

DIGITAL TECHNOLOGIES AND THE FORMATION OF ELECTRONIC COMMERCE IN THE GLOBAL TOURISM INDUSTRY

Yuldashev Kamol Sharifovich

*Head of the Department of Tourism and hotel management,
Bukhara State University (Uzbekistan)*

Davronov Istamkhuja Olimovich

*Department of Tourism and hotel management,
Bukhara State University (Uzbekistan)
kamolyuldashev1987@gmail.com*

Abstract. The emergence of electronic commerce became one of the defining processes in the modern transformation of the tourism industry. Between the end of the 1980s and the year 2000, the appearance of the World Wide Web and the rapid development of internet technologies gave rise to a new digital infrastructure of tourism services, within which online reservation systems, online travel agencies, search engines, price comparison services, and review platforms were successively formed. These innovations reduced the intermediary role of traditional travel agencies and shifted the booking of accommodation, of air tickets, and of tour packages into a direct online format. The present article examines, on the basis of a historical and chronological analysis, the key milestones in the formation of electronic commerce in tourism during this period, and it systematizes the main types of digital platforms that established the foundations of the contemporary online tourism market.

Keywords: electronic commerce, online booking, online travel agency, metasearch, World Wide Web, tourism platforms, digitalization, hotel reservation, air ticketing, tourism market.

Introduction

As the use of information and communication technologies in the tourism market became increasingly widespread, internet communication developed rapidly and opened new horizons for the organization of travel. Travelers gained the ability to study destinations remotely and to book tourism services online, which led to the formation of electronic commerce in tourism in a new format. The appearance of tourism web pages fundamentally changed both the structure of consumption and the competitive environment of the industry. The aim of the present article is to identify and to systematize, on the basis of a historical and chronological analysis, the key events in the formation of electronic commerce and of online booking systems in tourism between 1989 and 2000, which can be presented as follows.

Research methods

The study applied the methods of analysis and synthesis, the historical and chronological method, the comparative method, the systems approach, content analysis, and statistical analysis.

Discussion

Table 1. Chronology of the key milestones in the formation of electronic commerce in tourism, 1989 to 2000

Year	Innovation or platform	Contribution to electronic commerce in tourism
1989	World Wide Web (Tim Berners-Lee, CERN)	Foundation of the global information network; tourism services begin to move into an online format
1994	Travelweb.com; first travel blog (Jeff Griswold)	First unified global hotel catalog with online booking; birth of travel blogging and content marketing
1995	Internet Travel Network; Viator Systems; Lonely Planet	First online sale of an air ticket; online tour packages; digital guidebooks
1996	Bookings.nl; Expedia (Microsoft); Google; low-cost airlines	Direct online hotel reservation; search, comparison and purchase of travel products; budget air travel
1998	Lastminute.com (Hoberman, Lane Fox); Travelocity	Online sale of tours; reduced dependence on traditional travel agencies
1999	FareChase	First price comparison across hotels, airlines and agencies; basis for metasearch systems
2000	TripAdvisor; Booking.com	User reviews as a trusted information source; large-scale online reservation

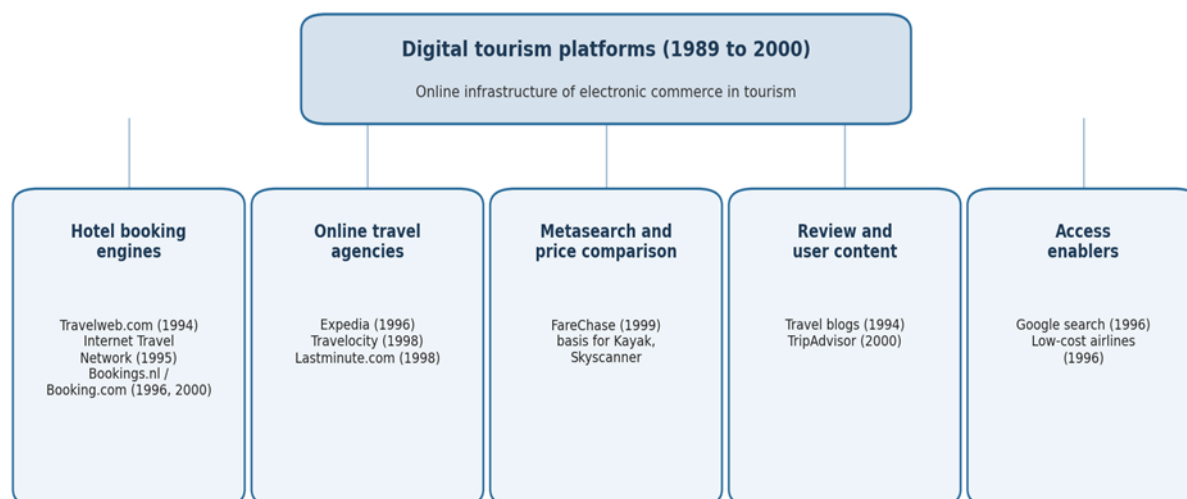


Figure 1. Classification of the main types of digital tourism platforms formed between 1989 and 2000

In 1989, the British scientist Tim Berners-Lee [1] put forward the concept of the World Wide Web (WWW), which became the cause of revolutionary changes in the process of information exchange throughout the world. Initially created at the CERN research center for the rapid exchange of documents and data between scientists, this system became widespread within a short time and laid the foundation for the formation of a global information network. The introduction of the World Wide Web gave people the opportunity to exchange data in the form of text, images, audio, and video materials on a single platform. This innovation radically changed not only social communication and scientific research but also exerted a significant influence on the service sector, in particular on tourism and hospitality. As a result, tourism services gradually began to move into an online format, namely the booking of air tickets and of hotel and transport services through the internet, the selection and purchase of tour packages through the websites of travel firms, and the receipt of detailed information about tourism destinations. The World Wide Web thus brought the system of tourism service provision to a new stage of development and became a solid foundation for the formation of modern capabilities such as online booking, virtual advertising, and interactive engagement.

In 1994, the use of internet technologies in the sphere of tourism entered a new stage of development. In that year the website Travelweb.com was created, uniting the hotel catalogs of the whole world into a single system and presenting them widely to the public. This web page not only provided information about various hotels but over time also began to offer tourists the possibility of online booking, thereby laying the foundations of the modern online reservation systems in tourism. The year 1994 was also marked by another important event, namely that Jeff Griswold [2] entered history

as the first travel blogger on the internet. He began to use virtual space to convey his impressions to travelers and to share experience, and in this way he opened a new format of communication. In Global Network Navigator, considered one of the first commercial web pages, Griswold [3] published a piece of about 1600 words. This publication not only conveyed the personal impressions of the author from his journey but also became one of the first examples of the modern, content-oriented sharing of tourism experience. In effect, this was the birth of blogging and of web content as new instruments of tourism marketing. The year 1994 therefore became a turning point in the history of tourism and hospitality, when the internet for the first time made it possible both to provide services and to form an environment for sharing impressions.

In 1995, the internet acquired particular significance for the sphere of tourism owing to the rapid development and practical introduction of internet technologies. In that year the company Internet Travel Network carried out, for the first time in history, the sale of an air ticket through the internet, for a flight from San Francisco to Las Vegas. This event became a most important step in the establishment of digital commerce in the tourism industry and laid the basis for the subsequent formation of systems for the online sale of air tickets. At the same time, the travel agency Viator Systems introduced an innovative approach by beginning to place and to sell tour packages and tourism services on internet pages, which significantly simplified the process of selecting and acquiring tours for travelers. In parallel, the company Lonely Planet, which had previously published extensive guidebooks and reference works for tourists in print, transferred part of its activity to internet platforms, and thanks to this it was able to broaden its audience and to provide information to travelers in a more prompt and convenient form. As a result of these processes, reservation and the receipt of information, which previously had been carried out mainly through travel agencies, gradually began to move into a digital format. Online booking, the selection of tours through the internet, and electronic guidebooks thus began to take shape as new standards on the global tourism market.

In 1996, the Dutch entrepreneur Geert-Jan Bruinsma [4] launched the system Bookings.nl, which made it possible to obtain information about hotels and to book them directly through the internet. For its time this project was extremely innovative, since it gave travelers the opportunity to select and to reserve accommodation without recourse to traditional travel agencies. Later, in 2000, the Bookings.nl system merged with the Bookings Online project, as a result of which a new and more advanced platform appeared that changed its address to Booking.com. Under this name the company began to develop rapidly and soon became one of the largest global online systems for hotel booking. Today Booking.com serves millions of users throughout the world, offering a wide range of tourism services, including the booking of accommodation and air tickets, the rental of cars, and other services. The headquarters

of the company is located in Amsterdam (the Netherlands), while the company itself operates throughout the world and is a recognized leader in the sphere of online reservation in tourism and in the hospitality business.

The year 1996 also became one of the key stages in the history of tourism and of the hospitality industry, marked by the rapid development of digital technologies. In that year the world's largest software corporation, Microsoft, launched its own online travel agency, the platform Expedia. This innovative project gave travelers the possibility to search for, to compare, and to acquire directly through the internet air tickets, hotel rooms, and tour packages, which led to a reduction in the intermediary role of traditional travel agencies. During the same period, Larry Page and Sergey Brin [5] developed the Google search engine, which provided rapid access to internet resources on a global scale, including information about tourism services and destinations, and which significantly accelerated the information-oriented development of tourism. In parallel, the airlines Ryanair, EasyJet, and Southwest Airlines actively introduced the low-cost model of budget air transport, which made it possible to sell air tickets directly through the internet. This innovation led to a noticeable reduction in the prices of air travel, expanded the possibilities for the use of air transport, and stimulated the development of mass tourism. The year 1996 thus occupied an important place in history, since it was then that digital innovations, namely online booking systems, search mechanisms, and budget air transport models, brought tourism services to a new global level of development.

The period from 1998 to 2000 stands out for the rapid development of internet technologies in the sphere of tourism. During this period, platforms such as TripAdvisor, Travelocity, LastMinute.com, and FareChase began their activity, and these online services opened fundamentally new possibilities on the tourism market. The platform TripAdvisor provided a wide audience with the reviews, the ratings, and the recommendations of travelers themselves, which promoted the development of subjective experience sharing and made possible an independent assessment of the quality of tourism services. Travelocity ensured convenient access to tour packages and air tickets through online booking systems. LastMinute.com offered special favorable deals for tourists planning a trip in the final days, which made it possible to form a new segment of tourism consumers. FareChase, in turn, compared prices on various tourism websites and gave users the possibility to select the most suitable option. The period from 1998 to 2000 thus entered the history of the tourism industry as an important stage connected with the broad development of online reviews, of accessible price offers, and of last-minute booking possibilities.

The year 1998 became a turning point in the history of the tourism industry. In Europe, Brent Hoberman and Martha Lane Fox [6] launched a web platform specializing in the online sale of tourism tours. Thanks to this service, travelers gained

the possibility not only to obtain detailed information about the destinations they were planning but also to book the necessary services directly online. This event became an important step toward a gradual move away from dependence on traditional travel agencies and contributed to the popularization of independent travel planning. In the same year, the large online system Travelocity began operating in the United States, providing tourists with the possibility to search for and to purchase air tickets, hotels, and tour packages through the internet, which accelerated the process of the global digitalization of tourism services. The year 1998 thus entered the history of tourism as a time when online booking and rapid access to tourism information expanded significantly, laying the foundation of the modern infrastructure of online tourism that took shape in the following decades.

The year 1999 became a further important stage in the development of online services in tourism. In that year the web platform FareChase began operating in the United States, offering an innovative solution for the tourism market. It united the tariffs provided by hotels, airlines, and travel agencies and gave users the possibility to compare them. In addition, through FareChase tourists could directly purchase the selected services online. This brought the process of decision making on the tourism market to a new level based on the comparison of prices. Subsequently the FareChase platform was acquired by the company Yahoo, and its experience formed the basis for the creation of the globally known systems for comparing the prices of tourism services, such as Sidestep, Kayak, TravelSupermarket, and Skyscanner. FareChase thus remained in history not only as an innovative platform of its time but also as one of the first projects that created a scientific and practical basis for the formation and development of metasearch systems on the online tourism market in the following years.

The year 2000 became one of the key stages of the digital revolution in tourism, for it was in that year that the platform TripAdvisor was founded, which today is considered one of the most popular tourism web resources in the world. The initial concept of TripAdvisor differed fundamentally from other online booking systems, since on the platform hotels and other providers of tourism services did not have the possibility to sell their services directly. TripAdvisor was initially positioned as an interactive space where travelers could leave their impressions and reviews of the hotels, restaurants, and attractions they had visited and of their tourism experience in general. Such an innovative approach gave rise to revolutionary changes in the tourism industry, since the real reviews of users came to be perceived as a more reliable source of information in comparison with traditional advertising and marketing strategies. As a result, TripAdvisor turned into a global platform that played an important role in the formation of content-based consumer decisions, in the strengthening of competition

between hotels and other objects of the tourism infrastructure, and in ensuring a sustainable improvement in the quality of the services provided.

Conclusion

The historical and chronological analysis shows that between 1989 and 2000 the tourism industry passed from the first experiments in online information exchange to a mature digital infrastructure of electronic commerce. The successive emergence of hotel booking engines, of online travel agencies, of metasearch and price comparison services, and of review platforms consistently reduced the dependence of travelers on traditional intermediaries and transferred the booking of accommodation, of air tickets, and of tour packages into a direct online format. As a result, electronic commerce became the structural foundation of the contemporary tourism market and reshaped both the structure of consumption and the competitive environment of the industry. The further study of these processes is of practical importance for destinations such as Uzbekistan, where the development of national online booking and information systems can substantially increase the competitiveness of the tourism sector.

REFERENCES

1. Berners-Lee T., Fischer R. The World Wide Web: The History of Its Creation and Development. Moscow: Mir, 2003. 284 p.
2. Buhalis D., Law R. Progress in information technology and tourism management: 20 years on and 10 years after the Internet, the state of eTourism research // Tourism Management. 2008. Vol. 29 (4). P. 609-623.
3. Gretzel U., Sigala M., Xiang Z., Koo C. Smart tourism: foundations and developments // Electronic Markets. 2015. Vol. 25. P. 179-188.
4. Kotler P., Bowen J., Makens J. Marketing for Hospitality and Tourism. 7th ed. Pearson, 2020. 720 p.
5. Minaev D. A. Electronic Commerce in Tourism. Moscow: Yurait, 2021. 298 p.
6. Xiang Z., Tussyadiah I. Information and Communication Technologies in Tourism 2020. Springer, 2020. 620 p.
7. Molchanova N. I. Digital transformation in the tourism industry: trends and prospects // Vestnik RMAT. 2021. No. 2. P. 45-52.