

Islamic Digital Tourism: Content Analysis of Smartphone Applications in Algeria

Author:

Houria Nehari

Permanent Researcher –A-Scientific and Technical Research Center for the Development of the Arabic Language, Unit Tlemcen, Algeria

Email: nhari15@hotmail.fr

Abstract

The success of tourism marketing in today's world heavily relies on the availability of information and communication infrastructure. Electronic media, social media, and digital applications play a vital role as global marketing strategies. The accessibility of electronic applications to diverse segments of society has prompted numerous companies to invest in this advantage, leveraging it to improve customer communication and promote their products and services. This research paper specifically explores the introduction of electronic tourism applications in Algeria and examines their significance in activating tourism marketing efforts. The main objective of this paper is to address the following question: How do tourism applications in Algeria contribute to the creation of effective marketing content that supports and fosters tourism development?

Keywords: Digital Tourism, Smartphone Applications, Algeria, Impact, Marketing

Introduction:

According to united national world tourism organization (UNWTO) data, world tourism visitors reached 1.3 billion in 2001, while in 2021, it is estimated that 2.3 billion tourists have traveled. Tourists do not only travel conventionally but also online or using the internet. (Roziqin, Kurniawan, & Hijri, 2023, p. 3) For example, smartphones and intelligent tourism are powerful tools for visitors to aid in traveling. The ownership of different technology devices impacts the contribution of mobile travel bookings to the entire travel industry (Adeola & Olaniyi Evans, 2019)

Digital tourism is an information service system based on networks, technology and databases (Wu, 2020) Digital or electronic tourism (e-tourism) combines one of the fastest-growing technologies, such as telecommunications and information technology, the hospitality industry and strategic planning (Horvath & Happ, 2020)

The findings of a global traveller survey of 13,000 individuals conducted by Travel

Port, the leading Travel Commerce Platform, have been released, highlighting the usage of digital tools while planning, booking, and enjoying a journey.

The main results from the global reports are:

- **When planning a trip:**

- 81 percent use peer-to-peer reviews when planning a vacation
- 47 percent use voice search, such as Amazon Echo and Google Home, when planning a trip
- Nearly a quarter of those over 60 use a smartphone to plan a trip

- **When booking a trip:**

- More than 35% of travellers plan their vacation on their phones.
- 63% of people avoid staying in hotels that charge for Wi-Fi.

- **When on the trip:**

- 62% of travellers feel that a good digital experience is important when choosing an airline
- 75 percent of travellers say that digital boarding cards make travelling so much simpler
- At their destination, 47% of travellers rely on their smartphone.

- **When at the destination:**

- When travelling, travellers utilize an average of 18 different types of apps.
- On review sites, 78 percent of travellers provide feedback.

In today's era, the reliance on smartphones has significantly increased, and they have gained immense popularity worldwide. Consequently, the demand for accessing information on the go has become more pressing than ever. This demand has given rise to the necessity for innovative and efficient electronic applications that facilitate quick, easy, and expedient transactions for users. Marketing through electronic applications primarily focuses on creating captivating content that attracts a larger pool of potential customers. Embracing electronic applications in the tourism industry and the overall economy enhances the value of tourism products and propels tourism development to global horizons. Major global technology companies now prioritize the development and regular updates of these applications, as they recognize the significance of catering to customer interests in various aspects of life.

Importance of the Study and Objectives:

The significance of this study stems from its focus on a recent topic within the tourism field, namely the utilization of smartphone applications in tourism activities and services. It sheds light on the crucial role of information technology in the tourism industry.

The objectives of this study, which serves as an exploratory examination of smartphone applications and mobile devices in the Algerian tourism sector, are as follows:

- 1- To identify and introduce the various smartphone applications used in the tourism industry.
- 2- To analyze the characteristics of these applications, including their names, objectives, operating platforms, pricing (whether they are free or paid), available languages, and release dates.

Problematic

This research paper focuses on introducing electronic tourism applications in Algeria and identifying their role in activating tourism marketing. The study aims to answer the following questions:

- 1- What are the characteristics of smartphone applications that promote tourism in Algeria? This includes examining the application's name, objectives, operating platform, pricing model (free or paid service), available languages, and other relevant attributes.
- 2- To what extent do tourism applications in Algeria contribute to the creation of effective marketing content that serves and fosters tourism development? This question delves into assessing the impact of tourism applications on successful marketing strategies that facilitate tourism development and growth.

By addressing these problem statements, the study aims to provide valuable insights into the role of electronic tourism applications in Algeria and their influence on generating impactful marketing content that drives tourism development.

Limits of the study

- **Objective limitations:** The study specifically examines the use of smartphone applications in the tourism field, excluding other aspects of technology or marketing strategies.
- **Qualitative limitations:** The study's qualitative analysis is confined to the context of tourism in Algeria, limiting the generalizability of findings to other regions or countries.
- **Geographic limitations:** The study's scope is restricted to the country of Algeria, neglecting insights from other global tourism destinations.
- **Time limitations:** The study was conducted within a specific timeframe from September to November 2021, which may not capture recent developments or changes in the use of smartphone applications in tourism beyond that period.

Study population

The study focused on (11) electronic applications, as the researcher identified the

applications related to tourism in Algeria. These selected applications were included in the study sample for analysis and examination.

Research methods:

The study used content analysis as a suitable method for analyzing the characteristics of smartphone applications and mobile devices, in order to extract indicators that can be used later in the development of smartphone applications, as well as to identify and analyze the features of current applications. We used the following tools:

- Google Play Store, for smartphones running on the Android system,
- App Store, which is a platform for distributing digital applications for iOS.

Literature Review:

Suriya MS, and all (2021) have confirmed that tourist industry is rapidly evolving, with a growing adoption of numerous tools, technologies, and digital platforms, mostly to improve customer experience, establish strong loyalty, and manage businesses more effectively. Mobile apps, social media, Big Data Analytics, artificial intelligence (AI) and machine learning, virtual reality (VR), and augmented reality (AR) are just a few examples (AR) . (Suriya, Kamalaveni, Sakthivel, & Vignesh, 2021, p. 36)

Zheng, Huang, & Oraltay (2023) have analyzed the intellectual structure of digital cultural tourism research via multidisciplinary lenses. Two hundred and eleven related academic articles from 1996 to 2021 were retrieved and analyzed using a bibliometric visualization approach. Five research themes were identified, including changing the discourses of cultural tourism, historical site reconstruction, travel route information, smartphone-mediated cultural tourism, and virtual cultural tourism. The study further analyzed the research progress and proposed a future research agenda. (Zheng, Huang, & Oraltay, 2023)

Theodora, Charoula, & Maro (2013) have discussed the growing interest in mobile technologies and applications, particularly in the tourism sector. The paper examines the conditions under which mobile technologies can be applied in the tourism sector, and maps the mobile tourism applications based on specific dimensions of proposed business models resulting from an extended literature review. The development of mobile applications is favored by three factors: maturity of the mobile network infrastructures, advanced mobile hardware, and increasing demand for mobile applications/services. The paper identifies the most popular mobile tourism applications for navigating and disseminating information to end-users/travelers using their smartphones as a channel. (Theodora, Charoula, & Maro, 2013)

Masrury, Fannisa, & Alamsyah, (2019) have analyze user reviews of two popular

OTA mobile applications, Traveloka and Tiket.com, using Text Mining models such as Sentiment Analysis and Topic Modeling. The study identifies the MappSql dimensions that are most important to users, such as reliability, responsiveness, and ease of use. The study finds that positive or negative sentiments towards MappSql dimensions of online travel agent applications qualities can be revealed using sentiment analysis method. Topic modeling method is used to bring up groups of important words of topics related to each mobile application service quality dimensions. The paper concludes that the findings could be useful for companies in the tourism industry to improve their mobile applications and increase user satisfaction. (Masrury, Fannisa, & Alamsyah, 2019)

Graham, Dann, Dennison, & Philip (1988) have contributes to the field of mobile-based tourism information by presenting a content analysis of articles related to the topic. It identifies research tendencies and implications of yearly research trends, research subjects, statistical analysis techniques, research methods, research models, and theories related to mobile tourist information. The paper highlights the need for a systematic study of domestic mobile tourist information and the lack of research on content analysis. The findings of this paper can be used to guide future research on mobile tourist information and improve the quality of mobile-based tourism services. (Graham, Dann, Dennison, & Philip, 1988)

Chih Chang (2014) has investigated mobile users' intention to adopt smartphone applications (apps) for accessing tourism services. A research framework was proposed and empirically tested using data collected from a survey on mobile users. Innovation diffusion theory and media selection theory were used to explore and explain mobile users' intention to adopt smartphone-enabled tourism services (STS). Among the investigated factors, functionality, usability, situational factor, image, relative advantage and low complexity were found to significantly affect users' intention to adopt STS. Social influence was found to significantly affect image, thus indirectly influencing users' intention to use STS. Based on the findings, the tourism industry should focus on the validated factors for developing STS in a ubiquitous commerce environment. The research findings can help managers and decision makers in the tourism industry keep pace with research on consumer attitudes and innovations in smartphone applications, and make favorable tactics to catch the benefits offered by STS in the ubiquitous commerce environment. (Chih Chang, 2014)

Suid & Boon Quah (2022) have discovered that the level of Aesthetics, Informativeness, and Interactivity on customer-facing websites is a critical characteristic of each country's official website in Southeast Asia. The results were generally fair in one dimension but lacked to attract visitors. Visitors will be driven and facilitated to visit the tourist place if the website is functional, informative, and engaging. Furthermore, visitors value the destination more because of the price collection and special tourist marketing price. Therefore, a company should communicate with them, expose their advertisement, and increase consumer

interaction to keep loyal visitors. As a result, this situation allows tourism destination management to promote client loyalty. The outcome is helpful to destination managers, but it also provides insight for policymakers and tourist organizations to market their destinations via Internet media. Indeed, this information will support the tourism office's website's credibility. However, in truth, the tourism website's destination represents a country. Overall, tourism websites in Southeast Asia have been highly effective in attracting tourists to their respective countries websites (Suid & Boon Quah, 2022, p. 52)

Federica (2019) has proposed the Smart Tourist App (STAPP), which is a mobile travel assistant that integrates the functionalities of a traditional city card with the specificities of mobile devices. The proposed app is based on the Kano Model and the Analytic Hierarchy Process (AHP) methodologies, which allow categorization and ordering of service attributes according to how they are perceived by customers, and estimate their impact on customer satisfaction. The paper concludes that the STAPP has the potential to enhance the tourist experience and increase customer satisfaction. (Federica, 2019)

Ricardo, Metrôlho, & Ribeiro (2019) have presented the development of a mobile application for inclusive tourism that provides personalized recommendations of points of interest for users based on their location and profile. The application stands out by allowing an automatic filtering of information, considering the user's situation, and providing more personalized and relevant information. The main contribution of this paper is the development of a mobile application that can help tourists with disabilities or restrictions to obtain information and recommendations of points of interest that are suitable for their situation, contributing to better inclusion (Ricardo, Metrôlho, & Ribeiro, 2019)

Batool, Al, Essa, & all (2020) have contributed to the design and implementation of a web application named "travel key" that aims to improve the tourism industry by providing accurate and relevant information about tourism places such as location, restaurants, and events. The proposed application uses the Unified Modeling Language (UML), Microsoft Access 2010, and ASP.net, HTML, CSS, Visual basic programming languages. The proposed tourism system will be able to provide the tourists with recommendations for places to visit based on their preferences. The paper also highlights the challenges faced by the tourism industry and the need for smart tourism systems that take advantage of recent advances in communication and information technology. (Batool, Al, Essa, & all, 2020)

The applied study:

In this section of the research, we will define smartphone applications that promote tourism in Algeria—the sample of the study—and analyze their characteristics (application name, audio and visual quality, interactivity, sound effects, evaluation, distracting factors (advertisements), type of service, its services, features, and drawbacks).

Siyaha DZ app: The project was launched in 2016. It is primarily a service application that displays a limited range of hotels, indicating the services they provide, their locations, and prices. These texts are accompanied by some images, all of which are medium-quality photographs. The French language is used in this application. It is associated with an email, phone number, and a Facebook page. One of the drawbacks of the application is slow opening.

Tristansoft Algeria Guide app:

An application based on Arabic as the main language, incorporating four iconic areas:

- The field of tourist attractions: It contains popular tourist attractions, where a tourist place is chosen and a picture of it is displayed with information about the place such as the date of establishment and its contents, and it provides several iconic windows that help in accessing the place and enjoying and roaming in it, including location maps, nearby hotels , restaurants and a YouTube video to get to know the place, the photos are of high quality
- Proximity field: This field provides the ability to determine the distance between the customer's location and the place he chose to visit
- Hotels field: This field does not contain any information
- World field: This field does not contain any information

"Algeria's in Image app:

The Arabic language is used as the main language, and English is used in some places. The application includes several iconic areas, which are:

- 1- Category: It contains a collection of images distributed across the administrative states of Algeria. The images are characterized by high quality, with the ability to like and zoom in on them.
- 2- Wallpapers: It contains a collection of images displaying the beauty of tourist places in Algeria.
- 3- Excellent Wallpapers: It contains a collection of images unrelated to tourism in Algeria.
- 4- GIF Images: It does not contain any content.
- 5- Live Wallpapers: Empty of content.
- 6- Search: Users can search for the tourist destination they wish to visit. One of the application's drawbacks is the extreme slowness when opening, and sometimes it fails to open."

Algeria Excursion App:

It is based on the Arabic language and contains 53,758 classified tourist sites into several categories: administrative area 814, inhabited place 8,118, plants 388, local area 3,191, underwater 2, street 4, hypsography 16,386, hydrography 16,398, location 8,457. Tourist sites can also be shared through social media platforms

such as Facebook, WhatsApp, and Instagram. The application does not contain any photos or videos.

ONAT App:

It is based on the French language and includes a number of iconic areas:

Desert trips: It displays different tourist destinations, where each interface presents the trip program, duration, mode of transportation (by land or air), trip expenses, and the possibility of online booking.

Domestic accommodation: It showcases the most important heritage tourist places in ancient Algeria. For each destination, the program and duration of the stay are displayed, with the option of online booking.

Trips: It offers organized trips to places in Algiers.

Hajj and Umrah: Provides information about the dates of Hajj and Umrah. It contains many pictures distributed according to the types of tourism promoted, in addition to a collection of professional and high-quality pictures that serve as a good attraction for tourists from inside and outside. It also includes promotional flashes about organized tourist programs in the form of short video clips. This application promotes tourism in its various types and styles. The application is linked to my Facebook and Instagram pages.

Tourism Algeria app:

It is based on the English language, and it includes introductory pages about six Algerian cities. It does not contain any images, videos, or links.

Tahwissa dz app:

It is based on the French language, equipped with Google maps, and includes a number of iconic areas such as hotels, travel agencies, restaurants, museums, resorts, sports and leisure, arts and culture, tourist guide, and provides the ability to search for everything mentioned across the entire national territory by providing the search feature and relying on GPS technology.

Visas and Travel Algeria app:

The application was launched in January 2018 by TSA Media Company in France.

It is based on the French language and includes several iconic categories:

News: It focuses on following travel news and trips around the world.

Visa application form for many countries around the world.

Videos: Displaying travel news and updates through videos.

News and Discounts: Displaying discounts and offers on flight and hotel prices worldwide.

Places, Meals, and Traditions: Providing information and guidance about tourist destinations based on food culture and traditions inside and outside Algeria.

Advertising: Providing the ability to advertise and promote tourism products through this application. The application is distinguished by high-quality photos and videos. The application is linked to social media platforms such as Facebook, Twitter, and YouTube.

Dzair Voyages app:

It is based on the French language and includes the following categories:

Hajj and Umrah: Offers for Hajj and Umrah by different travel agencies, including travel and accommodation details, transportation, and living arrangements.

Organized trips: Offers various organized domestic trips in a competitive manner in terms of prices and organization.

Accommodation: Offers both domestic and international accommodation options from different travel agencies.

Cruise trips: No offers available.

Itinerary: No offers available. No social media links provided.

Algerian Landmarks App:

This application was designed by the Algerian developer, who called himself Abu Adam al-Jazairi. It is based on the Arabic language and includes a number of iconic areas:

Northern Algerian landmarks: It includes a collection of images without information for cities in northern Algeria.

Southern Algerian landmarks: It includes a collection of images without information for cities in southern Algeria.

Eastern Algerian landmarks: It includes a collection of images without information for cities in eastern Algeria.

Western Algerian landmarks: It includes a collection of images without information for cities in western Algeria. The images are of medium quality. The application includes advertisements and can be shared on social media platforms.

Algeria hotel booking app:

It is based on the English language and includes a number of iconic fields:

- About Algeria: A brief geographical introduction to Algeria
- Hotel booking: Failed to load the page to see its contents
- Top 10 cities: Introduction to ten Algerian cities geographically, with the number of hotels specified
- Contact: Providing contact numbers for services related to providing security and comfort in case of danger
- Commonly used phrases: Specifies a number of commonly used phrases in colloquial language and provides their translation in English
- Do's and Don'ts: Identifying desirable behaviors by Algerians and behaviors that are completely rejected in the Algerian environment

The application is very useful in terms of its content, but it is boring during browsing as it completely lacks images and videos.

Data Analysis: Through downloading the study sample applications, examining them, and attempting to uncover their features and drawbacks, we sought to find answers to the initial research question: what extent do tourism applications in Algeria contribute to the creation of effective marketing content that serves and fosters tourism development? This question delves into assessing the impact of tourism applications on successful marketing strategies that facilitate tourism development and growth.

After the applications of the study community were limited to 11 electronic

applications that are concerned with tourism in Algeria, they were downloaded to the smart phone and the applications were opened to explore their features and display them in the aforementioned element. Provided by the owner of the product, the number of downloads, the evaluation review of the application, and the approved language, and the results were as follows:

- 1- In terms of the service provided: 63% of the applications are satisfied with defining the tourist attractions in Algeria without any promotional or marketing plan, and 27% of them are interested in presenting offers of travel agencies and hotels, which is an important tourist service, while the rest of the applications are concerned with following up on travel news.
- 2- In terms of identifying the product owner: 81% of applications, the product owner (electronic application) is unknown, which reflects a negative image of the product itself.
- 3- In terms of the number of downloads: The percentage of the number of downloads ranged between 100 downloads to a thousand downloads, and the highest percentage reached 10 thousand downloads. This reflects two things: either the lack of quality of the application or a lack of awareness of the importance of tourism electronic applications. Overall, the number of downloads is weak compared to international applications. Famous in the tourism field, which amounts to millions.
- 4- In terms of review evaluation: Review evaluation rates reflect the lack of quality of the product and its importance to users.
- 5- In terms of the approved language: French was adopted by 45%, while the remaining percentages were divided equally between Arabic and English. This statistic does not reflect any clear trend to adopt a specific language in the field of tourism promotion.

Conclusion:

- 1- The primary goal of designing this type of application is tourism promotion, but the applications subject to the study did not reflect a positive image of tourism, so that the absence of a marketing plan appears clearly.
- 2- The absence of the quality component related to accompanying images and videos in most applications
- 3- The difficulty of opening the application and its extreme slowness reflect clear design problems
- 4- The linguistic content of electronic applications is weak so that it does not attract the user to tourism in Algeria
- 5- The electronic applications market lacks qualified technicians to create and develop applications
- 6- The difficulty of finding investors who can encourage this tourism promotional means and the way it grows and invest in this field, due to its novelty.

Recommendations:

- 1- The need to support Arabic content in tourism electronic applications.
- 2- The need for financial support for electronic application designers to open the door to tourism investment

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