

# The Digital Marketing Practiced by the Moroccan Tourism Sector: National-scale Communication Actions and Environmental Management

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**Abstract-** Tourism plays a crucial role in the economic growth of Morocco. To promote the country, the tourism sector has adopted innovative digital marketing strategies highlighting its cultural diversity, breathtaking landscapes, and legendary hospitality. Social media, travel blogs, and online booking platforms have been utilized to reach a wider audience and enhance Morocco's visibility as an attractive tourist destination. This study focuses on the impact of communication actions and environmental management on the Moroccan tourist experience. Its objective is to evaluate the effectiveness of national-scale digital marketing practices and examine the environmental impact of these activities on the tourist experience. A sample of 100 participants was utilized for this quantitative study. The results of the statistical analysis revealed a positive correlation between communication actions and environmental management with the tourist experience in Morocco. Future research perspectives include exploring the opportunities offered by the Metaverse for the Moroccan tourism sector. These findings underscore the importance of continuing to promote sustainable practices and enhancing the tourist experience in Morocco.

**Index Terms**—Digital Marketing, Moroccan Tourism Sector, Digital Communication, Communication Actions, Environmental Management, Online Marketing Strategies, Responsible Tourism, E-Tourism, Social Media, E-Tourism, Cultural Tourism, Metaverse, Virtual Tourism, Digital Communication, Digital Marketing, and COVID-19.

## 1 Introduction

The tourism industry plays a crucial role in the global economy and has faced unprecedented challenges in recent years due to the Covid-19 pandemic. However, despite these difficulties, the sector has shown remarkable adaptability and innovation, particularly in the use of digital marketing to promote tourist destinations. In this article, we focus on the case of the Moroccan tourism sector and examine its national communication actions and commitment to environmental management.[1]

Based on key figures for 2021 and 2022, despite the disruptions caused by the pandemic, global tourism has started to gradually recover. According to the latest UNWTO World Tourism Barometer report, international tourist arrivals nearly tripled from January to July 2022, with a growth rate of 172% compared to the same period in 2021, allowing the sector to recover nearly 60% of its pre-pandemic level. This recovery can be partly attributed to the efforts made by tourism industry stakeholders to adopt innovative digital marketing strategies[7].

In Morocco, tourism plays a vital role in the country's economic growth. This sector has also witnessed significant advancements in national communication. Targeted digital marketing campaigns have been implemented to promote the country's attractions, highlighting its cultural diversity, breathtaking landscapes, and legendary hospitality[3]. The use of social media, travel blogs, and online booking platforms has helped reach a wider audience and enhance Morocco's visibility as an attractive tourist destination. In 2019, the country welcomed 12.9 million visitors at border posts, contributing 7% of GDP and 20% of exports of goods and services. This industry has also generated approximately 550,000 jobs, representing 5% of the workforce [9]. The sector contributes significantly to wealth creation, unemployment reduction, and poverty alleviation[2]. These remarkable results can be attributed to two main factors. On the one hand, Morocco has implemented a substantial public-private investment program since its independence. On the other hand, the country has improved its competitiveness at the continental level over the past decade. However, despite these achievements, several challenges hinder job creation, value addition, and sustainable development in this sector [8].

Furthermore, the Moroccan tourism sector has also shown an increasing commitment to environmental management within the framework of what is known as "ECO-RESPONSIBLE, FAIR, AND SUSTAINABLE TOURISM IN MOROCCO." Since January 2006, Morocco, with its diverse landscapes, has combined ecological responsibility and sustainable tourism, positioning itself as a leader in the field through the Moroccan Charter for Responsible Tourism signed by over 60 cities, promoting tourism that respects humans, the environment, and values the cultural heritage of different regions. Aware of the importance of preserving natural resources and promoting sustainable tourism, the country has implemented measures to reduce the carbon footprint of the tourism industry. This includes initiatives recognized for their environmental responsibility, encouragement labels, and the valorization of nature reserves, with projects such as the wastewater treatment plant in Marrakech and the Noor thermodynamic solar power plant in Ouarzazate. In addition, Marrakech has hosted COP events, reinforcing its international commitment to combating climate change, organizing COP7 in 2001 and COP22 in 2016, marking the beginning of a sustainable commitment and the launch of the "Blue Belt" initiative to stimulate the fishing sector [9].

This study focuses on the following main objectives: firstly, to analyze the current practices of digital marketing used by the Moroccan tourism sector; secondly, to evaluate the effectiveness of national communication actions in the Moroccan tourism sector; thirdly, to examine the environmental impact of digital marketing activities in the Moroccan tourism sector; and finally, to identify the challenges and opportunities related to environmental management in the digital marketing of the Moroccan tourism sector, in order to provide recommendations to enhance the effectiveness of national communication actions and environmental management in the digital marketing of the Moroccan tourism sector.

This study encountered several limitations, including limited data access regarding digital marketing strategies and their interdependence with various factors. Other limitations include the rapid evolution of technologies and practices at the national level, geographical limitations (the research focuses on the Moroccan tourism sector, limiting its generalizability to other geographical contexts), and sustainability-related difficulties. Given that sustainability measures can vary, it can be challenging to determine whether digital marketing practices actually contribute to environmental sustainability goals.

The research problem addressed in this study can be articulated as follows: "What is the impact of communication actions and environmental management conducted by the Moroccan tourism sector at the national level on the Moroccan tourist experience?" This problem highlights

the challenge of striking a balance between digital marketing strategies used to promote the Moroccan tourism sector at the national level and the aspects of environmental management. It raises questions about how tourism industry stakeholders can leverage the benefits of digital marketing while minimizing environmental impact, promoting responsible tourism, and preserving the country's natural resources.

To analyze our sector, a comprehensive understanding of the context is necessary. We have opted for a quantitative study to understand the impact of communication actions and environmental management actions of the tourism sector on the Moroccan tourist experience. We seek to understand how communication actions and environmental management actions influence the Moroccan tourist experience by examining the relationships between these variables and identifying key factors that contribute to the impact.

This work brings significant added value by providing insights into best practices in digital marketing by the Moroccan tourism sector, such as the most effective communication actions and appropriate targeting strategies. It also helps identify the most effective environmental practices for the Moroccan tourism sector, such as waste management and preservation of natural resources. This information can assist the Moroccan tourism sector in improving its sustainability and attracting more tourists. The main message of this scientific research is to understand how the Moroccan tourism sector utilizes digital marketing to promote its activities and manages the impact of environmental management on the Moroccan tourist experience.

This work is relevant to various audiences interested in researching and analyzing digital marketing and environmental management practices in the Moroccan tourism sector. It targets researchers, academics, tourism professionals, doctoral students, trainee researchers, government organizations and institutions, and the general public interested in sustainable tourism. The primary objective of this study is to understand how these communication actions influence the visibility, attractiveness, and sustainability of tourist destinations in Morocco. The article adopts a structured approach in four steps: the introduction (which we have just écovered), the methodology we adopted, the results we obtained, and the discussion to provide an in-depth analysis of this crucial subject for the tourism industry in Morocco.

## **2 Methodology**

This study adopts a positivist paradigm, emphasizing empirical observation and objective verification of data in the investigation of Digital Marketing in the Moroccan tourism sector. Quantitative data was collected using a structured questionnaire to analyze and observe the facts. The aim is to establish causal relationships between variables and enhance understanding of digital marketing practices, informing effective strategies for improvement.

The explanatory variables in this study are communication actions, which include the various strategies, channels, and content used by the Moroccan tourism sector to communicate with tourists, and environmental management actions, which specifically concern the initiatives implemented by the Moroccan tourism sector to manage and preserve the environment, such as waste management, renewable energy use, implementation of eco-friendly transportation, preservation of natural resources, etc.

The dependent variable in our study is the Moroccan tourist experience: the experience lived by tourists during their visits to Moroccan cities, including their perceptions, emotions, satisfactions, and overall evaluations. We suggest the following hypotheses:

H0: There is no significant impact of communication actions and environmental management conducted by the Moroccan tourism sector at the national level on the Moroccan tourist experience.

H1: There is a significant impact of communication actions and environmental management conducted by the Moroccan tourism sector at the national level on the Moroccan tourist experience.

## **2.1 Study description**

This study employed an online approach, utilizing web and social media platforms to collect data from participants. Social media platforms like LinkedIn, Facebook, and Instagram played a vital role in promoting and mobilizing participants for the study. This online method facilitated broad accessibility and reach, allowing data collection from diverse regions.

The research was conducted during the post-Covid period, following the emergence of the pandemic and related mitigation measures. It spanned three months and focused on analyzing digital marketing strategies, national-scale communication actions, and environmental management in the Moroccan tourism sector within this context. This duration provided insight into the effects of the pandemic on digital marketing practices and allowed for an examination of measures taken by the tourism sector to adapt and enhance the tourist experience.

The study population comprised 100 Moroccan tourists, with a balanced gender representation of 49% women and 51% men. The participants encompassed a wide age range from 18 to 60 years, capturing diverse perspectives and experiences in the tourism sector. This inclusive sample aimed to provide comprehensive insights into national-scale communication actions and environmental management, considering the various needs and behaviors of different age groups and genders.

By employing a representative sample of Moroccan tourists, this study sought to obtain meaningful and diverse insights into the Moroccan tourism sector's communication actions and environmental management. A structured and standardized questionnaire was used, consisting of closed-ended questions to collect quantitative information. This rigorous approach enabled the acquisition of objective data and the provision of evidence-based conclusions aligned with the positivist paradigm.

## **2.2 Collected data and analysis**

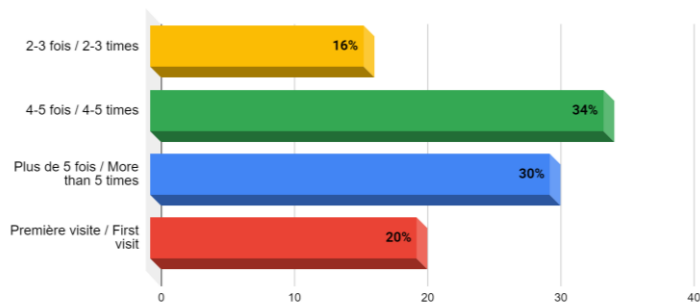
This results analysis section is divided into three parts: General Analysis, Analysis of Communication Actions, and Analysis of Environmental Management Actions. These parts provide information on the general trends observed in participants' responses, as well as specific communication and environmental management actions implemented by the Moroccan tourism sector.

### **2.2-1-General Analysis:**

The analysis of the data reveals that Marrakech is the most frequently visited tourist city in Morocco, as reported by 26% of the participants. Tanger and Fès also emerged as popular destinations, with each receiving 26% of the responses. Casablanca and Chefchaouen were mentioned by 4% and 11% of the participants, respectively. Other Moroccan tourist cities, such as Rabat, Agadir, and Essaouira, were visited by a smaller proportion of participants.

The survey results indicate that 20% of the participants visited this tourist city for the first time in the past 5 years. Approximately 16% of the participants reported visiting it 2 to 3 times, while 34% visited it 4 to 5 times. Finally, 30% of the participants stated that they have visited this tourist city more than 5 times during the given period.

**The number of times this tourist town has been visited in the last 5 years.**



**Fig.1:** The number of times this tourist town has been visited in the last 5 years.

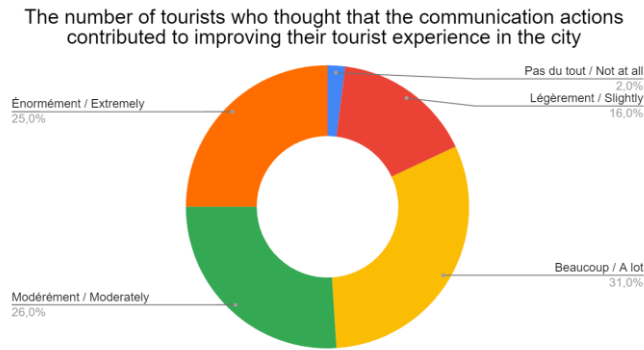
However, participants in this tourist city chose various types of accommodations. The majority, 36%, opted for hotels, while 23% chose riads. Apartments were preferred by 26% of respondents, and 5% selected guesthouses. Finally, 10% mentioned other unspecified types of accommodations. In terms of recommending the tourist city to others, 47% of respondents answered "Absolutely," indicating a strong willingness to recommend it. Similarly, 36% answered "Probably," suggesting they are likely to recommend it. However, 4% answered "Probably not," indicating a lower inclination to recommend. These results show that the majority of respondents have a favorable opinion and are inclined to recommend the city to others.

Regarding overall satisfaction with the tourist experience, 48% of respondents expressed being "Satisfied," while 32% indicated being "Very satisfied," reflecting a high level of satisfaction. Only 2% expressed being "Dissatisfied," and 18% answered "Neutral." Overall, these results demonstrate a positive level of satisfaction with the tourist experience. Regarding participation in cultural activities or events organized by the city, 53% of respondents answered "No," indicating non-participation. Conversely, 47% answered "Yes," indicating that they did take part in cultural activities or events. These findings suggest that nearly half of the participants engaged in cultural activities during their visit to the tourist city.

## **2.2-2- Analysis of communication actions:**

The analysis of communication actions in the Moroccan tourism sector revealed the effectiveness of various strategies in promoting the tourist city. The survey results indicate that 39% of participants perceive a high impact of these actions on their decision to visit, while 30% consider it moderate and 12% perceive it as weak. Additionally, 19% indicate a very high impact, demonstrating the significant influence of communication actions. The survey also explored participants' engagement with online information sources before visiting the city. The majority (69%) consulted websites or apps for information, highlighting the importance of digital channels in shaping tourists' perceptions. However, 31% did not engage in this process, emphasizing the need for diverse communication strategies.

Furthermore, participants' perception of responsible and sustainable tourism efforts by the city was assessed. A significant majority (87%) acknowledged these efforts, reflecting a positive reception. However, 13% reported not noticing these initiatives, indicating the importance of improving visibility and communication regarding responsible tourism practices.



**Fig.2:** The number of tourists who thought that the communication actions contributed to improving their tourist experience in the city

The results of this study highlight the significant impact of communication actions on enhancing the tourist experience in the city. The majority of respondents (25%) perceived an extremely positive impact, while 31% reported a lot of positive impact. The usefulness of official websites or apps was recognized by 77% of participants for planning their visit, indicating their effectiveness. Communication actions also had a positive influence on the perception of local culture, with a majority experiencing significant influence (28% extremely, 31% a lot). Mobile applications and online services were widely used by 77% of respondents to obtain real-time information about attractions, transportation, and events. Communication actions significantly influenced the choice of establishments for 25% (extremely) and 38% (a lot) of respondents. Internet research (41%) and online advertisements (27%) were the most consulted sources of information, while TV advertisements were the least consulted (3%).

Popular tourist attractions, Moroccan culture and heritage, and attractive promotional offers sparked the interest of respondents. Social media (48%) was the primary platform for sharing experiences, followed by blogs or forums (19%) and other online platforms (13%). Official destination websites (33%), online advertisements (32%), and social media (27%) were considered the most effective channels to inform tourists about interesting places to visit, while printed tourist guides and TV advertisements had less influence.



**Fig. 3:** Most effective communication channels for informing tourists about interesting places to visit during their stay.

As for the benefits of discounts or special promotions through communication actions during the stay in this tourist city, it reveals that 46% of the respondents answered "No, never," indicating that they never benefited from such discounts or promotions. Additionally, 33% of the respondents answered "Yes, occasionally," indicating that they benefited from them occasionally. Finally, 21% of the respondents answered "Yes, frequently," indicating that they benefited from them regularly.

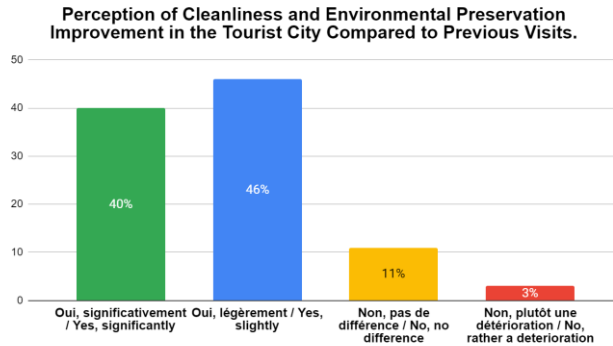
While the extent to which communication actions have contributed to improving the visibility and image of this tourist city at the national and international level reveals that 28.3% of the respondents answered "Extremely," indicating that they believe these actions have contributed to a highly significant extent. Additionally, 33.3% of the respondents answered "A lot," indicating that they believe these actions have contributed significantly. Furthermore, 30.3% of the respondents answered "Moderately," indicating a moderate level of contribution. Moreover, 6% of the respondents answered "Slightly," indicating a slight contribution, and only 2% of the respondents answered "Not at all," indicating that they believe there is no contribution.

### **2.2-3- Analysis of environmental management actions:**

In this section of the study, we will delve into the analysis of environmental management actions implemented in the tourist city. The aim is to assess the impact of these actions on the preservation of the local environment, their contribution to the preservation of the city's authenticity and natural beauty, as well as their influence on participant satisfaction, the reduction of negative tourism impacts, and the improvement of tourist infrastructure quality. The obtained results will provide a better understanding of the effectiveness of these environmental management actions and identify areas that require reinforcement or improvement.

The analysis of environmental management actions in the tourist city reveals positive perceptions among participants. The majority of respondents (41%) perceive the impact of these actions on the preservation of the local environment as moderate, followed by 34% who view it as high and 19% who describe it as very high. This suggests a growing recognition of the effectiveness of environmental management actions in the city.

Furthermore, in terms of preserving the authenticity and natural beauty of the city, a significant proportion of respondents (31%) believe that these actions have an extremely high contribution, while 34% acknowledge a substantial contribution. Moderately perceived contributions were reported by 28% of participants, while only 7% mentioned a slight contribution. These findings highlight the important role played by environmental management actions in preserving the authenticity and natural beauty of the tourist city, demonstrating their effectiveness and the need for continued reinforcement and improvement in relevant areas.



**Fig. 4:** Perception of Cleanliness and Environmental Preservation Improvement in the Tourist City Compared to Previous Visits.

The study reveals that a majority of respondents noticed some level of improvement in cleanliness and environmental preservation compared to their previous visits to the tourist city. 46% reported a slight improvement, while 40% noticed a significant improvement. In terms of satisfaction with tourist services and infrastructure, a majority of participants expressed satisfaction (41%) or high satisfaction (33%). Environmental management actions were recognized by respondents for their contribution to reducing negative impacts, with 24% perceiving an extremely high contribution and 28% acknowledging a significant contribution.

The influence of these actions on the tourist experience was also evident, with 24% perceiving a great influence and 31% recognizing a strong influence. Eco-friendly transportation methods were used by 66% of respondents, while the remaining 34% did not utilize such methods. The quality of tourist infrastructure showed significant improvement according to 45% of respondents and slight improvement according to 36%, while 16% noticed no change and 3% perceived a deterioration. These findings highlight the positive impact of environmental management actions and improvements in the city's infrastructure on the tourist experience and satisfaction levels of visitors.

### 3

## Results

In the present study, we formulated hypothesis H1 stating that there is a significant impact of communication actions and environmental management carried out by the Moroccan tourism sector at the national level on the tourist experience in Morocco. The results obtained in this study confirmed this initial hypothesis, thus supporting the notion that communication actions and environmental management have a significant influence on tourists' experience in Morocco.

However, the type of study utilized, specifically a quantitative study, was appropriate for the research problem. The initial research protocol was rigorously adhered to, and the sample size of 100 participants was considered adequate for obtaining significant and representative results. The statistical data analysis was conducted in a descriptive and relevant manner, allowing for the identification of trends and key information regarding the variables under study. The conclusions drawn from the results are logically and coherently deducible. According to this analysis, 69% of respondents accessed information about this tourist city through websites or applications before their visit, while 31% did not. Furthermore, 77% of respondents found the information provided by the official websites or applications of this tourist city useful for planning their visit, while



23% did not find them useful.

Approximately 41% of respondents believe that their tourist experience in this city was influenced by internet research, while other factors such as online advertisements, recommendations from friends, and other sources also played a role. The most consulted sources of information before choosing a Moroccan city as a tourist destination were: popular highlighted tourist attractions (28%), presentation of Moroccan culture and heritage (18%), attractive promotional offers (24%), messages related to environmental sustainability and responsible tourism (4%), testimonials from previous travelers (20%), and other sources (6%).

About 45% of respondents believe that social media is the most effective communication channel for informing tourists about the most interesting places to visit during their stay. Approximately 61.6% of respondents noticed an improvement in the quality of tourist infrastructure in this city over time. Moreover, around 77% of respondents believe that communication actions have contributed to improving the visibility and image of this tourist city at the national and international levels.

## 4

## Discussions

The study found that communication actions have a significant impact on enhancing the tourist experience in the city. A majority of respondents perceived a positive influence, with 25% indicating an extremely positive impact and 31% stating a lot. The usefulness of official websites or apps in planning visits was acknowledged by 77% of participants. Communication actions were also found to shape perceptions of local culture, with 28% reporting an extremely significant influence. Mobile applications or online services were used by 77% of respondents for real-time information. Additionally, communication actions influenced the choice of establishments for 63% of participants. Online advertisements, internet research, and recommendations from friends and family were the most consulted information sources. Popular tourist attractions and attractive promotional offers sparked the most interest. Around 48% shared their experiences on social media, and official destination websites were deemed the most effective channels for informing tourists about interesting places to visit.

The confrontation of results with our expectations is a crucial element, particularly for validating the research hypothesis and ensuring internal validation. In our study, the results confirmed research hypothesis H1, thus strengthening the relationship between communication actions, environmental management, and the tourist experience in Morocco. Furthermore, the evaluation of external validation of our study relies on comparing our results with similar studies in the literature. In our case, this comparison was not possible due to the recent and current nature of our topic. However, this highlights the importance of future research that can explore emerging trends and advancements in digital marketing applied to the Moroccan tourism sector, in order to strengthen existing knowledge and contribute to the external validation of our study.

Nevertheless, it is important to note certain limitations of our research method. Firstly, this study focused solely on the Moroccan tourism sector, which limits its generalizability to other contexts. Additionally, data collection was primarily based on a closed questionnaire, which can introduce biases related to response subjectivity. These limitations should be considered when interpreting the results. Based on this analysis, we suggest "The Impact of the Metaverse on Destination Promotion and Awareness" as a potential avenue for future in-depth research to assess how the use of the Metaverse can contribute to increasing the visibility and awareness of

Moroccan tourist destinations on a global scale. Moreover, it would be interesting to analyze how virtual platforms and social networks can be innovatively used to promote tourism in Morocco.

This research direction related to the Metaverse offers perspectives for exploring the possibilities offered by this new technology in improving the tourism sector in Morocco. It can help understand how the Metaverse can be innovatively utilized to promote Moroccan tourist destinations and enhance visitors' experience.

## 5 Conclusion

In conclusion, this study has demonstrated the significant impact of communication and environmental management on the tourist experience. The results highlight the importance of effective communication through digital channels and experiential media, as well as environmental management to promote sustainability. Based on this analysis, we recommend investing in tailored digital marketing strategies, developing targeted communication campaigns, and creating engaging virtual experiences to promote tourism in Morocco.

The findings of this study are valuable to professionals in the industry, policymakers, and researchers. Under favorable conditions, this study can serve as a foundation for the development of innovative digital marketing practices in the Moroccan tourism sector. It also provides concrete perspectives for the use of new technologies, digital media, and virtual reality in destination promotion. The results can guide the strategic decisions of industry stakeholders and encourage a sustainable approach focused on the customer experience. This research opens new avenues for future studies on emerging trends and advancements in technology and digital marketing in Moroccan tourism.

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