline ticket or hotel accommodation, and then searches for a tourism company's business whose services fit into that price [16].

The aim of the research is to answer the research questions and test hypotheses, both quantitatively and qualitatively. Below is a comparative analysis of the competition companies Google, Priceline, and Expedia, divided on analyses of the hotel internet budget, the degree of return on investment (RoI), the analysis of the exponential growth of mobile marketing and the impact of social media and marketing initiatives.

### 4.1. Alphabet Inc. Corporate Overview

Alphabet Inc. - Google.com and Google International sites (e.g. Google.sr) offer a platform for searching on the Internet over computers and wireless devices. Google earns from contextual advertising known as the keyword that is displayed based on the type of user and search performed [17].

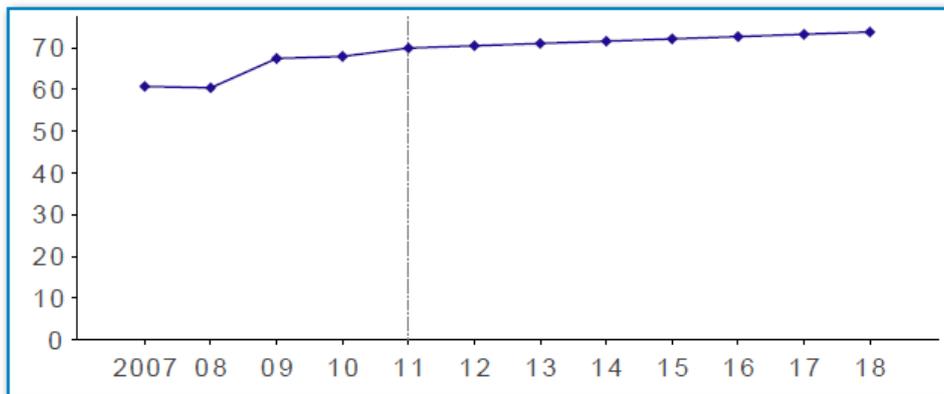
Google AdWords allows advertisers to show advertisements in Google search results on the Google Network with media content or through cost-per-click or cost-per-schema [18]. Keyword prices, keyword list, and frequency of search users are also available. In addition to advertising on search engines, Google earns money by placing ads on other Google sites, such as YouTube video site, Orkut social network, Google Mail (Gmail) email service, etc. Google also allows earning money on its "partner" sites (through ads using AdSense), from which it receives a portion of advertising revenue. Google search ad makes up 67 percent of the total estimated value of the company's stock. However, growth is becoming more and more expensive. In the fourth quarter, keyword payment terms used in online advertising increased by 64 percent to 217.9 million dollars, or 22 percent of revenue, which is 20.8 percent of total revenue in the first nine months of 2018 [19].

**Market Participation.** Google share in the global search market has risen from around 630 dollars per share in 2012, to 1200 dollars in 2008. However, Microsoft began to take aggressive measures against Google. First, he became a partner with Yahoo, and then with Facebook expanded Bing's market share. On the other hand, if Google continues to innovate, it could gain a new market share.

**EBITDA margin.** The current forecast of Google's search margin will remain the same as in 2010 and will amount to around 49 percent by the end of 2017. If Google additionally controls the costs, its margin can go at a fast pace. We estimate that the current stock price will increase by 5 percent if its margin goes up to 53 percent by the end of the forecast period.

**Sources of value.** It's believed that Google Ad Search is much more valuable than a partnership with Search & Content, YouTube, Gmail, Orkut and others for the following reasons. We estimated that Google earnings per 1,000 search (RPS) will be around 6 dollars in 2018 compared to 4.18 dollars per 1,000 RPM on YouTube. Monetizing page views on Orkut and Gmail sites is even lower than YouTube. Google search and Google search on partner sites earn comparable amounts per 1,000 searches. In addition, Google only gets ~ 14 percent of revenue on partner websites. It is believed that YouTube still makes business losses, but is expected to become profitable in the near future.

**Key Trends.** It is expected to increase internet search by mobile phones, higher internet speeds for mobile phones, and increase partnerships between search engines and mobile phone manufacturers (e.g. Google search on the iPhone). Unlike searches, which is more functional and commercial in nature, online videos and social networks are more fun oriented, where ads are generally considered to attract attention.



Graph 1: Google Search Market Share (%)

Google search market share has increased from around 61 percent of all internet searches in 2007 to around 74 percent in 2018. The prognosis is that Google will continue to increase its market share in the future, but at a slow pace.

#### 4.2. Priceline Corporate Overview

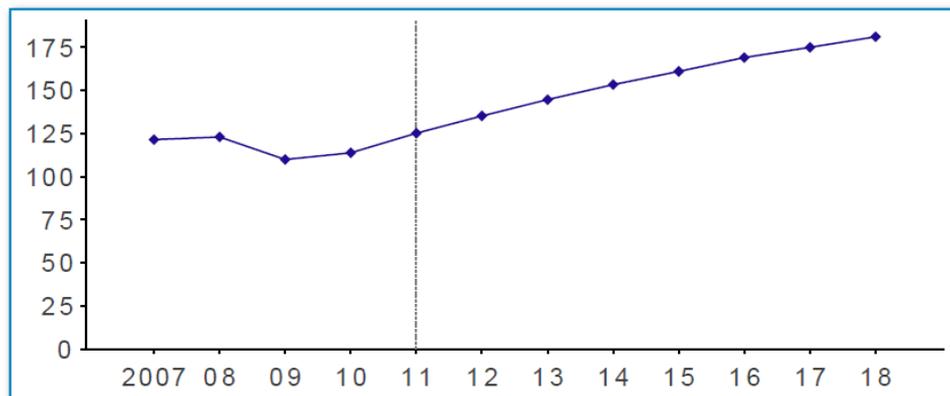
Priceline is the second largest online travel company in the world. It offers its customers a wide range of travel services that include bookings of hotel accommodation, airline tickets, car rental, cruises and a variety of package holidays through their online portal: priceline.com, booking.com, agoda.com, rentalcars.com, and breezenet.com that connect travelers with suppliers such as hotels, airlines, cruises and car rental companies.

Under the brand name Priceline, users can give their price for a tourist product (hotel room, living room, airline ticket, etc.). The advantage of Priceline service is to allow hotels to sell excess inventory (hotel rooms, air tickets, etc.) without compromising your existing price. The price of the shares and the total value of the company was made by summing the value of the individual sectors in the company.

**Potential increase and fall in prices.** Current forecasts for Priceline market share of reserved rooms show that the global share in the number of reserved rooms increases from 2.1 percent in 2010 to 3 percent by 2017. We can expect the EBITDA margin for hotel booking to increase from 29.2 percent in 2010 to 32.5 percent by 2017.

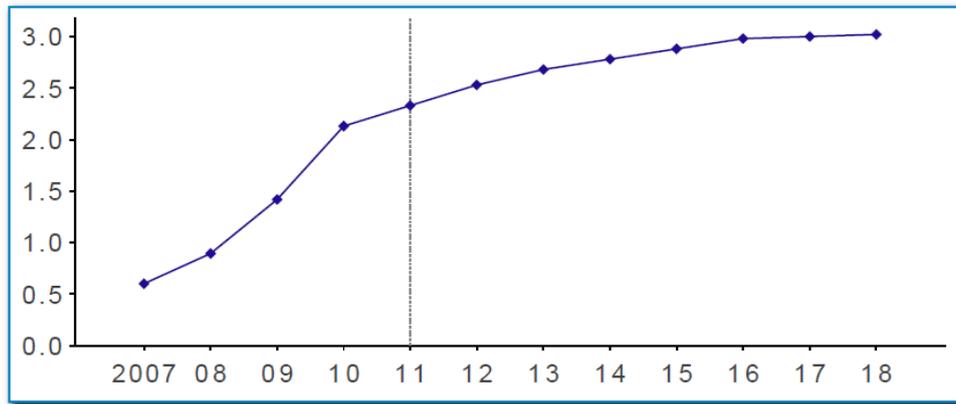
**Sources of value.** International business and hotel reservations are the main sources of value for Priceline. With the separation of Booking.com and Agoda, Priceline focuses on the development of operations in the international market, thus achieving 69 percent of the total number of gross bookings and 82 percent of total operating income. Growth in income levels in combination with a high growth rate in the developing countries of China, India and Southeast Asia, high growth in the budget of travelers outside the United States is also expected. The lack of standardization of travel services outside the US, along with the fragmented accommodation industry in Europe and the Asia-Pacific region, leaves a lot of room for achieving premium prices. International hotel reservations through Priceline and its dependent sites can contribute to achieving almost 59 percent of the total number of reservations and almost 67 percent on consolidation of operating costs.

**Hotel reservations.** Based on the selection of analyzes, the Priceline Hotel Booking Sector makes up 90.7 percent of the 520 dollars total stock price. The average daily rate per hotel room (Graph 2) refers to the average income per day from the booked (booked) hotel room. The average daily price per hotel reservation increase from 135 dollars by 2012, to 175 dollars in 2017.



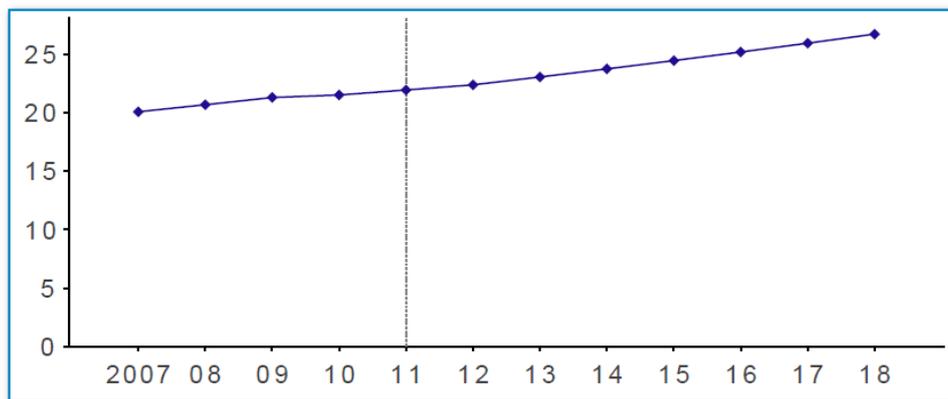
Graph 2: Average daily rate (ADR) per hotel room (\$)

The amount of the margin realized from the hotel booking relates to the percentage of gross hotel reservations made through various partner websites of Priceline. Revenue from the margin to hotel reservations is gradually increasing due to the Agoda.com site that is operational in the Asia Pacific region. The total margin for hotel reservations is slower and reach 25 percent by 2017, which is the end of the forecast period. Priceline market share of occupied hotel rooms (Graph 3) refers to the share of the total number of hotel rooms sold worldwide through the Internet.



Graph 3: Priceline market share of occupied hotel rooms (%)

Priceline has entered the global hotel reservation market and continuously increases the percentage of growth related to international business. Priceline will continue to increase its market share, with a reduced pace of up to 3 percent (or 185 million nights) by 2018. The global number of hotel rooms (Graph 4) refers to the total capacity of free hotel rooms in the world. Priceline reaches 26 million overnight stays by 2017. The estimate is that occupancy rates of hotel rooms by 2017 was on historical level of 65 percent.



Graph 4: Global number of hotel rooms (in millions)

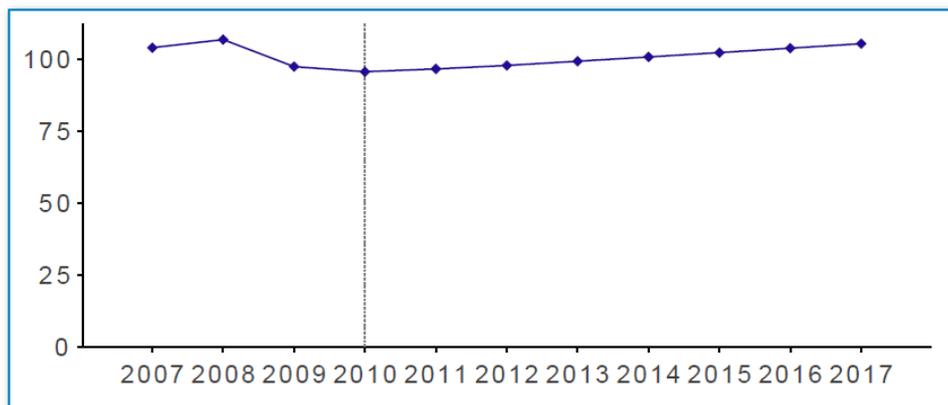
### 4.3. Expedia Corporate Overview

Expedia is an online provider that includes travel and accommodation information. It operates through tourist portals such as [expedia.com](http://expedia.com), [hotels.com](http://hotels.com) and [hotwire.com](http://hotwire.com) that connect travelers with hotels, airlines, shipping companies (cruises) and rent-a-car companies. Expedia corporate business is based on business through the Egencia website [20], which provides relevant tourism products and services to business partners in the tourism industry.

Expedia Media and Business is bound to advertise through the TripAdvisor Media Network [21], where information is collected and published, such as hotel descriptions that can interest travelers, various pre-booking research studies, generating revenue by offering hotel advertising and agencies. Hotel reservations make up 56 percent of the total price of Expedia's stock price, TripAdvisor.com represents 23 percent and Booking of air tickets 10 percent of the total stock price estimate. In addition, Expedia sells advertisements on the sites of these companies or pay-

per-click or charges ads depending on the length of advertising. Estimation of stock prices and total value of the enterprise was done by summing the value of individual departments of the company through individual analyzes. The value of each department of a company is calculated using the method of cash flow discounting (DCF).

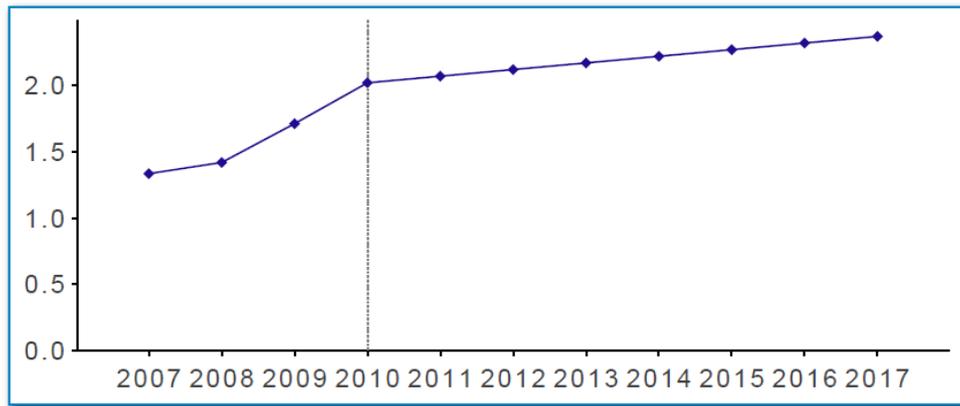
The forecast of basic DCF changes such as price, market share and profit margin for different parts of the company is estimating. The analysis below focuses primarily on important forecasts of the movement of stock prices and valuation. Current forecasts are that Expedia market share of reserved rooms is growing from 2.37 percent in 2017 to 2.64 percent by 2019. EBITDA margin is projected to decline from 22.9 percent in 2017 to 21 percent by 2019. The current EBITDA margin for corporate tourism services is growing from 12.6 percent in 2017 to 13 percent by 2019. It is possible that it be 1 percent less than the price estimate, if the EBITDA margin declines to a historical level from close to 5 percent in 2019. Expedia's Hotel Bookings business is a basic source of value for the following reasons. Margin profit on hotel reservations is much higher than the margin of earnings from airline reservations. The results of Expedia's earnings show that this ratio was 5 times higher for hotel reservations than airline reservations. Based on the selection of analyzes, the Expedia hotel reservation department makes up 55.7 percent of the 30.60 dollars of the total stock price. The average daily rate per hotel room refers to the average revenue per day from the booked (booked) hotel room. ADR is obtained by dividing the total annual income from the total number of occupied overnights per year.



Graph 5: Average daily price per hotel (\$)

The estimate is that the average daily rate per hotel room has been reduced from 101 dollars in 2011 to 110 dollars in 2013 and that it continues to rise to 127 dollars in 2017. The average daily price for hotel reservations slightly increases from 120 dollars in 2015 to 127 dollars in 2017. The amount of the margin realized from the hotel booking refers to the percentage of gross hotel reservations made through various partner sites of Expedia. According to the estimates of margins on hotel reservations, decreased from 23.5 percent in 2014 to 22.3 percent in 2017. Going forward, it can be expected that margin income to hotel reservations gradually drops from 23.2 percent in 2012 to 21 percent by 2018, which is the end of the forecast period. Expedia market share of occupied hotel rooms (Graph 6) refers to the share of the total number of hotel rooms sold worldwide through the Internet, rose from 1.3 percent in 2007 to 2.4 percent at the end of 2017. Next, we can expect an increase in market share to 2.8 percent by 2018, which is the end of the forecasting period.

The global number of hotel rooms refers to the total capacity of free hotel rooms in the world, increased from 20.1 million in 2007 to 24.3 million at the end of 2017, recording an annual growth rate of 3 percent.



Graph 6: Expedia market share of occupied hotel rooms (%)

Discussion of important findings related to research issues and hypotheses, critical evidence-based thinking is presented in next Chapter 5.

## 5. DISCUSSION

The context of the general hypothesis was observed by analyzing the comparative values of the competitors of Google, Priceline and Expedia: *“The higher is the level of responsiveness to different competence factors in the environment, the company is more innovative in technical, organizational and business sense.”* These companies are aware that business, technology and science have today been integrated into one system, one conversation and the strategy of a single world and a single market, prove that by using new technologies (such as mobile platforms for hotel reservations, mobile marketing, connectivity of the CMS, CRS, CRM, integration and social networking connectivity) make the technology factor larger, and technological innovations faster. Google, Priceline and Expedia are leading and proving their innovation capability through the principles of hypotheses H1 and H2. The faster changes in organizational factors, the higher the level of innovation in the company. The faster the adoption of new ideas in the company, the greater the factor of technology and technological innovation.

Indeed, the growing demands have emerged with CRS. The strategy includes increasing the speed of market entry, the quicker adoption of new ideas, through technological leadership or monitoring, with the widest scope and degree of innovation and the greater and better effectiveness of meeting the goals of the organization. The impact of the macroeconomic environment, the political and social stability or instability of countries and regions, the impact of new technologies and innovations and the impact of unforeseen events is only one of the factors of opportunity for these companies, which translate highly skilled external weaknesses into internal opportunities and turn global business into a local.

Just part of the innovative strategies of successful company are the availability of resources for innovation activity, the ability to understand competitive strategies and the evolution of activity from the point of view of innovation, the ability to understand technological development, the structural and cultural context of business units that support internal entrepreneurial initiatives and the ability of strategic management to deal with internal strategies.

## 6. CONCLUSION

At the time of technological change, some “greed is good,” others only “are on the wound”. In any case, all companies and most Google realized a smart way to generate additional revenue from search results and from earlier free services, creating hyper-profitable ones. Organizational changes have made it possible for users to progressively streamline the search services of the hotel and we can agree that Google has so far managed to provide the most relevant information, and the best user experience. At the same time, the price and availability of hotel content through the ability to display on Google Places and Google Maps also represent a natural progression of the company’s strategic goal in accumulating the deepest and most important depositaries of local content ever made on this planet.

Research aims to fill in a significant gap in literature by providing empirical evidence of on-line booking reservation systems and mobile internet usage. Based on the previously presented analyzes and facts, the most important recommendation to the future development of the reservation system is to adapt to a new marketing approach by developing a campaign that is fully aligned with the hyper-interactive requirements of travelers. Companies should strive and fight - to do more with less, and to do it better and faster than ever before. The reality is that today’s pace of technological change becomes a real threat to the future business of some hotel brands and companies they rely on in terms of products and services provided by these companies.

Key success factors should meet the needs of tourists with great success, such as ability to apply brand and program values in all operations; adaptability in identifying and meeting the needs of their guests from those with long-term brand relationships, the rapid process of globalization, which, under the influence of a new, development economy, the expectation of new challenges, from all sides, affect all areas of their business; and the flexibility of rapid acceptance of challenges and response.

The findings of the study obtained from the survey can be useful to managers of corporate brands and hotel owners in decision making, in formulating a new policy regarding their online distribution, revenue and strategies for brand optimization. Research results can have strong implications for companies that want to avoid uncertainty and failure in the market. The research limitations concern selection of variables that can be used to analyze financial data. One of the future issues that remain not clarified: Whether globalization of the tourism industry means a reduction of the total number of companies in the future. Some companies will survive, some not? Future research needs to explore the advantages and disadvantages of further reduction of platforming online booking.

## APPENDIX

### 8.1. Survey Mobile marketing in hotel industry

	2012 (%)	2013 (%)	2014 (%)	2015 (%)	2016 (%)	2017 (%)
Website re-design / design	18,0	22,0	19,6	16,0	16,34	20,2
Website optimization	9,0	11,3	12,8	10,0	10,1	13,7
Strategic links to the home page from the online directory	6,0	9,6	7,5	8,0	7,7	14,2
Paying for search engine marketing: Pay-per-click (PPC)	14,0	8,6	17,0	16,0	17,7	20,2
Local Search / Online Yellow Pages	3,0	3,6	4,2	4,0	3,4	4,7
Meta Search (Kayak, etc.)	2,0	2,6	2,6	3,0	2,6	4,3
Search Optimization (SEO)	10,0	11,5	8,7	12,0	10,5	13,4
Displaying on banners	6,0	6,6	7,0	5,0	7,6	7,6
E-mail marketing	10,0	11,5	8,7	7,0	11,0	12,3
Mobile marketing (mobile search, mobile sites, SMS messages, etc.)	n/a	n/a	n/a	2,0	4,5	6,9
Interactive web sites	1,0	3,1	3,0	6,0	2,9	n/a
Social media	n/a	n/a	n/a	n/a	7,5	11,7
Online video	n/a	n/a	n/a	n/a	4,3	7,9
Engaging an internet marketing agency	6,0	7,0	5,1	7,0	10,5	9,6

Table 1. Hotel total Internet budget, where will you spend the most money?

The *benchmark survey* “Mobile Marketing in the Hospitality Industry” was conducted in the period from 2012 to 2017, divided into the research of the hotel’s internet budget, the level of return on investment, the analysis of the exponential growth of mobile marketing, the percentage of use of mobile applications and searches, the impact of social media and marketing initiatives, as well as analysis of the success of video integration on the site of the hotel or agency.

### 8.2. Return of Investments (ROI)

	2012 (%)	2013 (%)	2014 (%)	2015 (%)	2016 (%)	2017 (%)
Website re-design / design	62,9	70,19	56,3	61,7	64,9	62,9
Website optimization	71,9	68,27	81,6	70,0	71,9	71,9
Strategic links to the home page from the online directory	52,7	41,35	48,3	48,3	46,5	52,7
Paying for search engine marketing: Pay-per-click (PPC)	40,7	39,42	56,3	38,3	47,4	40,7
Search optimization	68,3	56,73	60,9	38,3	65,8	68,3
Advertising by banner	16,2	12,5	28,7	58,3	14,0	16,2
E-mail marketing	58,7	60,6	51,7	21,7	59,6	58,7
E-mail sponsorship	6,6	26,0	37,9	48,3	3,5	6,6
Mobile marketing	n/a	n/a	n/a	10,0	14,9	n/a
Web / Social media (e.g. TripAdvisor, Facebook, Twitter, blogs, etc.)	16,8	26,0	37,9	15,0	n/a	16,8
Social media **	n/a	n/a	n/a	41,7	43,0	n/a
Online video	n/a	n/a	n/a	n/a	17,5	n/a

Table 2. Which internet marketing format gives you the best results and the highest return on investment (ROI)?

All respondents (hotels) in marketing research believe that the return on investment depends the most on the website optimization. Social media was presented last year as a separate category and do not fall too far from 43 percent. It shows dramatic changes in the perception of the past few years, the importance of sites and the possibility of earning a profit through them, such as Facebook, Twitter, etc. Social media is not a distribution channel, they have become one of the most important consumer information channels. Social media play an important role in defining their internet marketing strategy.

### 8.3. Exponential growth of Mobile marketing

	2018 (%)
Mobile site	37,50
Inclusion in mobile hobbyists	37,50
SMS text marketing	25,00
Mobile advertising via banner	12,50
iPhone application	8,90
I do not plan mobile marketing for 2018	38,40

Table 3. What type of mobile marketing do you plan?

Mobile marketing was introduced in 2010 as a special area and quickly became one of the most important tools that hotel lists consider as an advantage of use. As you can see in the Table 3, in 2018, about 37.5 percent of hoteliers are planning to create a mobile site and 37.5 percent engage in a mobile search for hotel accommodation. Over the past eight years, the mobile channel has become important in planning travel and booking reservations around the world. Guests of the hotel are mobile ready, so hoteliers must adequately respond to this growing need for mobile travel.

In 2018, existing and new companies will be focused on creating mobile sites, optimizing SEM, SEO, mobile social networking, creating interactive prize-winning games and content. Mobile applications make sense in good presentation of hotel brands (e.g. Marriott, Hilton, Starwood, etc.) with millions of users who are part of their loyalty programs, and as an additional option for these brands to well-developed mobile sites. Applications for smaller hotels have little chance of being discovered by mobile phone users.

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