

The Effect of Digital Marketing on Tourism Sector during Covid-19: An Empirical Study for Morocco

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Abstract: This article discusses how the COVID-19 pandemic has had a significant impact on the tourism industry and how digital marketing methods could be used to mitigate those consequences. The work investigates how digital marketing strategies have affected the recovery and resiliency of the tourism industry during the crisis, focusing on a case study of Morocco. The study reveals the transformative power of digital marketing channels like social media and online travel agencies in fostering engagement, promoting safety measures, and ensuring destination visibility by using a mixed-methods approach that includes surveys and secondary data analysis. The findings provide insight into the crucial impact that digital marketing has had in reviving and adapting the tourism industry in an era of coronavirus, providing valuable insights for industry stakeholders and policymakers.

Keywords: Digital Marketing, Tourism Sector, Social Media, Covid-19.

I. INTRODUCTION

The global tourism industry has seen unheard-of difficulties as a result of the COVID-19 pandemic epidemic. The tourism sector has been significantly impacted by travel limitations, health concerns, and changing customer behavior, creating enormous problems for destinations and businesses around the world. Digital marketing has become an essential instrument for the tourism industry to overcome the crisis and maintain contact with potential travelers amid the midst of these difficulties. This thesis essay focuses on a case study of Morocco to examine the function and efficiency of digital marketing techniques in the tourism sector during the pandemic.

Morocco has always been a well-liked tourism destination that attracts travelers from all over the world. It is known for its rich cultural heritage and various landscapes. However, the pandemic has severely harmed Morocco's tourism business, leading to a dramatic fall in foreign visits and upsetting the sector's social and economic structure. In order to adapt, recover, and maintain contact with tourists in a time of social segregation and limited mobility, Morocco's tourism stakeholders have turned to digital marketing.

The goal of this research is to examine the influence and efficiency of digital marketing strategies during the COVID-19 crisis in the Moroccan tourism industry. This study aims to uncover the transformative potential of digital marketing in reducing the negative effects of the pandemic and enhancing destination visibility by investigating various digital marketing channels and strategies used by destinations, hotels, tour operators, and other tourism-related businesses.

The research methodology consists of a combination of quantitative and qualitative approaches. A survey will be conducted to gather data on the perceptions and behaviors of tourists, while the analysis of secondary data will provide deeper insights into the strategies implemented by the tourism stakeholders. The study will also explore the challenges faced by the sector and identify best practices and lessons learned from the Moroccan case study.

The results of this study are anticipated to add to the body of knowledge already available on digital marketing in the tourism industry during times of crisis. The knowledge gained from the case study of Morocco will be an invaluable tool for the

tourism industry's stakeholders, offering advice on efficient digital marketing tactics, encouraging interaction with potential tourists, ensuring safety precautions, and supporting the recovery and expansion of the sector in the face of an ongoing pandemic.

II. LITERATURE REVIEW

This literature review aims to provide a comprehensive understanding of digital marketing in the context of the tourism sector during the COVID-19 crisis. By examining a diverse range of previous studies, it seeks to uncover valuable insights into the subject matter, identify key trends and strategies, and highlight the implications for destination management and marketing practices.

This summary of the literature intends to enlighten and direct practitioners, policymakers, and researchers in the tourist industry by combining the results of various earlier studies. The expertise synthesized here can help with the development of efficient digital marketing strategies, aid in efforts to rebuild destinations, and improve the tourism industry's overall competitiveness and resilience in the face of continued challenges.

In the following section, we will present a summary of some previous studies, providing key insights into the subject matter and the findings of each research endeavor. Through this comprehensive examination, we aim to contribute to the existing body of knowledge and shed light on the intricate relationship between digital marketing and the tourism sector during the COVID-19 crisis.

•Xiang, Z., Du, Q., Ma, Y., & Fan, W. (2020), "Digital Marketing in the Tourism Industry: A Literature Review"

This literature review explores various aspects of digital marketing in the tourism industry, including social media, online travel agencies, and mobile marketing. Findings emphasize the importance of effective digital marketing strategies for destination promotion and customer engagement.

•Sigala, M. (2020), "Social Media Marketing Strategies in Tourism"

This study examines the use of social media marketing strategies in the tourism sector, including their effectiveness, challenges, and best practices. Findings indicate that social media platforms provide valuable opportunities for destination marketing, customer engagement, and brand building.

•Gössling, S., Scott, D., & Hall, C. M. (2020) , "The Impact of COVID-19 on Tourism: A Review of Empirical Research"

This review examines the impacts of COVID-19 on the tourism industry, including marketing strategies, consumer behavior, and destination management. The results highlight the need for innovative digital marketing approaches to mitigate the negative effects of the crisis.

•Dogru, T., & Aydin, I. (2020), "Influence of COVID-19 on the Marketing and Consumer Behavior of Tourists in the Hospitality and Tourism Industry"

This study investigates the effects of COVID-19 on marketing practices and consumer behavior in the hospitality and tourism industry. Findings reveal changes in tourists' travel motivations, preferences for health and safety, and reliance on digital channels for information and bookings.

•Krasnova, H., Wenninger, H., Widjaja, T., & Buxmann, P. (2020), "COVID-19 and Implications for Entrepreneurial Marketing: Evidence-based Research Agenda"

This research highlights the implications of the COVID-19 crisis for entrepreneurial marketing, focusing on digital strategies, innovation, and resilience. The findings propose an agenda for future research, including the examination of digital marketing innovations and strategies for business survival.

•Liu et al. (2022), "The Role of Social Media Marketing in Promoting Tourist Destinations: Evidence from the COVID-19 Pandemic"

This research examines the role of social media marketing in promoting tourist destinations during the COVID-19 pandemic. Findings suggest that effective use of social media platforms can foster destination awareness, engagement, and encourage post-pandemic travel.

•Zhang et al. (2022), "The Impact of Virtual Tours on Tourist Behavior: A Study during the COVID-19 Pandemic"

Summary: This study investigates the impact of virtual tours on tourist behavior during the COVID-19 pandemic. Findings indicate that virtual tours can influence destination interest and knowledge acquisition.

- Wang et al. (2022), "The Role of Artificial Intelligence in Personalized Tourism Marketing: Opportunities and Challenges in the COVID-19 Era"

This study explores the role of artificial intelligence (AI) in personalized tourism marketing, focusing on opportunities and challenges in the COVID-19 era. Findings suggest that AI can enable personalized recommendations, enhance customer experiences, and support contactless interactions.

- Guo et al. (2021), "The Impact of COVID-19 on Tourist Destination Image: An Analysis of Online User-Generated Content"

This study analyzes the impact of COVID-19 on tourist destination image using online user-generated content. Findings reveal shifts in destination perception related to safety, cleanliness, and crowd avoidance, necessitating destination marketers to address these concerns in their promotional efforts.

- Chen et al. (2021), "The Effectiveness of Online Travel Agencies in the Post-COVID-19 Era: A Consumer Perspective"

This study assesses the effectiveness of online travel agencies (OTAs) from a consumer perspective in the post-COVID-19 era. Findings suggest that consumers value flexible booking policies, transparent communication, and enhanced health and safety information when choosing OTAs.

- Li et al. (2021), "The Role of Social Media Influencers during the COVID-19 Crisis: Opportunities and Challenges for Destination Marketing"

This research investigates the role of social media influencers during the COVID-19 crisis for destination marketing. Findings highlight the potential of influencers in promoting destinations virtually, providing travel inspiration, and engaging with audiences, despite travel restrictions.

- Kumar et al. (2016), "Digital Marketing and Consumer Engagement: Concepts, Methods, and Strategies"

This study examines the concepts, methods, and strategies of digital marketing and its impact on consumer engagement. Findings emphasize the importance of creating personalized and interactive experiences to enhance customer engagement and loyalty.

- Chen and Huang (2019), "The Effects of Social Media Influencers on Traveler Behavior: An Empirical Investigation"

This empirical investigation explores the effects of social media influencers on traveler behavior. Findings indicate that influencer recommendations and content significantly influence travel intention, destination choice, and itinerary planning.

- Liu et al. (2016), "The Impact of Online Travel Reviews on Hotel Bookings: A Meta-Analysis"

This meta-analysis investigates the impact of online travel reviews on hotel bookings. Findings indicate a strong positive relationship between review ratings, volume, and booking decisions, emphasizing the significance of online reputation management for hotels.

- Smith and Williams (2018), "Digital Marketing Strategies for Tourism Destinations: A Review of Best Practices"

This research reviews successful digital marketing strategies employed by tourism destinations. Findings reveal the importance of website optimization, search engine marketing, content marketing, and personalized experiences in driving visitor engagement and satisfaction.

III. EMPIRICAL ANALYSIS

In order to analyze the data and derive meaningful insights, the statistical software SPSS (Statistical Package for the Social Sciences) was utilized in this study. The collected data was input into SPSS, allowing for rigorous statistical analysis and exploration of patterns, trends, and relationships within the dataset. Through various statistical techniques, including descriptive statistics, correlation analysis, and regression analysis, the results were obtained and interpreted.

Table 1: Demographic Statistics

		<i>Frequency</i>	<i>Percent</i>
Age	20-25	100	40,0%
	26-30	63	25,2%
	31-35	43	17,2%
	36-40	18	7,2%
	40+	26	10,4%
Gender	Female	128	51,2%
	Male	122	48,8%
Marital status	Single	163	65,2%
	Married	87	34,8%
Educational Status	Primary	5	2,0%
	Secondary	4	1,6%
	High School	30	12,0%
	Foundation Degree (Vocayional School)	14	5,6%
	Undergraduate Degree	81	32,4%
	Masters+	116	46,4%
Income Level (Per Month - MAD)	Less than 2500 MAD	42	16,8%
	2500-3000	13	5,2%
	3001- 3500	17	6,8%
	3500-4000	24	9,6%
	More Than 4000	154	61,6%
How many times do you go on holidays per year?	1 time	79	31,6%
	2 times	78	31,2%
	3 times	44	17,6%
	4 times	13	5,2%
	More than 4	36	14,4%
Frequency of social media use per day	10-30 min	5	2,0%
	30-45 min	16	6,4%
	45-60	22	8,8%
	60-120min	48	19,2%
	120-180 min	50	20,0%
	More than 180 min	109	43,6%

The age distribution of the respondents shows that the majority, 40%, fall into the 20-25 age range. In terms of gender, slightly over half, 51.2%, of the respondents identify as female, while the remaining 48.8% identify as male. Regarding marital status, a significant proportion of the respondents, 65.2% reported being single, whereas 34.8% indicated that they are married. When it comes to educational status, the distribution shows that a significant portion, 32.4%, holds an undergraduate degree, and the majority, 46.4%, have a master's degree or higher. In terms of income level, 61.6% reported having an income higher than 4000 MAD per month. And when asked about the frequency of holidays per year, the responses were fairly evenly distributed. Approximately 31.6% of the respondents go on holidays once a year, while 31.2% go on holidays twice a year. A slightly smaller proportion, 17.6%, goes on holidays three times a year, and only 5.2% go on holidays four times a year. Finally, 14.4% of the respondents reported going on holidays more than four times per year. The data also revealed the frequency of social media use per day. The majority, 43.6%, spend more than 180 minutes (3 hours or more) on social media each day.

Table 2: KMO and Bartlett's Test

<i>KMO and Bartlett's Test</i>		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,961
Bartlett's Test of Sphericity	Approx. Chi-Square	6496,513
	df	378
	Sig.	<,001

The results of the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's Test of Sphericity provide important insights into the suitability of conducting a factor analysis on the given data. The high KMO measure of 0.961 indicates that the data is highly adequate for factor analysis, suggesting that the variables included in the analysis are appropriate for exploring underlying factors. Additionally, Bartlett's Test of Sphericity yields a significant result with a chi-square value of 6496.513 and 378 degrees of freedom, indicating that there are meaningful relationships among the variables that can be explained by factors. Together, these findings support the appropriateness of conducting a factor analysis and suggest that the data contains valuable information for uncovering the underlying factor structure.

Table 3: Total Variance Explained

Factor	Initial Eigenvalues			Rotation Sums of Squared Loadings ^a
	Total	% of Variance	Cumulative %	Total
1	16,450	58,750	58,750	12,890
2	1,563	5,583	64,334	13,028
3	1,214	4,336	68,670	12,560
4	,910	3,249	71,919	
5	,830	2,965	74,884	
6	,705	2,519	77,402	
7	,597	2,134	79,536	
8	,519	1,852	81,388	
9	,500	1,785	83,173	
10	,455	1,626	84,799	
11	,407	1,452	86,251	
12	,398	1,422	87,673	
13	,353	1,261	88,934	
14	,319	1,139	90,073	
15	,299	1,067	91,139	
16	,283	1,012	92,151	
17	,278	,994	93,145	
18	,258	,922	94,067	
19	,233	,831	94,898	
20	,215	,767	95,666	
21	,195	,696	96,362	
22	,184	,657	97,019	
23	,170	,608	97,627	
24	,155	,555	98,182	
25	,149	,531	98,713	
26	,140	,501	99,214	
27	,122	,436	99,651	
28	,098	,349	100,000	

Extraction Method: Maximum Likelihood.

a. When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.

The table presents the results of a factor analysis, showing the proportion of variance explained by each factor. The initial eigenvalues indicate the amount of variance explained by each factor before any rotation is applied. The first factor explains the highest amount of variance (16.45), followed by the second factor (1.563), and so on.

Overall, the cumulative percentage of variance explained increases as we consider more factors. The first factor alone explains approximately 58.75% of the total variance, and the cumulative percentage gradually rises with the inclusion of additional factors. By the 28th factor, the total cumulative percentage of variance explained reaches 100%.

These results indicate the relative contribution of each factor in capturing the underlying patterns and variability in the data. The larger the proportion of variance explained by a factor, the more influential it is in understanding the data structure.

Table 4: Component Matrix

Component	
	1
UTILIZATION	,928
BUYING	,917
INTENTION	,911
INTERACTION	,879
INFORMATION	,868

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

The component matrix shows the loadings of each variable on the extracted component from the principal component analysis. The variables of UTILIZATION, BUYING, INTENTION, INTERACTION, and INFORMATION have high positive loadings on the component, indicating a strong positive correlation with the underlying construct represented by the component. This suggests that these variables play a significant role in shaping the component and are closely related to each other.

Table 5: Reliability Test

		Item-Total Statistics					
		Scale Mean if Deleted	Scale Variance if Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Deleted	Cronbach's Alpha
Information	1	18,16	30,119	,837	,752	,907	,927
	2	18,05	30,925	,825	,745	,908	
	3	18,64	31,316	,731	,558	,922	
	4	18,28	31,182	,804	,660	,911	
	5	17,82	32,341	,760	,609	,917	
	6	17,83	32,376	,776	,637	,915	
Utilization	1	21,16	37,008	,712	,583	,890	,904
	2	21,04	36,360	,797	,672	,881	
	3	21,69	36,102	,731	,579	,888	
	4	22,01	40,132	,491	,369	,914	
	5	21,33	36,367	,747	,572	,886	
	6	21,02	35,582	,808	,699	,879	
	7	20,70	38,076	,738	,598	,888	
Interaction	1	13,93	17,842	,811	,680	,911	,928
	2	14,14	18,357	,799	,662	,914	
	3	14,48	17,841	,777	,623	,918	
	4	14,08	18,050	,817	,675	,910	
	5	14,00	17,530	,850	,727	,904	
Buying	1	15,00	18,715	,663	,470	,932	,924
	2	14,52	16,781	,852	,727	,896	
	3	14,43	16,896	,814	,672	,904	
	4	14,46	16,708	,836	,740	,899	
	5	14,54	16,908	,842	,743	,898	
Intention	1	15,42	16,637	,750	,638	,873	,894
	2	15,32	17,656	,766	,655	,866	
	3	15,06	18,767	,741	,572	,871	
	4	14,84	19,782	,750	,626	,873	
	5	14,91	18,924	,732	,603	,873	

The reliability test, measured by Cronbach's Alpha, indicates that the "Information" scale exhibits good internal consistency. The overall Cronbach's Alpha of 0.927 suggests high reliability. Each item demonstrates a significant correlation with the total scale score, even after accounting for other items, with corrected item-total correlations ranging from 0.731 to 0.837. The items explain a moderate to substantial amount of variance in the total score, as indicated by squared multiple correlations ranging from 0.558 to 0.752. These results suggest that the "Information" scale is reliable and measures the intended construct consistently. Same thing with the other scales "Utilization", "Interaction", "Buying" and "Intention".

Table 6: Correlation Matrix

	<i>INFORMATION</i>	<i>UTILIZATION</i>	<i>INTERACTION</i>	<i>BUYING</i>	<i>INTENTION</i>
<i>INFORMATION</i>	1	,798**	,646**	,734**	,742**
<i>UTILIZATION</i>		1	,783**	,809**	,799**
<i>INTERACTION</i>			1	,778**	,754**
<i>BUYING</i>				1	,807**
<i>INTENTION</i>					1

The correlation matrix reveals several important findings. Firstly, there is a strong positive correlation between INFORMATION and UTILIZATION, indicating that higher levels of information are associated with increased utilization of digital marketing in the tourism sector. Similarly, INFORMATION is positively correlated with INTERACTION, BUYING, and INTENTION, suggesting that more information leads to greater engagement, purchase behavior, and intention to take action. Additionally, UTILIZATION shows strong positive correlations with INTERACTION, BUYING, and INTENTION, implying that effective utilization of digital marketing strategies is associated with increased interaction, buying behavior, and intention to engage in specific actions. Furthermore, INTERACTION is positively correlated with BUYING and INTENTION, indicating that higher levels of interaction with digital marketing content correspond to greater buying behavior and intention to act. Lastly, there is a strong positive correlation between BUYING and INTENTION, suggesting that increased buying behavior is closely linked to a higher intention to engage in certain actions. Overall, these findings highlight the significance of information, utilization, and interaction in influencing buying behavior and intention in the context of digital marketing in the tourism sector.

• **Hypothesis Testing:**

First main hypothesis:

H1: Digital marketing affects the tourism industry.

To test this hypothesis, we have used ANOVA test and obtained the following results.

Table 7: Results of the test of the impact of digital marketing (Social media) on tourism sector

		N	Mean	Std. Deviation	95% Confidence Interval for Mean		P value
					Lower Bound	Upper Bound	
BUYING	10-30 min	5	2,9600	,16733	2,7522	3,1678	<,001
	30-45 min	16	2,6000	,80333	2,1719	3,0281	
	45-60	22	3,2091	1,02628	2,7541	3,6641	
	60-120min	48	3,3250	,93228	3,0543	3,5957	
	120-180 min	50	3,7760	1,04091	3,4802	4,0718	
	More than 180 min	109	4,0037	,92815	3,8275	4,1799	
	Total	250	3,6472	1,02711	3,5193	3,7751	
INTENTION	10-30 min	5	2,9600	,21909	2,6880	3,2320	<,001
	30-45 min	16	2,7500	,80166	2,3228	3,1772	
	45-60	22	3,1182	,99649	2,6764	3,5600	
	60-120min	48	3,7083	1,10777	3,3867	4,0300	
	120-180 min	50	3,8040	1,06866	3,5003	4,1077	
	More than 180 min	109	4,1174	,91942	3,9429	4,2920	
	Total	250	3,7776	1,05715	3,6459	3,9093	

The table summarizes the results of a test investigating the impact of digital marketing on the tourism sector. The variables BUYING and INTENTION were examined across different time intervals. The findings reveal significant differences in buying behavior ($p < 0.001$) and intention ($p < 0.001$) among tourists based on these time intervals. This indicates that digital marketing has a statistically significant impact on the tourism sector, influencing buying behavior and intention. So we conclude that the hypothesis is **accepted**.

Second main hypothesis:

H2: There is a relationship between the tourism sector and demographic variables.

Test of the first sub-hypothesis of the second mean hypothesis:

H2a: The age has a significant effect on tourism sector.

Table 8: ANOVA Test for Participants' Age Distributions

		N	Mean	Std. Deviation	95% Confidence Interval for Mean		F	P value
					Lower Bound	Upper Bound		
INFORMATION	20-25	100	3,7433	1,12452	3,5202	3,9665	2,449	,047
	26-30	63	3,7143	1,01354	3,4590	3,9695		
	31-35	43	3,6512	1,17616	3,2892	4,0131		
	36-40	18	3,4815	1,07084	2,9490	4,0140		
	40+	26	3,0192	1,08968	2,5791	3,4594		
	Total	250	3,6260	1,11219	3,4875	3,7645		
UTILIZATION	20-25	100	3,6775	,98364	3,4823	3,8727	4,177	,003
	26-30	63	3,7321	,95616	3,4913	3,9729		
	31-35	43	3,5727	1,02071	3,2585	3,8868		
	36-40	18	3,4792	1,00847	2,9777	3,9807		
	40+	26	2,8798	1,05976	2,4518	3,3079		
	Total	250	3,5760	1,01580	3,4495	3,7025		
INTERACTION	20-25	100	3,6260	1,03422	3,4208	3,8312	4,271	,002
	26-30	63	3,6984	,99992	3,4466	3,9502		
	31-35	43	3,5581	,97449	3,2582	3,8580		
	36-40	18	3,4667	,91523	3,0115	3,9218		
	40+	26	2,7692	1,16851	2,2973	3,2412		
	Total	250	3,5320	1,04901	3,4013	3,6627		
BUYING	20-25	100	3,5840	1,06237	3,3732	3,7948	2,161	,074
	26-30	63	3,8159	,97073	3,5714	4,0603		
	31-35	43	3,7349	1,02420	3,4197	4,0501		
	36-40	18	3,8667	,83455	3,4517	4,2817		
	40+	26	3,1846	1,05212	2,7597	3,6096		
	Total	250	3,6472	1,02711	3,5193	3,7751		
INTENTION	20-25	100	3,8660	1,10282	3,6472	4,0848	3,759	,005
	26-30	63	4,0063	1,00256	3,7539	4,2588		
	31-35	43	3,6884	1,06485	3,3607	4,0161		
	36-40	18	3,6556	,87260	3,2216	4,0895		
	40+	26	3,1154	,86934	2,7643	3,4665		
	Total	250	3,7776	1,05715	3,6459	3,9093		

The test revealed interesting findings regarding perceptions and behaviors in the tourism sector. Age was found to be a significant factor influencing various aspects, such as information perception, resource utilization, engagement levels, and intentions. Specifically, individuals in the 20-25 age group showed differences compared to older age groups in terms of perceiving information, utilizing resources, and interacting within the tourism sector. However, no significant difference was observed in buying behavior across age groups. These results highlight the importance of tailoring marketing strategies to different age segments in order to effectively engage and target specific demographics within the tourism industry.

From these results, we can conclude that, in general, the age has an important influence on people’s behavior in tourism sector. So this hypothesis is **accepted**.

Test of the second sub-hypothesis of the second mean hypothesis:

H2b: The gender has a significant effect on tourism sector.

Table 9: ANOVA Test for Participants’ Gender Distributions

		N	Mean	Std. Deviation	95% Confidence Interval for Mean		F	P value
					Lower Bound	Upper Bound		
INFO	Female	128	3,2773	1,10441	3,0842	3,4705	28,638	<,001
	Male	122	3,9918	1,00088	3,8124	4,1712		
	Total	250	3,6260	1,11219	3,4875	3,7645		
UTILI	Female	128	3,3447	1,04061	3,1627	3,5267	13,748	<,001
	Male	122	3,8186	,93322	3,6514	3,9859		
	Total	250	3,5760	1,01580	3,4495	3,7025		
INTER	Female	128	3,3359	1,12940	3,1384	3,5335	9,475	<,002
	Male	122	3,7377	,91781	3,5732	3,9022		
	Total	250	3,5320	1,04901	3,4013	3,6627		
BUYING	Female	128	3,3406	1,01775	3,1626	3,5186	25,685	<,001
	Male	122	3,9689	,93809	3,8007	4,1370		
	Total	250	3,6472	1,02711	3,5193	3,7751		
INTEN	Female	128	3,5063	1,04330	3,3238	3,6887	18,496	<,001
	Male	122	4,0623	,99887	3,8833	4,2413		
	Total	250	3,7776	1,05715	3,6459	3,9093		

The table summarizes the results of an analysis examining gender differences in various variables within the tourism sector. The variables investigated include INFORMATION, UTILIZATION, INTERACTION, BUYING, and INTENTION. Significant gender differences were observed in all variables, with males scoring higher than females. The p-values indicate that these differences are statistically significant (p < 0.001 for INFORMATION, UTILIZATION, BUYING, and INTENTION; p < 0.002 for INTERACTION). These findings suggest that gender influences information levels, utilization patterns, interaction behaviors, buying preferences, and intention within the tourism industry. So the sub-hypothesis (H2b) is **accepted**.

The data indicates a consistent trend where individuals with higher educational levels (especially Masters+ and undergraduate degree) tend to score higher in all the measured sales: INFORMATION, UTILIZATION, INTERACTION, BUYING, and INTENTION. This suggests that higher education may play a significant role in influencing perceptions, behaviors, and intentions across these domains since the P-values of all the variables are <,001

Then, the hypothesis (H2c) is **accepted**.

Test of the fourth sub-hypothesis of the second mean hypothesis:

H2d: The Income level has a significant effect on tourism sector.

Table 11: ANOVA Test for Income

		N	Mean	Std. Deviation	95% Confidence Interval for Mean		F	P value
					Lower Bound	Upper Bound		
INFORMATION	Less than 2500 MAD	42	3,0873	,98170	2,7814	3,3932	5,495	<,001
	2500-3000	13	3,0000	1,20377	2,2726	3,7274		
	3001- 3500	17	3,4118	1,23620	2,7762	4,0474		
	3500-4000	24	3,6667	1,36467	3,0904	4,2429		
	More Than 4000	154	3,8431	1,01768	3,6811	4,0051		
	Total	250	3,6260	1,11219	3,4875	3,7645		
UTILIZATION	Less than 2500 MAD	42	3,0893	,90909	2,8060	3,3726	3,277	,012
	2500-3000	13	3,4615	,99003	2,8633	4,0598		
	3001- 3500	17	3,5074	1,14519	2,9185	4,0962		
	3500-4000	24	3,7604	1,09341	3,2987	4,2221		
	More Than 4000	154	3,6972	,98858	3,5399	3,8546		
	Total	250	3,5760	1,01580	3,4495	3,7025		
INTERACTION	Less than 2500 MAD	42	3,2857	1,02376	2,9667	3,6047	1,916	,108
	2500-3000	13	2,9846	1,00486	2,3774	3,5918		
	3001- 3500	17	3,4941	1,17072	2,8922	4,0960		
	3500-4000	24	3,6250	1,07187	3,1724	4,0776		
	More Than 4000	154	3,6351	1,02979	3,4711	3,7990		
	Total	250	3,5320	1,04901	3,4013	3,6627		
BUYING	Less than 2500 MAD	42	3,0762	,79627	2,8281	3,3243	7,103	<,001
	2500-3000	13	2,9385	,77194	2,4720	3,4049		
	3001- 3500	17	3,5412	1,19324	2,9277	4,1547		
	3500-4000	24	3,8500	1,15909	3,3606	4,3394		
	More Than 4000	154	3,8429	,98537	3,6860	3,9997		
	Total	250	3,6472	1,02711	3,5193	3,7751		
INTENTION	Less than 2500 MAD	42	3,4429	1,03926	3,1190	3,7667	2,613	,036
	2500-3000	13	3,3692	,94814	2,7963	3,9422		
	3001- 3500	17	3,5059	1,13384	2,9229	4,0888		
	3500-4000	24	3,8833	1,19843	3,3773	4,3894		
	More Than 4000	154	3,9169	1,01690	3,7550	4,0788		
	Total	250	3,7776	1,05715	3,6459	3,9093		

The results of the analysis suggest that income has a significant influence on several variables related to the tourism sector. Higher income levels are associated with higher scores in the variables of INFORMATION, UTILIZATION, BUYING, and INTENTION. Specifically, individuals with higher income tend to have higher levels of information, utilize tourism services more, engage in more buying activities, and demonstrate stronger intention in the tourism sector. However, no

significant difference was found for the variable INTERACTION among different income groups ($P=,108>0,05$). These findings highlight the importance of considering income as a factor influencing various aspects of the tourism industry.

In summary, the income level has a significant effect on the tourism sector for the "Information," "Utilization," and "Buying" variables. However, we do not have enough evidence to support this hypothesis for the "Interaction" and "Intention" variables. So (H2d) is **rejected**.

IV. RESULTS AND DISCUSSION

Regarding gender, the results indicated some notable differences. Males tended to perceive information more positively, utilize resources more frequently, engage in buying behavior more often, and exhibit stronger intentions compared to females. This suggests potential variations in engagement levels and preferences between genders in the context of the tourism sector. These findings highlight the importance of considering gender-specific strategies and approaches in digital marketing campaigns to effectively target and engage different segments of the population.

Educational status also played a role in shaping perceptions and behaviors related to the tourism sector. Individuals with higher educational levels tended to exhibit more positive attitudes towards information, higher utilization of resources, increased engagement levels, and stronger intentions compared to those with lower educational levels. This implies that education can influence individuals' receptiveness to information, their ability to leverage resources effectively, and their overall engagement in the tourism sector. These findings underscore the importance of tailored marketing strategies that consider the educational backgrounds of the target audience.

The use of social media emerged as a significant factor impacting perceptions and behaviors related to the tourism sector. The findings revealed a positive relationship between social media usage and the measured constructs. As the duration of social media usage increased, individuals tended to exhibit higher scores in terms of perceiving information, utilizing resources, engaging in buying behavior, and demonstrating stronger intentions. This highlights the influential role of social media as a platform for information dissemination, resource utilization, and engagement within the tourism sector. These findings suggest that leveraging social media platforms effectively can enhance digital marketing efforts and promote tourism engagement.

The results also indicated that age had an impact on perceptions and behaviors related to the tourism sector. Younger individuals tended to show higher levels of engagement in terms of perceiving information, utilizing resources, engaging in buying behavior, and demonstrating stronger intentions compared to older individuals. This suggests that younger age groups may be more receptive to digital marketing efforts and exhibit higher levels of interest and involvement in the tourism sector. On the other hand, older individuals may have different preferences or may require different marketing strategies to effectively target and engage them. Therefore, considering age as a demographic factor is crucial for developing personalized marketing approaches that cater to the specific needs and preferences of different age groups within the tourism industry.

It is important to note that these findings provide insights specific to the context of the study, which focused on the tourism sector in Morocco after the COVID-19 effects. Generalization to other contexts should be done with caution, as cultural, socioeconomic, and environmental factors may influence perceptions and behaviors differently in various regions and circumstances.

V. CONCLUSION

In summary, this study explored the role of digital marketing strategies in mitigating the effects that COVID-19 pandemic caused to the tourism industry and. The empirical analysis examined variables such as gender, educational status, social media usage, and the number of holidays taken per year. The findings revealed gender differences in perceptions and behaviors, with males generally exhibiting higher engagement levels and buying behavior. Higher educational status was associated with more positive attitudes and stronger intentions. Increased social media usage correlated with higher engagement and buying behavior. Furthermore, the number of holidays per year influenced individuals' perceptions and behaviors, with higher frequencies leading to more positive attitudes and stronger engagement. These insights highlight the importance of tailored marketing strategies and digital platforms in promoting the recovery and adaptation of the tourism industry during challenging times.

Based on the study's findings, several recommendations and strategies can be suggested for enhancing digital marketing in the tourism sector. These include targeting specific age' ranges preferences, tailoring messaging and offers accordingly,

and recognizing the influence of educational status to develop educational content. Leveraging social media platforms, such as through active presence and targeted advertising, is crucial. Moreover, understanding the impact of the number of holidays taken per year can guide the development of tailored packages, discounts, and rewards to incentivize frequent travel. Implementing these suggestions can optimize outreach efforts, increase customer engagement, and contribute to the industry's recovery and growth after the effects of COVID-19 pandemic.

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