Lessons Learned from International Experiences in E-Tourism and the Requirements for Activating E-Business in the Tourism Sector in Algeria

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Summary: This study examines how electronic transactions and e-business architectures can strengthen e-tourism in Algeria through a descriptive-analytical and comparative approach. It synthesizes established literature, international experiences from Saudi Arabia, the United Arab Emirates, Tunisia, and France, and updated secondary statistics for 2024-2026. The results show that international tourism fully recovered in 2024 and expanded further in 2025, while early 2026 remained positive despite geopolitical uncertainty. Digital distribution has become structurally central to tourism: online channels accounted for about 71% of global travel and tourism revenue in 2025, while the online travel market exceeded USD 700 billion. The analysis indicates that Algeria's competitiveness depends on interoperable electronic payments, a unified tourism database, multilingual digital portals, simplified electronic entry procedures, cybersecurity, high-speed connectivity, and mobile tourism services. A comparative policy framework is proposed to integrate these elements into a coherent national e-tourism ecosystem and support market access, service efficiency, destination visibility, and resilience.

Keywords: E-tourism ; E-business ; Digital transformation ; Electronic transactions ; Algeria.
Jel Classification Codes : Z32 ; L81 ; O33

Résumé : Cette étude examine, selon une approche descriptive-analytique et comparative, comment les transactions électroniques et les architectures d'e-business peuvent renforcer le e-tourisme en Algérie. Elle fait la synthèse de la littérature établie, des expériences internationales de l'Arabie saoudite, des Émirats arabes unis, de la Tunisie et de la France, ainsi que de statistiques secondaires actualisées pour la période 2024-2026. Les résultats montrent que le tourisme international a entièrement retrouvé son niveau d'avant la pandémie en 2024 et a poursuivi son expansion en 2025, tandis que le début de l'année 2026 est resté positif malgré l'incertitude géopolitique. La distribution numérique est devenue structurellement centrale pour le tourisme : les canaux en ligne ont représenté environ 71 % des revenus mondiaux des voyages et du tourisme en 2025, et le marché du voyage en ligne a dépassé 700 milliards de dollars américains. L'analyse indique que la compétitivité de l'Algérie dépend de paiements électroniques interopérables, d'une base de données touristique unifiée, de portails numériques multilingues, de procédures d'entrée électroniques simplifiées, de la cybersécurité, d'une connectivité à haut débit et de services touristiques mobiles. Un cadre de politique comparative est proposé afin d'intégrer ces éléments dans un écosystème national cohérent de e-tourisme et de soutenir l'accès aux marchés, l'efficacité des services, la visibilité de la destination et la résilience.

Mots-clés : E-tourisme ; E-business ; Transformation numérique ; Transactions électroniques ; Algérie.
Codes de classification JEL : Z32 ; L81 ; O33

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I- Introduction:

Digitalization has transformed the organization, distribution, and consumption of tourism services. Destination search, reservations, electronic payments, mobility information, and post-trip feedback are increasingly executed through networked platforms. For developing economies, this transformation is strategically important because tourism can contribute to diversification, foreign-exchange earnings, employment, and the diffusion of digital services across transport, hospitality, retail, and cultural industries.

Algeria possesses a diversified tourism endowment encompassing Mediterranean coastal areas, mountain regions, Roman and Islamic heritage, thermal resources, and the Sahara. Yet the international competitiveness of a destination is now influenced not only by physical assets but also by digital discoverability, frictionless transactions, secure payment, multilingual information, and the ability to connect tourism providers to global distribution channels. This makes e-tourism an institutional and technological issue rather than a simple website-development exercise.

The central research question is therefore: What electronic transaction models and digital capabilities are most relevant to activating e-tourism, and how can they be operationally adapted to the Algerian tourism sector?

The study assumes that the systematic digitization of tourism information, combined with secure real-time dissemination, electronic reservation and payment, and interoperable digital public services, positively supports the activation and performance of e-tourism infrastructure in Algeria.

I.1. Objectives and Significance

- Clarify the conceptual foundations of e-tourism, e-business, and electronic tourism transactions.
- Identify technological, institutional, legal, financial, and human-capital requirements for digital tourism transformation.
- Compare selected international experiences and extract transferable implementation principles.
- Integrate updated 2024-2026 tourism and digital-market indicators into the evaluation of current trends.
- Propose an integrated roadmap for an Algerian e-tourism ecosystem.

The study is relevant to Algeria's diversification agenda because digital tourism can reduce information asymmetry, improve destination visibility, lower transaction friction, expand market access for small and medium-sized tourism firms, and support more evidence-based tourism governance.

I.2. Literature Review and Theoretical Foundations

Prior research generally converges on the idea that e-tourism performance depends on the simultaneous development of digital infrastructure, transactional security, electronic payments, and regulatory credibility. Al-Husseini (2018) emphasized the role of automated travel procedures, connectivity, and public-private investment, while Amri (2018) identified a positive relationship between sophisticated e-marketing adoption and the competitive performance of Algerian tourism enterprises, alongside persistent constraints related to payment systems, broadband access, and consumer trust.

From a conceptual perspective, e-tourism can be understood as the application of information and communication technologies to the analysis, marketing, sale, reservation, payment, and logistics of tourism products. Ouran (2019) stresses the digital integration of the tourism value chain, whereas Javad Abdul Hussein (2017) highlights digitally mediated business-to-consumer, business-to-business, and government-to-business interactions. The expected benefits include broader information access, lower transaction costs, global market reach, and richer pre-travel experiences (Kowash & Qamraoui, 2013; Shanabi & Attou, 2020).

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Recent research also points to the value of web-based data for understanding tourism markets. Boumahdi and Zaoujal (2025), using Booking.com data covering 1,852 accommodation establishments across North Africa and a large corpus of recent tourist reviews, demonstrate how digital traces can complement conventional tourism statistics and provide more granular territorial insight. This reinforces the case for building national tourism data infrastructures capable of integrating administrative and platform-based information.

II- Methods and Materials:

The study adopts a descriptive-analytical and comparative research design. It does not use a survey sample or experimental dataset. Instead, it combines: (i) a structured review of academic literature on e-tourism and digital tourism marketing; (ii) comparative examination of selected international e-tourism practices; and (iii) secondary quantitative indicators published by recognized tourism and market-data institutions.

II.1. Data Sources and Selection

The updated statistical component focuses on 2024-2026 and uses UN Tourism data on international arrivals and receipts; World Travel & Tourism Council (WTTC) Economic Impact Research on tourism GDP, employment, and visitor spending; and Statista market indicators on the global online travel market and the share of online sales. Algeria-specific indicators are drawn from statements of the Ministry of Tourism reported by national media and the Algerian Press Service. The 2026 figures are identified as forecasts or partial-year observations where applicable, preventing the comparison of incomplete 2026 observations as if they were full-year actual values.

II.2. Comparative Analytical Framework

The comparative cases - Saudi Arabia, the United Arab Emirates, Tunisia, and France - were selected because they represent distinct but relevant models: high-volume digital entry and religious tourism administration; smart-destination integration; regional North African e-governance; and mature multilingual digital destination distribution. The cases are assessed across six dimensions: digital entry procedures, payment interoperability, tourism information systems, mobile and web interfaces, public-private integration, and data-driven destination management.

II.3. Analytical Treatment

Quantitative data are summarized through totals, growth rates, comparative tables, and descriptive charts. No inferential statistical test is performed because the study uses aggregated secondary indicators rather than micro-level observations. The purpose of the quantitative update is contextual: to show the scale, pace, and digitalization of contemporary tourism and to assess whether the proposed Algerian e-tourism roadmap is consistent with current market dynamics.

III- Results and Discussion:

III.1. Global Tourism Recovery and Expansion, 2024-2026

The global tourism environment in which Algeria seeks to compete has moved beyond post-pandemic recovery into a new expansion phase. UN Tourism reported approximately 1.4 billion international tourist arrivals in 2024, marking a return to pre-pandemic volumes. Revised data placed international tourism receipts at about USD 1.7 trillion in 2024 and total tourism export revenues, including passenger transport, at around USD 2.0 trillion (UN Tourism, 2025).

In 2025, international arrivals increased by 4% to an estimated 1.52 billion, almost 60 million more than in 2024. Preliminary estimates put international tourism receipts at USD 1.9 trillion and total export revenues from tourism at USD 2.2 trillion (UN Tourism, 2026a). The first quarter of 2026 recorded approximately 307 million international tourist arrivals, up 2% year on year. UN Tourism subsequently warned that geopolitical disruption could reduce full-year growth by one to two percentage points from its initial 3%-4% forecast (UN Tourism, 2026b).

Table (1): Selected global international tourism indicators, 2024-2026

Indicator	2024	2025	2026
International tourist arrivals	~1.4 billion	1.52 billion	307 million in Q1
Arrival growth	Recovery to pre-pandemic level	+4% vs. 2024	+2% Q1 year-on-year
International tourism receipts	USD 1.7 trillion (revised)	USD 1.9 trillion (preliminary)	Full-year figure not yet available
Tourism export revenues	USD 2.0 trillion	USD 2.2 trillion	Full-year figure not yet available
2026 outlook	-	-	Initial +3%-4%; downside risk of 1-2 percentage points

The source: Authors' elaboration based on UN Tourism (2025, 2026a, 2026b). 2026 observations are partial-year/forecast data.

III.2. Tourism's Economic Weight Is Still Rising

WTTC data show that the macroeconomic weight of travel and tourism continued to increase after the recovery phase. The sector contributed approximately USD 10.9 trillion to the global economy in 2024 and supported 357 million jobs. In 2025, the contribution reached USD 11.6 trillion and employment rose to 366 million jobs. WTTC forecasts approximately USD 12 trillion in global GDP contribution and 376 million supported jobs in 2026 (WTTC, 2025, 2026a, 2026b).

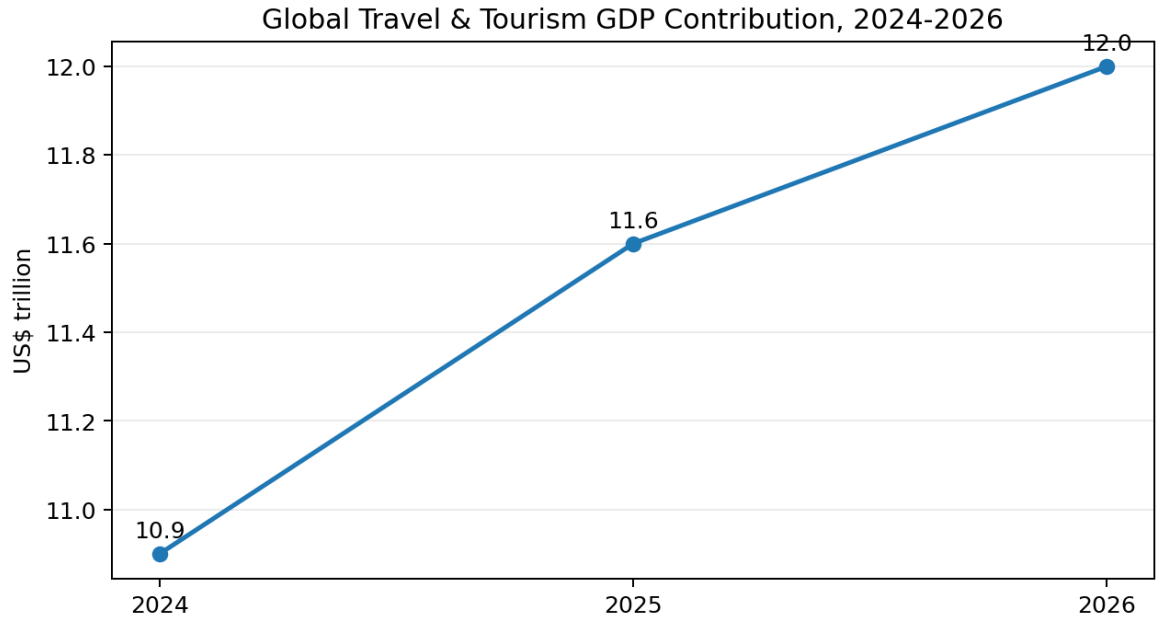
Table (2): Global Travel & Tourism economic impact, 2024-2026

Metric	2024 actual	2025 actual	2026 forecast
GDP contribution	USD 10.9 tn	USD 11.6 tn	USD 12.0 tn
Share of global economy	~10.0%	9.8%	9.9%
Jobs supported	357 million	366 million	376 million
International visitor spending	USD 1.87 tn	USD 2.02 tn	Growth forecast: +3.7%
Domestic visitor spending	USD 5.3 tn	USD 5.63 tn	Not specified in cited release

The source: WTTC (2025, 2026a, 2026b). 2026 values are forecasts.

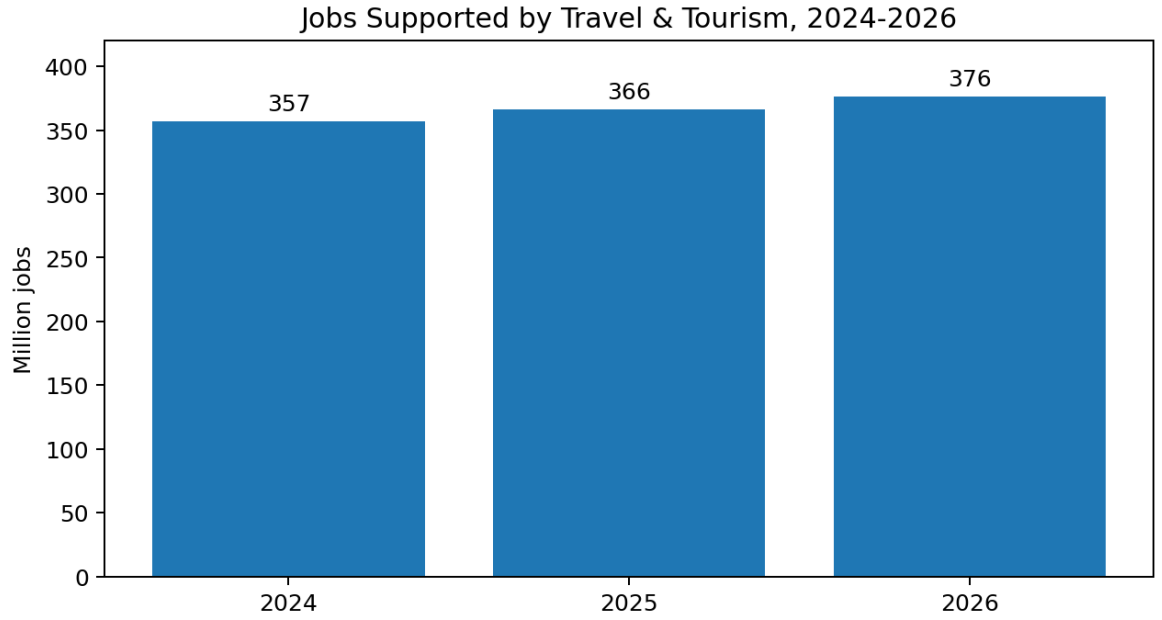
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Figure (1): Global Travel & Tourism GDP contribution, 2024-2026



The source: Authors' chart based on WTTC (2025, 2026a, 2026b). 2026 is a forecast.

Figure (2): Jobs supported by Travel & Tourism, 2024-2026



The source: Authors' chart based on WTTC (2025, 2026a, 2026b). 2026 is a forecast.

III.3. Digital Distribution Has Become a Core Tourism Channel

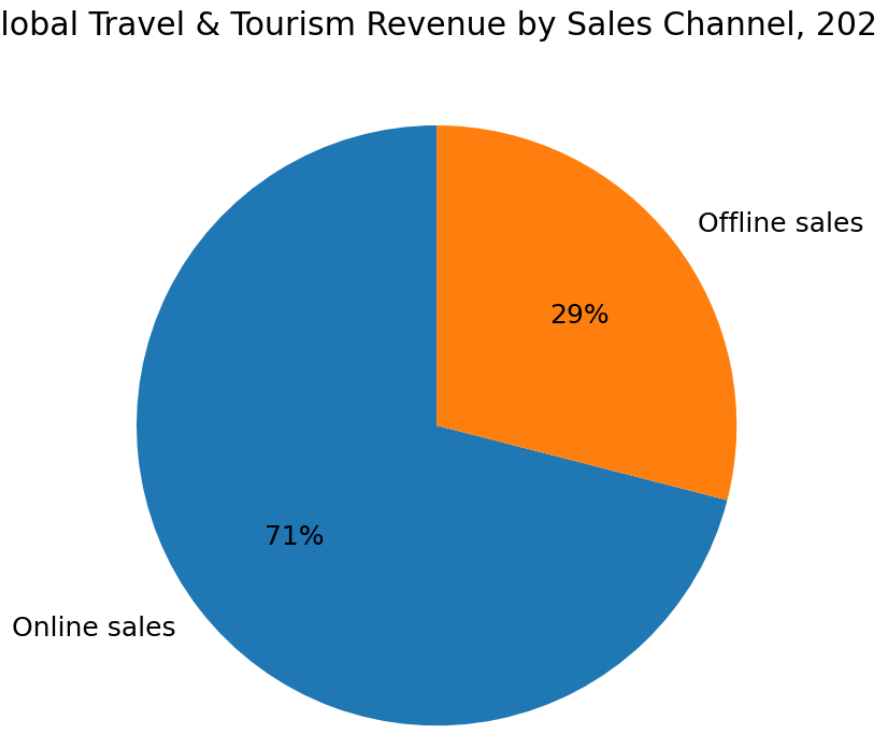
The quantitative evidence also supports the central premise of this study: digital channels are no longer peripheral to tourism distribution. Statista reports that the global online travel market generated approximately USD 654 billion in 2024 and about USD 702 billion in 2025. In 2025, online sales accounted for roughly 71% of global travel and tourism market revenue, illustrating the structural shift from physical intermediation toward platform-mediated search, booking, and payment (Statista, 2026a, 2026b). Statista's broader Travel & Tourism Market Forecast projects total market revenue of about USD 1.07 trillion in 2026 (Statista, 2026c).

Table (3): Selected digital tourism market indicators

Indicator	2024	2025	2026
Global online travel market size	USD 654 bn	USD 702 bn	Latest public summary does not disclose a directly comparable value
Online share of global Travel & Tourism revenue	-	71%	Expected to remain dominant; exact public value not disclosed
Total global Travel & Tourism market revenue (Statista forecast)	-	-	USD 1.07 tn

The source: Statista (2026a, 2026b, 2026c). Metrics are not identical and should not be combined into one time series.

Figure (3): Global Travel & Tourism revenue by sales channel, 2025



The source: Authors' chart based on Statista (2026a): online 71%, offline 29%.

For Algeria, these global patterns imply that competitiveness increasingly depends on being present in the channels through which tourists actually discover, compare, reserve, and pay. A destination may possess strong physical attractions but remain commercially invisible if its tourism inventory is fragmented, difficult to book, or disconnected from electronic payment and global distribution systems.

III.4. Algerian Tourism Indicators and the Digital Opportunity

Recent national indicators also suggest renewed tourism momentum. Algeria received about 3.5 million tourists in 2024, including approximately 2.5 million foreign visitors and one million members of the Algerian diaspora, according to figures presented by the Minister of Tourism and reported during the 2025 International Tourism and Travel Fair (TSA Algérie, 2025). Separately,

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the Algerian Press Service reported that 47,000 foreign tourists visited the Algerian Sahara during the 2024-2025 season following the application of visa-regularization procedures (APS, 2025).

Table (4): Selected recent indicators for tourism in Algeria

Indicator	Value	Period / Note
Total tourists received	3.5 million	2024
Foreign visitors	2.5 million	2024, as reported by the minister
Algerian diaspora visitors	1.0 million	2024
Foreign tourists in the Sahara	47,000	2024-2025 Saharan season
National target announced for 2025	4.0 million	Target announced mid-2025, not treated here as an actual result

The source: TSA Algérie (2025) and APS (2025). The 2025 value shown is a target, not a realized full-year total.

These figures are relevant to e-tourism because visa facilitation, digital information, and the ability to package remote destinations such as the Sahara are mutually reinforcing. The digitalization of entry procedures can reduce uncertainty for foreign visitors, while multilingual content, geolocation, verified accommodation inventories, and secure booking interfaces can convert interest into actual travel demand.

III.5. Lessons from International Experiences

Saudi Arabia illustrates the value of integrating electronic visa processing, tourism licensing, and digital visitor services within a national transformation agenda. Its experience suggests that digital entry procedures are most effective when connected to payment, accommodation, and operator databases rather than functioning as isolated portals (Saudi Arabia Ministry of Foreign Affairs, 2021; Saudi Arabia Ministry of Tourism, 2021).

The United Arab Emirates demonstrates a smart-destination model characterized by the integration of transport, aviation, hospitality, border services, multimedia destination information, and electronic payment. The relevant lesson for Algeria is interoperability: the tourist experience improves when public and private systems exchange information and transactions through coherent digital interfaces (Official Portal of the UAE Government, 2021).

Tunisia offers a regionally relevant example of tourism e-governance through digital access to sector information, regulation, investment guidance, and official tourism promotion. France, by contrast, demonstrates the value of mature multilingual destination content, multimodal transport booking, and standardized digital visa processes (France-Visas, 2021; Tunisian Ministry of Tourism and Handicrafts, 2021).

III.6. Proposed Integrated E-Tourism Framework for Algeria

The evidence suggests that Algeria should avoid a fragmented approach based on disconnected websites. The proposed framework is structured around four interacting layers:

- Macro-environment layer: national digital strategy, tourism regulation, data protection, electronic signatures, investment incentives, and high-speed telecommunications coverage.
- Core transaction layer: interoperable domestic and international electronic payments, electronic visa and entry services, verified tourism-provider registries, and a centralized national tourism database.
- Operational intermediary layer: digitally enabled travel agencies, smart accommodation operators, destination-management organizations, and mobile tourism applications using geolocation and real-time information.
- Market-interface layer: a multilingual national portal linked to reservation systems, global distribution systems, social media, reviews, maps, and data-driven marketing tools.

This structure is consistent with the implementation logic identified in previous studies: tourism data must first be aggregated and standardized, then digitized, disseminated through multiple channels, and finally connected to real-time transactional systems (Bouawina, 2016).

Strategic prerequisites include institutional coordination, legal certainty, connectivity, digital literacy, and trust in electronic transactions (Ibrahim Hamad, 2013).

III.7. Discussion

The updated evidence strengthens the original hypothesis. The global tourism sector is expanding in both economic scale and digital intensity. The rise from USD 10.9 trillion in tourism GDP contribution in 2024 to a projected USD 12 trillion in 2026 coincides with the dominance of online distribution and a global online travel market already above USD 700 billion in 2025. This means that e-tourism is not merely a promotional option; it is increasingly part of the core transaction architecture of tourism.

For Algeria, the international cases indicate that the decisive issue is system integration. Saudi Arabia's digital entry services, the UAE's smart-service interoperability, Tunisia's public information model, and France's integrated content, transport, and visa platforms all reduce transaction friction at different stages of the visitor journey. Algeria can adapt these principles without reproducing any single model wholesale. The most transferable elements are reliable data, interoperable payments, simplified digital entry, multilingual content, mobile access, cybersecurity, and institutional coordination.

The 2026 context also highlights resilience. UN Tourism's Q1 2026 data show that travel demand remained positive despite geopolitical disruption, but the downward adjustment to the growth outlook demonstrates the vulnerability of tourism to shocks. Digital systems can support resilience by enabling rapid communication, rebooking, real-time information, market diversification, and data-driven crisis management.

IV- Conclusion:

This study concludes that activating e-business within Algeria's tourism sector requires an integrated digital ecosystem rather than isolated promotional websites. The evidence from 2024-2026 shows a global tourism market that has recovered, expanded, and become strongly dependent on online channels. International arrivals reached 1.52 billion in 2025, tourism receipts rose to an estimated USD 1.9 trillion, and online channels represented about 71% of global travel and tourism revenue. These trends make digital transaction capability a central determinant of destination competitiveness.

For Algeria, the priority actions are to establish a unified national tourism database, connect accredited tourism operators to secure booking and payment infrastructure, simplify electronic entry and visa procedures, improve broadband and mobile coverage in strategic tourism zones, develop multilingual web and mobile interfaces, strengthen data-protection and cyber-security rules, and use digital analytics to support destination management and promotion.

The principal limitation is methodological: the study relies on secondary and aggregated indicators and does not directly measure the behavior of tourists or Algerian tourism firms. Some 2026 data are forecasts or partial-year observations and should therefore be updated when full-year statistics become available. Future research should test the proposed framework empirically through surveys of tourists and tourism operators, platform-usage data, and regional digital-readiness indicators across Algerian destinations.

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