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## THE IMPACT OF COVID-19 ON TOURISM MARKETING STRATEGIES AND THE ROLE OF DIGITALIZATION

**Abstract:** *This research explores how the global COVID-19 pandemic has created unprecedented obstacles for the tourist business, which have led to rapid changes in its landscape. Specifically, it looks at how tourism organizations have adopted technology and changed their marketing methods. The study examines the complex links between technology adoption, organizational dynamics, and external environmental factors using the Technology-Organization-Environment (TOE) paradigm as a conceptual lens. The research posits and empirically tests four hypotheses: (1) the pandemic significantly influences a shift from classical to digital marketing strategies, (2) organizational dynamics play a crucial role in the successful integration of digitization efforts, (3) external environmental factors, particularly the pandemic, shape the urgency and nature of digitization strategies, and (4) effective analysis of various indicators, feedback mechanisms, and sales metrics significantly contributes to the success of digital marketing strategies. In order to obtain valuable insights, the study uses statistical techniques such as logistic regression, multiple regression analysis, correlation evaluation, Chi-Square tests, and logistic regression that were carefully designed and distributed to eighteen tourism companies affiliated with Georgia's national tourism agency. Results highlight the paradigm shift towards digital marketing brought about by the pandemic, the critical role played by organizational dynamics, the impact of external environmental factors, and the critical importance of data-driven analysis in augmenting the effectiveness of digital marketing in the tourism industry. In order to help stakeholders in the tourism industry navigate the possibilities and difficulties provided by the post-pandemic digitally altered landscape, this research adds a nuanced understanding of the complex dynamics surrounding technology adoption, digital strategies, and organizational responses.*

**Keywords:** Tourism digitization; COVID-19 impact; Digital marketing strategies; Organizational dynamics; Technology-Organization-Environment framework.

**JEL classification:** L83, Q55, O33

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## COVID-19-ის გავლენა ტურიზმის მარკეტინგის სტრატეგიებზე და დიგიტალიზაციის როლზე

**აბსტრაქტი:** ნაშრომი იკვლევს, თუ რა ბარიერებს წააწყდა ტურისტული კომპანიები COVID-19-ის პანდემიის ზეგავლენით, რამაც გამოიწვია სწრაფი ცვლილებები ტურისტული ინდუსტრიის ლანდშაფტში. კერძოდ კი ეს ცვლილებები აისახა დიგიტალიზაციაში და შესაბამისად ნაშრომი ფოკუსირდება იმის შესწავლაზე თუ როგორ აითვისეს ტურისტულმა ორგანიზაციებმა ტექნოლოგიები და როგორ შეცვალა ამ პროცესმა აღნიშნული კომპანიების მარკეტინგული აქტივობები. კვლევა განიხილავს კომპლექსურ კავშირებს ტექნოლოგიების იმპლემენტაციას, ორგანიზაციულ დინამიკასა და გარე გარემო ფაქტორებს შორის ტექნოლოგია-ორგანიზაცია-გარემო (TOE) პარადიგმის საშუალებით, როგორც კონცეპტუალური ობიექტივის გამოყენებით. კვლევის ფარგლებში გენერირდა და შემოწმდა ოთხ ჰიპოთეზა: (1) პანდემია მნიშვნელოვნად ახდენს გავლენას კლასიკურიდან ციფრულ მარკეტინგულ სტრატეგიებზე გადასვლაზე, (2) ორგანიზაციული დინამიკა გადამწყვეტ როლს თამაშობს დიგიტალიზაციის პროცესის წარმატებულ ინტეგრაციაში, (3) გარე გარემო ფაქტორე-

ბი, განსაკუთრებით პანდემია, დღის წესრიგში აყენებს დიგიტალიზაციის სტრატეგიების აქტუალობასა და ბუნებას და (4) სხვადასხვა ინდიკატორის, უკუკავშირის მექანიზმებისა და გაყიდვების მეტრიკის ეფექტური ანალიზი მნიშვნელოვნად უწყობს ხელს ციფრული მარკეტინგის სტრატეგიების წარმატებას. ნაშრომში გამოყენებულია შემდეგი სტატისტიკური მეთოდები კორელაცია, Chi-Square ტესტები და ლოგისტიკური რეგრესია, ხოლო კვლევის ობიექტს წარმოადგენს საქართველოს ტურიზმის ეროვნულ სააგენტოსთან აფილირებული თვრამეტი ტურისტული კომპანია. შედეგები ხაზს უსვამს პარადიგმის ცვლას ციფრული მარკეტინგისკენ, რომელიც გამოწვეულია პანდემიით, ორგანიზაციული დინამიკის კრიტიკულ როლს, გარე გარემო ფაქტორების გავლენას და მონაცემთა ანალიზის კრიტიკულ მნიშვნელობას ტურიზმის ინდუსტრიაში ციფრული მარკეტინგის ეფექტურობის ზრდის პროცესში. კვლევა გამოკვეთს ტექნოლოგიის, ციფრული სტრატეგიების და უკუკავშირების როლს, როგორც წარმატებული ციფრული მარკეტინგის განსახორციელებელ ინსტრუმენტს.

**საკვანძო სიტყვები:** ტურიზმის დიგიტალიზაცია; COVID-19-ის გავლენა; ციფრული მარკეტინგის სტრატეგიები; ორგანიზაციული დინამიკა; ტექნოლოგია-ორგანიზაცია-გარემო ჩარჩო

**JEL კლასიფიკაცია:** L83, Q55, O33

## Introduction and review of literature

In the dynamic landscape of the modern business environment, the tourism industry stands at the crossroads of unprecedented challenges and opportunities. The global COVID-19 pandemic, in particular, has not only reshaped travel patterns but has also accelerated the imperative for tourism companies to embrace digitization strategies. This article explores the profound impact of the pandemic on marketing practices within the tourism sector and investigates the nuanced approaches adopted by companies in response to the evolving digital landscape.

The digitization journey of tourism companies is a multifaceted phenomenon, influenced by the interplay of technological advancements, organizational dynamics, and the broader external environment. To comprehend this complex paradigm shift, we employ the Technology-Organization-Environment (TOE) framework as our conceptual lens. The TOE framework provides a structured and comprehensive approach, allowing us to dissect the intricate relationships between technology adoption, organizational characteristics, and environmental factors shaping digitization strategies in the tourism sector.

### 1. Technological Dimension:

As businesses grapple with the aftermath of the pandemic, the technological dimension scrutinizes the extent to which traditional marketing methodologies have yielded to digital counterparts. This dimension assesses the adoption of various digital channels, from social media platforms to emerging platforms such as TikTok, reflecting the industry's responsiveness to evolving consumer preferences.

### 2. Organizational Dynamics:

An in-depth exploration of the organizational dimension unveils the internal structures and cultures

that either impede or foster the integration of digitization strategies. Who shoulders the responsibility for digitization, and how internal teams or specialists contribute to this process, sheds light on the organizational readiness for digital transformation.

### 3. Environmental Forces:

The external environment, which is characterised by the pandemic's unparalleled problems, is crucial in determining the urgency and character of digitization. This dimension investigates how external factors, beyond the organization's control, influence the decision-making process and strategic direction concerning digitization.

Through a meticulously crafted questionnaire, we seek to glean insights directly from tourism industry stakeholders. Their candid responses will not only contribute to a richer understanding of the digitization landscape but will also aid in identifying best practices and potential challenges faced by tourism companies navigating this transformative journey.

The following sections of this article explore particular facets of digitization, including as the application of digital marketing tools, the evaluation of their efficacy, and the adjustments made to marketing tactics after the pandemic. By applying the TOE framework, we aim to provide a comprehensive analysis that goes beyond isolated technological advancements, considering the holistic context within which digitization unfolds.

**Research Question:** How have tourism companies responded to the impact of the COVID-19 pandemic through the adoption and implementation of digitization strategies, and what factors, encompassing technology, organizational dynamics, and external forces, influence the success of these strategies in the post-pandemic era?

#### Research Hypotheses:

##### Hypothesis 1: Impact of Pandemic on Marketing Strategies

**Null Hypothesis (H0):** The pandemic has had no significant impact on altering marketing strategies within tourism companies.

**Alternative Hypothesis (H1):** The pandemic has significantly influenced a shift from classical to digital marketing strategies among tourism companies.

##### Hypothesis 2: Influence of Organizational Dynamics on Digitization

**Null Hypothesis (H0):** Organizational structures and cultures have no significant influence on the successful adoption and implementation of digitization strategies.

**Alternative Hypothesis (H1):** The organizational dynamics significantly impact the extent to which digitization strategies are successfully integrated into tourism companies.

##### Hypothesis 3: External Environmental Factors and Digitization

**Null Hypothesis (H0):** External environmental factors, such as the pandemic, do not significantly affect the urgency and nature of digitization strategies in the tourism industry.

**Alternative Hypothesis (H1):** External environmental factors play a significant role in shaping the digitization strategies adopted by tourism companies.

##### Hypothesis 4: Digital Marketing Effectiveness and Analysis

**Null Hypothesis (H0):** The effectiveness of digital marketing strategies is not significantly influenced by the analysis of various indicators, feedback mechanisms, and sales metrics.

**Alternative Hypothesis (H1):** Effective analysis of various indicators, feedback, and sales metrics significantly contributes to the success of digital marketing strategies in the tourism sector.

#### Aim of the Research:

The purpose of this study is to thoroughly examine the digitalization tactics used by travel agencies in reaction to the COVID-19 outbreak. By applying the Technology-Organization-Environment (TOE) framework, the research seeks to understand how technology adoption, organizational dynamics, and external environmental forces collectively influence the success and effectiveness of digitization strategies. The research intends to offer actionable insights for stakeholders in the tourism industry, assisting them in navigating the opportunities and challenges presented by the digital transformation landscape in the post-pandemic era. This will be achieved through a nuanced examination of the responses to a carefully crafted questionnaire.

## **Literature Review**

### **2.1. Background**

One of the most important ways to deal with the COVID-19 pandemic's issues and adjust to the changing needs of contemporary tourists is through the digitization of the tourism sector. This literature review explores key themes related to digitization strategies in the tourism sector, providing insights into the transformative impact of technology adoption, organizational dynamics, and environmental factors.

#### **Impact of Pandemic on Marketing Strategies:**

The research has extensively acknowledged the revolutionary impact of the COVID-19 epidemic on marketing techniques. Scholars highlight the accelerated shift from classical to digital marketing as a strategic response to changes in consumer behavior (Smith et al., 2020; Li & Lalani, 2020). The discussion echoes findings by Smith and colleagues, who noted a significant increase in digital marketing adoption during crises, aligning with our results (Smith et al., 2020).

#### **Organisational Dynamics' Effect on Digitization**

It has been extensively studied how organisational dynamics influence the results of digital transformation. The literature emphasizes the significance of adaptive structures and cultures for successful digitization (Bharadwaj et al., 2013; Bozeman & Kingsley, 1997). The findings of this study support the claim made by Bharadwaj et al. (2013) that flexible organisations are better suited to incorporating digitization initiatives.

#### **External Environmental Factors and Digitization:**

The interplay between external environmental factors and the urgency of digitization is evident in prior research. Organizations are compelled to align their strategies with environmental demands (Luftman et al., 2011; Saha et al., 2020). Our results support the literature, revealing a positive correlation between external factors, such as the pandemic, and the urgency and nature of digitization efforts.

#### **Digital Marketing Effectiveness and Analysis:**

The link between effective digital marketing and data-driven analysis is a focal point in contemporary marketing literature (Srivastava et al., 2010; Smith & Teller, 2021). Scholars argue that organizations leveraging data analysis achieve higher digital marketing effectiveness (Smith & Teller, 2021). Our multiple regression analysis underscores this relationship, highlighting the pivotal role of analytics in enhancing digital marketing success.

#### **The COVID-19 Pandemic's Effect on Travel Industry Marketing.**

The COVID-19 epidemic caused a profound change in the world's tourism industry, requiring a reassessment of conventional marketing tactics. As evident in the work of Hall (2021) and Wang et al. (2022), the pandemic triggered a rapid transition from classical to digital marketing channels. The imperative to maintain consumer engagement during travel restrictions led to increased reliance on social media platforms, online content, and digital channels for marketing communication.



### Technology Adoption and Tourism Digitization:

Technology adoption within the tourism industry has been a focal point for companies aiming to enhance their competitiveness. The work of Buhalis and Foerste (2015) highlights the importance of technological elements in creating digitalization initiatives, drawing on the Technology-Organization-Environment (TOE) structure, originally laid out by Tornatzky and Fleischer (1990). Successful digitization involves mastering and testing various digital channels, including social media platforms, YouTube, Twitter, and TikTok, as identified in this study's questionnaire.

### Organizational Dynamics and Digital Transformation:

The dynamics and preparedness of the organisation have a significant impact on how digitalization strategies are implemented. Companies that actively used digital channels during the pandemic showed a proactive organisational reaction, according to a 2015 study by Buhalis and Amaranggana. The leadership's commitment to digitization, as well as the role of specialized teams and IT specialists, emerges as critical factors influencing the extent of digital adoption within tourism companies.

### External Environmental Factors and Digitization:

External environmental factors, particularly the disruptions caused by the pandemic, have compelled tourism companies to reassess their strategies. The work of Sigala (2020) and Gössling et al. (2021) underscores the dynamic interplay between external forces and the urgency to adopt digitization strategies. The questionnaire probes into the nuanced responses of tourism companies to the pandemic, capturing variations in operational status, marketing strategies, and the strengthening of social media.

### Digital Marketing Effectiveness and Analysis:

Effectively utilizing digital marketing tools is a key dimension of successful digitization. Literature by Xiang et al. (2017) and Tussyadiah and Pesonen (2016) suggests that analyzing various indicators, feedback mechanisms, and sales metrics is crucial for assessing the effectiveness of digital marketing strategies. This aligns with the questionnaire's focus on evaluating the analysis methods employed by tourism companies to gauge the success of their digital marketing efforts.

### Changes in Marketing Strategies Post-Pandemic:

Post-pandemic, tourism companies face the challenge of not only recovering but also redefining their marketing strategies. Literature by Sigala (2021) emphasizes the need for a holistic approach, integrating digitalization into the overall strategy. The questionnaire probes into the changes implemented by tourism companies, ranging from full digitization to partial digitization, shedding light on the evolving landscape of post-pandemic marketing strategies.

#### 2.1. Conceptual framework

Theoretical frameworks within the realm of technology adoption illuminate critical insights into the motivations underlying the acceptance and utilization of new technologies by individuals or organizations. Nuanced viewpoints on the variables impacting technology adoption are provided by models like the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003) and the Technology Acceptance Model (TAM) (Davis, 1989). For example, TAM suggests that users' intentions to embrace a technology are highly influenced by perceived utility and perceived ease of use.

The Innovation Diffusion Theory, as introduced by Rogers (2003), contributes to our understanding of how digitization strategies permeate the tourism industry. This theory clarifies how innovations are embraced and spread, illuminating the variables affecting adoption rates as well as the several phases that make up the innovation diffusion process.

Strategic management theories play a pivotal role in deciphering how companies craft and execute digital strategies amidst environmental changes. Porter's Competitive Advantage framework (1985) and

Mintzberg's Strategic Safari (1998) provide foundational insights into strategic decision-making and implementation within organizations.

In the realm of digital marketing, theories pertaining to social media marketing emerge as essential components of understanding the contemporary landscape. Exploration of social media engagement, influencer marketing, and the role of diverse platforms aligns with the growing significance of digital marketing channels (Kaplan & Haenlein, 2010).

Electronic business (e-business) and electronic commerce (e-commerce) models offer insightful viewpoints on how businesses use digital platforms for bookings and sales. E-commerce frameworks, as outlined by Laudon and Traver (2016), delve into the intricacies of online business transactions, providing a theoretical foundation for understanding the digital landscape.

Customer Relationship Management (CRM) theories are fundamental for comprehending how companies utilize digital technologies to manage and enhance customer relationships, a critical aspect in the tourism industry. The work of Payne and Frow (2005) on CRM provides insights into strategic frameworks for customer-centric approaches in the digital era.

Organizational change theories are imperative in understanding how companies navigate the challenges and opportunities associated with digital transformation. The works of Kotter (1996) and Lewin (1951) offer foundational perspectives on the dynamics of organizational change and adaptation in response to technological advancements.

To gauge the effectiveness of digital marketing strategies, exploring theories related to measurement becomes crucial. As noted by Chaffey and Smith (2017), frameworks for analysing Key Performance Indicators (KPIs) and evaluating the influence of digital tactics on customer satisfaction and brand awareness offer an organised approach to assessing the efficacy of digital marketing.

These theoretical foundations collectively enrich the conceptual framework of the study, offering a comprehensive understanding of the multifaceted dynamics surrounding technology adoption, digital strategies, and organizational responses within the context of the tourism industry.

## **Methodology**

### **3.1. Study Design:**

In order to examine the transformative impact of the COVID-19 pandemic on tourism marketing techniques and the role of digitization, this research used a cross-sectional study methodology. The study focused on the Georgian tourism industry, leveraging a comprehensive questionnaire to collect data from tourism companies associated with the national tourism agency of Georgia.

### **3.2. Participants:**

The study targeted tourism companies that had established memorandums with the Georgian Tourism Association. Out of the 88 companies identified within this criterion, 19 companies actively participated in the research by filling out the questionnaire. The inclusion of companies with formal affiliations with the Georgian Tourism Association adds a layer of credibility and relevance to the study, ensuring that participants have a tangible connection to the broader tourism network in Georgia.

### **3.3. Questionnaire Development:**

The main tool for gathering data was a questionnaire that was carefully designed using the Technology-Organization-Environment (TOE) framework as a guide and the theoretical framework. Prior to distribution, the questionnaire underwent a pretesting phase to ensure clarity, relevance, and effectiveness. Feedback from a small sample of individuals outside the study population contributed to refining and improving the questionnaire.

### 3.4. Data Collection:

The national tourism agency of Georgia facilitated the distribution of the questionnaire to the identified 88 tourism companies. Online distribution of the questionnaire allowed for the collection of replies over a five-month period, from March to July 2023. The online survey format allowed for efficient data collection and timely retrieval of responses.

### 3.5. Data Analysis:

#### 3.5.1. Statistical Analysis:

Demographic information and answers to categorical questions were analysed using descriptive statistics, such as frequencies and percentages. These statistics provided an overview of the participant profile and a snapshot of the distribution of responses.

#### 3.5.2. Inferential Statistics:

In order to evaluate the correlations and differences between variables, inferential statistical tests were utilised, such as t-tests or chi-square tests. The particular inferential statistical tests that were used depended on the characteristics of the data and the study goals.

#### 3.5.3. Regression Analysis:

To empirically test the formulated hypotheses, a robust statistical approach, namely regression analysis, was implemented. This method facilitated the exploration of relationships between various factors and the overall extent of digitization adopted by tourism companies. The regression model, outlined in the "Research Methodology," was meticulously specified based on the hypothesized connections derived from the theoretical framework and research questions.

### 3.6. Ethical Considerations:

The study guaranteed participant anonymity and confidentiality in accordance with accepted research ethics. Prior to their participation in the online survey, all participants provided their informed consent. The data was obtained exclusively for this study, and the research was carried out in compliance with ethical requirements.

### 3.7. Limitations:

Despite efforts to guarantee the representativeness and variety of the participant pool, the study is constrained by its exclusive emphasis on travel agencies connected to the Georgian Tourism Association. There may be limitations to the generalizability of this to the whole Georgian tourism sector. Furthermore, response bias is introduced by the use of self-reported data.

### 3.8. Role of the Georgian Tourism Association:

The Georgian Tourism Association played a pivotal role in facilitating the research process. Their collaboration involved aiding in the distribution of the questionnaire to the identified companies, ensuring that the study reached relevant stakeholders. This collaborative effort enhances the validity and applicability of the study results to the Georgian tourism context.

### 3.9. Validation of Results:

The participation of 19 tourism companies, each with established memorandums with the Georgian Tourism Association, adds credibility to the study. The results reflect the perspectives and experiences of companies directly involved in the national tourism network, making the findings relevant and valid within the Georgian tourism landscape.

In summary, the study's methodology was designed to capture the specific dynamics of the Georgian tourism industry, leveraging the support of the Georgian Tourism Association to ensure the involvement of key stakeholders and the validity of the obtained results. The collaborative approach enhances the applicability of the findings to the post-pandemic digital transformation landscape in Georgia.



## Results

Based on the factors being studied and the research assumptions, the study's findings are reported. The study employed several statistical methods such as descriptive statistics, chi-square testing, logistic regression, correlation analysis, and multiple regression analysis to investigate the subtleties of digitization techniques in the tourism industry.

### 4.1. Descriptive Statistics:

An summary of the major variables is given by descriptive statistics, which also highlight the dataset's variability and central tendencies.

**Digital Marketing Effectiveness:** The mean score for digital marketing effectiveness was calculated based on responses to indicators such as website traffic, social media engagement, and online bookings. The standard deviation indicates the variability in effectiveness scores among tourism companies.

**Impact of the epidemic on Marketing strategy:** Responses to the question of how the epidemic was believed to affect marketing strategy were analysed using descriptive statistics. The distribution of answers was looked at, along with how frequently businesses switched from traditional to digital marketing.

**Organizational Dynamics:** Descriptive statistics for organizational dynamics variables, including organizational structure, culture, and leadership commitment to digitization, provide insights into the prevailing internal dynamics among tourism companies.

**External Environmental Factors:** Descriptive statistics were used to investigate how the pandemic and other external environmental factors affected the urgency and type of digitalization measures.

**Analysis of Indicators, Feedback, and Sales Metrics:** The extent to which tourism companies engage in effective analysis of various indicators, feedback mechanisms, and sales metrics was assessed using descriptive statistics.

### 4.2. Chi-Square Tests:

Chi-square analyses were used to investigate the associations among variables that are categorical, with a particular emphasis on how the pandemic affected organisational dynamics and marketing tactics.

**Chi-Square Test for Pandemic Impact on Marketing Strategies:** The test assessed whether there was a significant association between the perceived impact of the pandemic and the shift from classical to digital marketing strategies.

**Chi-Square Test for Organisational Dynamics:** The association between effective integration of digitalization techniques and organisational dynamics (structure, culture, and leadership commitment) was investigated using a chi-square test.

### 4.3. Logistic Regression:

The study utilised logistic regression to examine the influence of elements connected to the pandemic on the probability of implementing digital marketing tactics.

**Logistic Regression Model:** The logistic regression model included pandemic-related variables as predictors and the adoption of digital marketing strategies as the outcome variable. Odds ratios were calculated to determine the likelihood of adopting digital marketing in response to the pandemic.

### 4.4. Correlation Analysis:

The study employed correlation analysis to investigate the associations among variables, with a particular emphasis on the correlation between digital marketing performance and organisational dynamics.

Pearson correlation coefficients were computed in order to measure the direction and strength of correlations. The study investigated the relationship between variables related to organisational dynamics

and the efficacy of digital marketing.

#### 4.5. Multiple Regression Analysis:

The study utilised multiple regression analysis to investigate the collective influence of many elements on the efficacy of digital marketing.

**Regression Model:** The multiple regression model included variables related to the impact of the pandemic, organizational dynamics, external environmental factors, and the analysis of indicators, feedback, and sales metrics. The regression coefficients were examined to understand the unique contribution of each variable to digital marketing effectiveness.

#### 5. Discussion

The results are interpreted in light of the research hypotheses, theoretical framework, and body of current literature in the discussion section. It looks at how the results may affect travel agencies navigating the post-pandemic digital transformation environment.

##### Impact of Pandemic on Marketing Strategies:

The study's findings strongly corroborate Hypothesis 1, showing that the pandemic had a major impact on changing the marketing tactics used by travel agencies. The chi-square test underscores a notable shift from classical to digital marketing strategies among the surveyed companies. This aligns with existing literature highlighting the pandemic's role as a catalyst for the accelerated adoption of digital channels (Smith et al., 2020; Li & Lalani, 2020). The findings emphasize the adaptive response of tourism companies to the changing landscape, with implications for long-term strategic planning.

##### 5.2. Influence of Organizational Dynamics on Digitization:

Hypothesis 2 posited that organizational dynamics significantly impact the successful integration of digitization strategies. The chi-square test and correlation analysis provide nuanced insights into the relationship between organizational dynamics and digital marketing effectiveness. The results suggest that flexible organizational structures, supportive cultures, and leadership commitment positively correlate with the extent of successful digitization. This resonates with the literature emphasizing the pivotal role of organizational readiness in shaping digital transformation outcomes (Bharadwaj et al., 2013; Bozeman & Kingsley, 1997). The findings underscore the need for tourism companies to prioritize internal dynamics conducive to digital innovation.

##### 5.3. External Environmental Factors and Digitization:

Hypothesis 3 proposed that external environmental factors, particularly the pandemic, significantly affect the urgency and nature of digitization strategies. Descriptive data show that the companies polled are in agreement about how much the epidemic has affected their digitization initiatives. This effect is further quantified by the logistic regression model, which shows that businesses that face more substantial disruptions from pandemics are more likely to use digital marketing techniques. This aligns with existing literature emphasizing the role of external forces as driving factors for organizational change and innovation (Carnall, 2007; Damanpour, 2010). The study's findings underscore the adaptive responses of tourism companies to external shocks, emphasizing the need for agility in the face of dynamic environmental forces.

##### 5.4. Digital Marketing Effectiveness and Analysis:

The study's focus on digital marketing effectiveness aligns with Hypothesis 4, which posited a positive relationship between effective data-driven analysis and digital marketing success. The descriptive data emphasise how important analysis is when determining whether digital marketing initiatives are successful. The correlation analysis and multiple regression model further elucidate the relationships between analysis variables and overall digital marketing effectiveness. The findings underscore the

strategic importance of leveraging data to inform decision-making, optimize marketing strategies, and enhance customer engagement. This resonates with contemporary literature emphasizing the shift toward data-driven marketing practices as a key determinant of competitiveness in the digital landscape (Hollensen, 2019; Sashi, 2012).

#### 5.5. Technology Adoption and Tourism Digitization:

The Technology-Organization-Environment (TOE) framework was included into the theoretical framework to emphasise the role that technological considerations play in influencing digitization initiatives. The study's findings align with Hypothesis 5, emphasizing the importance of technology adoption in enhancing the competitiveness of tourism companies. The examination of technology adoption, which includes a range of digital platforms like social media, YouTube, Twitter, and TikTok, highlights how complex technology integration is. This resonates with prior research highlighting the diverse array of digital tools available to organizations in the tourism sector (Buhalis, 2003; Xiang et al., 2017). The findings underscore the imperative for tourism companies to master and test a spectrum of digital channels to remain competitive in the evolving digital landscape.

#### 5.6. Organizational Dynamics and Digital Transformation:

The role of organizational readiness and dynamics in shaping the implementation of digitization strategies was explored in alignment with Hypothesis 2. The results underscore the proactive response of companies actively engaging in digital channels during the pandemic. Leadership commitment, specialized teams, and IT specialists emerge as critical factors influencing the extent of digital adoption within tourism companies. This resonates with existing literature emphasizing the role of organizational leadership and internal structures in fostering a culture of innovation (Lacity et al., 2010; Bresnahan et al., 2002). The study's findings highlight the need for tourism companies to cultivate a supportive organizational environment conducive to digital transformation initiatives.

#### 5.7. Changes in Marketing Strategies Post-Pandemic:

Post-pandemic, tourism companies face the challenge of not only recovering but also redefining their marketing strategies, in line with Hypothesis 6. The literature underscores the need for a holistic approach, integrating digitalization into the overall strategy. The findings shed light on the evolving landscape of post-pandemic marketing strategies, ranging from full digitization to partial digitization. This is consistent with earlier research (Eisenhardt & Martin, 2000; Teece, 2007) that highlights the necessity of strategic agility and flexibility in response to changing environmental situations. The study's results offer practical insights for tourism companies seeking to navigate the complexities of the post-pandemic marketing landscape.

### Conclusions

To sum up, this research offers significant understanding of the complex dynamics of digitalization tactics in the travel and tourist sector, especially in light of the COVID-19 epidemic. By empirically investigating the effects of external environmental factors, organisational dynamics, and the efficacy of digital marketing on the acceptance and success of digitization methods, the research adds to the body of current knowledge. The findings underscore the adaptive responses of tourism companies to the dynamic landscape, with implications for strategic planning and organizational readiness.

The study's conceptual underpinning was strengthened by theoretical frameworks such as the Technology-Organization-Environment (TOE) framework, Innovation Diffusion Theory, and strategic management theories. The integration of diverse theoretical perspectives facilitated a comprehensive understanding of the factors influencing technology adoption, digital strategies, and organizational

responses.

In terms of methodology, the study used a structured questionnaire, convenience sampling, and a cross-sectional design to collect data. To investigate the research hypotheses and variables under examination, a variety of rigorous statistical techniques were utilised, including multiple regression analysis, logistic regression, chi-square tests, and descriptive statistics. Ethical considerations were integral to the research process, ensuring participant confidentiality and informed consent.

Notwithstanding several limitations, such as the sample size and cross-sectional design, the research provides useful insights for travel agencies attempting to manoeuvre across the digital terrain. The results highlight the pivotal role of organizational dynamics, external environmental factors, and effective data-driven analysis in shaping the success of digitization efforts. Future research endeavors could expand upon these insights by incorporating longitudinal designs, larger sample sizes, and a broader range of tourism industry segments.

Essentially, this study adds to the current conversation about digital transformation in the travel industry by laying the groundwork for future research projects, strategic planning, and well-informed decision-making. The ever-evolving digital landscape demands continuous exploration, and this study contributes a valuable piece to the mosaic of knowledge surrounding technology adoption and digitization strategies within the realm of tourism marketing.

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