



## **Artificial Intelligence as catalyst of Tourism Communication and Destination Branding: A Strategic Framework for Algeria**

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### **Abstract:**

*This article examines the transformative capacity of artificial intelligence (AI) in redesigning tourism communication and destination branding of Algeria as a top destination in the Mediterranean basin. While possessing a tough cultural heritage, historical, and natural resources, Algeria remains on the sidelines of the international tourism market, due to a single international place brand image and non-interactive with centralized communication approaches. Consensually, the study proposes a multi-phases framework for categorizing AI applications from hyper-personalized marketing, intelligent Chatbots, sentiment analysis, and predictive analytics across the entire tourism journey (pre-visit, during visit and post visit). It is revealed that these AI technologies are the key elements for disrupting fixed perceptions and supporting the co-creation of a fluid, dynamic, and competitive destination brand dynamic, and competitive destination brand. The analysis also identifies operational obstacles to the implementation of these 21 st century tools, such as infrastructure and data issues, passing through gaps in skills of human capital, and institutional inertia. Then the study offers a new phased, wizard-style strategic framework to assist Algerian tourism and hospitality stakeholders in the form of a guide, such as the Ministry of Tourism and Handicrafts, the Office National du Tourisme (ONT), travel agencies, and hotels. This strategic framework emphasizes the*

*orchestration of pilot projects, investment in employee capacity building, ethical and centralized data analysis, and inter-sectoral collaboration. For the conclusion the study suggests that for Algeria case study, the ethical integration of AI is a strategic decision to be in the digital-global tourism market. However, this approach is urgent and imperative for re-positioning the county destination, sustainable development of tourism and hospitality industry, as well as a resilient presence in the Digital-Global Tourism Marketplace which is highly complete.*

**Keywords:** *Artificial Intelligence (AI), Destination Branding, Tourism Communication, Digital Marketing, Algeria, Smart Tourism, Sustainability.*

## **L'intelligence artificielle comme catalyseur de la communication touristique et de la promotion des destinations : Un cadre stratégique pour l'Algérie**

### **Résumé :**

*Cet article examine le potentiel transformateur de l'intelligence artificielle (IA) pour repenser la communication touristique et l'image de marque de l'Algérie en tant que destination phare du bassin méditerranéen. Malgré un riche patrimoine culturel, historique et naturel, l'Algérie reste en marge du marché touristique international, du fait d'une image de marque unique et d'une communication non centralisée. L'étude propose un cadre en plusieurs phases pour catégoriser les applications d'IA, allant du marketing hyper-personnalisé aux chatbots intelligents, en passant par l'analyse des sentiments et l'analyse prédictive, tout au long du parcours touristique (avant, pendant et après le séjour). Il apparaît que ces technologies d'IA sont essentielles pour faire évoluer les perceptions établies et favoriser la co-création d'une image de marque fluide, dynamique et compétitive. L'analyse identifie également les obstacles opérationnels à la mise en œuvre de ces outils du XXI<sup>e</sup> siècle, tels que les problèmes d'infrastructure et de données, le manque de compétences du personnel et l'inertie institutionnelle. L'étude propose ensuite un nouveau cadre stratégique progressif, structuré comme un guide, destiné aux acteurs du tourisme et de l'hôtellerie algériens, tels que le ministère du Tourisme et de l'Artisanat, l'Office National du Tourisme (ONT), les agences de voyages et les*



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*hôtels. Ce cadre stratégique met l'accent sur la mise en œuvre de projets pilotes, l'investissement dans le développement des compétences des employés, l'analyse éthique et centralisée des données, ainsi que la collaboration intersectorielle. En conclusion, l'étude suggère que, pour l'Algérie, l'intégration éthique de l'IA constitue un choix stratégique pour se positionner sur le marché mondial du tourisme numérique. Cette approche est toutefois urgente et impérative pour repositionner la destination, assurer le développement durable du secteur touristique et hôtelier, et garantir une présence solide sur un marché mondial du tourisme numérique hautement concurrentiel.*

**Mots-clés :** *Intelligence artificielle (IA), image de marque de destination, communication touristique, marketing numérique, Algérie, tourisme intelligent, durabilité.*

## **Introduction:**

There is a large consensus among scholars that the 21st century has become era of the artificial intelligence (AI), given its capability of rapid growth with widespread application across industries, while the world is currently going through a technological funneling process that has never been experienced before which affecting trade, economies, and society. Furthermore, the industries are being dramatically redesigned by AI (Bin Rashid & Kausik, 2024), disrupting historic practices and providing new avenues for service delivery. The tourism and hospitality industry is one of these industries which is rapidly transforming with the introduction of AI. The global tourism industry in particular is undergoing a fourth revolution fueled by the onset of digitalization. At the forefront of this change is Artificial Intelligence, which is defined as "*a collection of technologies that exercise some combination of learning, reasoning, and/or independent action*" (Russell & Norvig, 2020). The Artificial intelligence (AI) is radically reforming the tourism and hospitality industry globally by enhancing operational efficiency, personalizing customer experiences, and improving marketing and management and competitive advantage (Ivanov & Webster, 2019, Stylos et al, 2025). For destination marketing organizations (DMOs) the use of AI tools has also moved from simply a competitive advantage, to a necessity for growth and survival as the tourism and hospitality industry becomes more crowded and more digitally mediated (Buhalis & Sinarta, 2019). As such, this technological shift brings into sharp relief a significant regional contrast. While neighboring countries have created growing tourism



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economies; Morocco with a growing, well branded tourism industry and Tunisia with an established product and circuits.

This research is structured as follows. We start by following the introduction, Section (2) provides an extensive literature review, covering the evolution of destination communication and branding, the theoretical foundations of AI in tourism, and the specific context of the Algerian tourism sector. In addition, Section (3) outlines the research methodology. Section (4) presents the core analysis a detailed exploration of AI's potential role across the pre-visit, during-visit, and post-visit phases of the tourist journey in Algeria. With Section (5) we discusses the significant implementation barriers and introduces a novel strategic framework for enhancing Algeria's communication and destination branding. This section also presents a progressive strategic framework for the Algerian destination, culminating in a strategic managerial framework for AI integration. Finally, Section (6) provides the conclusion, which includes the study's theoretical and practical implications, acknowledges the paper's limitations, and suggests avenues for future research. The References section concludes the paper.

## **1. Literature Review**

### **1.1. Evolution of Destination Branding and Communication**

Destination branding represents a process that intentionally develops a positive branded identity which differentiates place to build attraction for a destination (Gnoth, 2002). Destination branding goes beyond the

creation of a logo and tagline; in fact, it is the intentional and consistent management of each contact point of a potential visitor with the destination (Blain et al., 2005). Traditionally, this has been a unilateral process, based on the purview of DMOs creating storytelling through glossy brochures and commercials. Destination branding and communication have shifted significantly with the competitive and digital environment of tourism markets. The early focus of destination branding was visual identity and tagline to encourage differentiation of the place (Kotler & Gertner, 2004). In the 2000s, destination branding expanded to include brand personality, emotional branding, and co-creation of place meanings with tourists (Govers & Go, 2009). The emergence of social media and Web 2.0 shifted the tourism communication paradigm from a unilateral capability to have an interactive experience, in which user-generated content and electronic word of mouth became part of how destinations were formed (Kavaratzis & Hatch, 2013). More recently, place branding shifted to utilize various elements such as experiential marketing, storytelling, and authenticity to deepen emotional engagement & sense of cultural identity (Hanna & Rowley, 2011). Digitalization, cyber influencers, immersive media, and artificial intelligence algorithm personalization have dramatically changed how destinations communicated and developed relational loyalty brands.

## **1.2. Artificial Intelligence in Tourism and hospitality**

Artificial Intelligence (AI) has become an influential element in tourism, altering the ways service can be delivered, the ways customers engage with activities and places, the competitiveness of destinations. The theoretical



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development of AI in tourism has occurred within the context of the automation of services, the utilizing of decision-support systems, and the understanding of the models of interaction between machines and humans. Much of the early research examined AI as a tool designed to create operational efficiency through expert systems, recommendation algorithms and data-informed decision making (Gretzel & Fesenmaier, 2004). When machine learning, as well as comprehension of big data, began to develop, AI was able to enable personalized travel services, predictive analytics and smart tourism ecosystems (Gretzel et al., 2015, Samara et al., 2020). In terms of AI, the Smart Tourism label is used to recognize the role of AI to assist in greater exchange of real-time information, co-creation of value, and management of destinations by enabling connectivity between several digital technologies (Buhalis & Amaranggana, 2015). More recently, much of the theoretical developments examine human machine collaboration, experiential enhancement and ethical issues associated with AI, such as privacy, biases in the algorithms, and digital inclusion (Tussyadiah, 2020). AI enabled conversational agents, immersive technologies, and robotics are re-shaping how tourists interact, producing hybrid service experiences with emotional intelligence in partnership with automation. Overall, AI in tourism is shifting from a technology centered view to a human-centered perspective, focusing on co-design of value, personalized experiences and responsible implementation in smart tourism environments. The theoretical understanding of the application of AI in tourism is often dependent on.

While the artificial intelligence is transforming tourism through a range of innovative applications that enhance service quality, room personalization, and decision-making transversely the tourists journey. AI powered chatbots and virtual assistants now provide 24/7 customer support, handling inquiries, facilitating bookings, and increasingly managing complex multi-turn conversations (Tussyadiah & Park, 2018). Personalization has been further strengthened by recommendation systems that leverage collaborative and content-based filtering to tailor travel suggestions to individual preferences (Ricci et al., 2011). In revenue management, AI-driven dynamic pricing allows tourism providers to adjust prices for flights, hotels, and packages in real time by analyzing demand patterns, competitor pricing, weather, and major events, thereby optimizing profitability (Ivanov, 2014). Destination Management Organizations (DMOs) also benefit from sentiment analysis and social listening tools, which use natural language processing to extract insights from online reviews, travel blogs, and social media, offering real-time evaluations of destination image and visitor satisfaction (Marine-Roig, 2017). In addition, computer vision technologies are enabling new forms of continuous and immersive tourism experiences, from facial recognition at check-in points to augmented reality applications that overlay digital content onto physical attractions (Diana & Paula, 2024). Communally, these AI applications are reshaping tourism communication, service delivery, and destination competitiveness brand.

### **1.3. Algerian Tourism Context**

Algeria is the closest Arabo-African nation to numerous European capitals, this is the world's largest tourism market.



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Moreover, Algeria is one of the few destinations globally, that has a stunning potential which purely tourism yet to be developed. And besides Egypt, Algeria is the largest country in the MENA region, with a total area of approximately 2.4 million sq. km and a population of roughly 47 million (Algerian National Office of Statistics ONS). Located in North Africa bordering the Mediterranean Sea with a coastline of 1620 km between Morocco and Tunisia as the most well-known destinations on the southern shore of the Mediterranean Sea itself. Algeria has an incredible hinterland that includes the Atlas Mountains, ski resorts, and the world's largest desert (Sahara), which includes an area of 1.2 million sq. km. In addition to Saharan desert views, UNESCO World heritage sites, and rich archaeological sites (Djamila at al, 2024).

Algeria is a minor player within the world tourism industry; its tourist arrivals are only a tiny fraction of its neighbors, and its international brand image is consistently fragmented, undefined, or portrayed negatively through the geopolitical lenses (Boukhris & Es-Sadeq, 2020). Magnifying this challenge is the communication approach of Algeria's principal tourism organization (L'Office National du Tourisme or ONT), which has historically relied on centralized, broadcast, one-way messaging. This approach has lacked the flexibility, personalization, and interactivity necessary to attract the consumer of today who is more empowered and seeking different forms of engagement (Mihardaş, 2021). The country tourism brand has weak global presence and a limited diversification of product offerings (Aissani, 2025). Moreover, limitations pertaining to infrastructure, bureaucracy, and Vis requirements continue

to interrupt international tourism flows (Amine & Khalasse, 2021). Security concerns, often magnified and driven by dated perceptions, have also limited destination image and competitiveness (Touati, 2019). In terms of Brand Image and Communication, it suffers from a "*liability of origin*" (Jaffe & Nebenzahl, 2001), whereby its international image is generally associated with political instability and security issues in the broader Sahel region, concealing the fact that internally, the country is stable and equipped with tourism resources.

Communications from the government of Algeria have been somewhat unconvincing and do not consistently rebuff these narratives or present a cohesive and contemporary vision of itself as a brand (Boukhris & Es-Sadeq, 2020). However, the government continues to endorse reforms that attempt to develop sustainable tourism, broaden participation from the private sector, and build aspects of tourism within the Sahara and for culture and eco-tourism. In particular, the future of tourism in Algeria is closely associated with digital transformation of travel and tourism services, improving aviation connectivity and regional cooperation. Thus, the Algerian tourism context is one of significant potential hampered by structural and perceptual barriers that necessitate the need for a destination brand, improved infrastructure and tourism policies.

## **2. Methodology**

### **2.1. Methodology Approach**

Considering the incipient stage of AI adoption in the Algerian tourism and the exploratory nature of the research, the research is conducted as a qualitative, conceptual research strategy aimed at developing a theoretically-based



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framework, not empirically testing hypotheses (MacInnis, 2011). The method combines systematic literature synthesis with contextual analysis and occurred in three main stages. Literature was first reviewed systematically to build theoretical awareness of AI's role in tourism and using communication in branding destinations. Literature from academic sources was systematically searched in Scopus, Web of Science, and Google Scholar, using targeted keywords related to AI in tourism, smart destinations, destination branding, tourism communication and the Algerian tourism sector. The second stage focused on collecting contextual data to help contextualize the analysis with Algeria's tourism landscape. This included a review of grey literature including national tourism development strategy documents and policies from the Ministry of Tourism and the National Tourism Office (ONT). Also, an audit of the digital footprint of the ONT was completed for three months, to explore presence and engagement on their website and social media channels, including language and content. The third practice created analysis of perceived external image derived from international media exposure and travel advisory sites, and the economic and digital readiness indicators were evaluated from the reports.

## **2.2. Contextualizing the study**

In the analysis of the tourism landscape in Algeria, we reviewed different grey literature and primary sources. This includes reviewing official documents and national tourism development plans produced by the Ministry of Tourism and Handicrafts, as and the National Tourism Office (ONT), the two current major players in the tourism segment. We

also conducted a three-month examination of the ONT's digital footprint through its website and social media channels to gauge content strategy, user engagement, and multilingual offerings. External perceptions about Algeria as a destination were monitored through international media attention and travel advisory platforms. Lastly, while not examining them in detail, we reviewed reports from the World Bank and African Development Bank, as indicators of the country's digital infrastructure and readiness. Based on findings from the literature review and the situational analysis, we produced a conceptual framework that maps AI applications on the tourist journey (pre-visit, on-site, post-visit) and includes a phased implementation framework that takes into consideration Algeria's structural, organizational, and communication challenges. This methodological approach is particularly suited to particular to constructing an initial model in a developing research space, and aids in conceptual tenderness for further empirical studies and policy development.

### **2.3 Conceptual Framework Development**

The conceptual framework structure and synthesis consists of insights drawn from the literature review and contextual analysis were synthesized to develop a multi-phase conceptual framework designed for the Algerian tourism context. The framework is built on existing models of AI tourism integration that align technical applications with stages of the tourist journey pre-visit, on-site, and post-visit (Buhalis & Amaraggana, 2015; Tussyadiah, 2020). It identifies key AI tools such as recommendation systems, chatbots, sentiment analysis, and immersive technologies and places them at each interaction phase with a strategic



implementation roadmap that considers Algeria specific barriers such as a much limited digital infrastructure, weak online presence of destinations, and a low-stakeholder digital literacy (Mekhloufi & Baziz, 2025; World Bank, 2023). This is a reflection of best practices in conceptual model development and is theory driven synthesis, from which both the under-researched context and the background are addressed. In this way, the framework fulfills a baseline for potential empirical testing and may help to inform policy, investment, and capacity-building strategies regarding AI integration and adoption by various stakeholders in the Algerian tourism context (Bouchemal & Chaouche, 2023).

### **3. Artificial intelligence and the Algerian Tourist Journey**

#### **3.1. A Pre-Visit Phase**

During the visit phase where impressions are anchored, AI offers additional strategic opportunities for Algeria to mitigate its low visibility and high information barriers in the travel decision-making process. AI-enabled hyper-personalized content marketing and programmatic advertising can supplant generic promotion with micro-targeted campaigns based on profiles of specific travelers, and through behavioral analytics deliver dynamic content in the user's language, that connects to their individual interests (Huang & Rust, 2021; Lim & Kim, 2025). As an example, AI can identify online activity for European adventure seekers and create ads based on personalized itineraries and real time travel information. Accessibility of information may be further enhanced with multilingual conversational agents, as AI chatbots harnessed across websites and messaging platforms, respond to complex

queries, impart reassurance, and facilitate shaping brand perception with cues of efficiency and modernity (Pillai & Sivathanu, 2020). AI-based influencer, and partnership marketing tools can further assist in identifying the most impactful creators by assessing audience demographics, quality of engagement, and thematic alignment, to ensure collaboration with the highest potential for conversion (Mariani & Baggio, 2021). Collectively, these AI applications may help to raise the pre-visit stage for Algeria from obscurity to aspiration, enhancing destination image, relevance, in addition to competitive differentiation in global tourism markets.

### **3.2. During the Visit-Phase**

During the visitation phase, when the visitor experiences the destination's brand promise, AI can greatly improve visitor satisfaction and operational efficiencies. AI-powered mobile concierges and augmented reality (AR) applications are already beginning to provide personalized immersive on-site visitor support (Tussyadiah, 2020; Dieck & Han, 2021). An official “Algeria Travel” app, for example, could work as an intelligent, digital travel companion. It could optimize real-time itineraries based on dynamic inputs related to traffic, weather, and site closures, while the AR features could add 3D historical reconstructions and audio visitor interpretation overlaid onto heritage sites, resulting in a greater cultural interpretation and engagement experience, along with integrated AI translated tools for seamless communication between the tourist and local person. In parallel to the mobile app experience, smart tourism infrastructure benefited by computer vision and predictive analytics can, for example, actively monitor



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visitor flows at fragile sites to protect them and manage distributed sustainable visitor crowding, improving visitor comfort and protecting cultural assets (Gretzel et al., 2015; Buhalis & Amaranggana, 2015). In relation to the hospitality context, numerous AI-enabled service experiences for example, automated check in, robotic services and in-room voice assistance can streamline guest service operations, operational waiting time and increase value perception of service and quality modernity in relation to premium targeted hotels in the luxury portion of the market (Ivanov & Webster, 2019). Together, these AI experiences can enhance delivery at the visitor destination experiences on-site, improve satisfaction, enjoyable engagement, and deliver positive post.

### **3.3. Post-Visit Phase**

The post-visit stage is important for sustaining engagement, developing loyalty, and stimulating advocacy, and AI can strengthen destination-visitor relationships after the visit. Sophisticated sentiment analysis and reputation management systems can continuously analyse numerous online venues, including TripAdvisor, Booking.com, travel blogs, and social media, using natural language processing to not only identify the amount of reference but also what the authentic emotions and emerging themes are (Marine-Roig, 2017; Mariani & Wirtz, 2023). This enables Destination Management Organizations (DMOs) such as the ONT to transition from reactive crisis response to proactive brand management, propagating positive user-generated content, pursuing strategic communication against negative perceptions that resurface, and using collective insights to

push for policy modification if applicable should persistent systematic issues (e.g., visas) present (Gretzel et al., 2015). Subsequently, AI-enhanced customer relationship management (CRM) tools could assist in personalized campaigns to re-engage the visitor, identifying satisfied visitors with a propensity to be an advocate and launching relevant and tailored follow-ups, such as destination specific travel suggestions or exclusive offers, to stimulate return visitation (Huang & Rust, 2021). Thus, by adopting AI to assist with post-visit engagement, Algeria could convert first-time visitors into dedicated advocates/ambassadors with a strengthened destination image and greater long-term competitiveness.

## **4. Discussion**

### **4.1. Critical Barriers for the Implementation**

While there is no doubt that AI has great potential, its implementation in the Algerian context has significant hurdles. In the Algerian tourism context several major barriers evident in both the structural and contextual landscape need to be considered for professionals to implement AI in a successful manner. Firstly, weak technological foundations prevail within the overall context, marked notably by unreliable high-speed internet access, particularly in remote Saharan destinations, limits the viability of delivering data driven and AI-enabled services, which reflects the digital infrastructure deficiencies faced by more general emerging destination contexts (World Bank, 2023; UNWTO, 2022). Secondly, without requisite data governance frameworks for effective AI deployment within Algeria, one would certainly need to consider ethical and privacy implications related to the deployment of AI in



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tourism. Although the European Union's GDPR framework exists, Algeria does not possess an inclusive data protection law comparable to the GDPR, which reflect similar government frameworks as addressed in ethical concerns in tourism and engagement with AI (Zahidi et al., 2024). Thirdly, likewise to other sectors facing a skills gap of technical standards, this sector suffers a gap of skills in AI, data analytics and marketing, particularly around education systems that do not have enough capacity to produce the relevant talented workforce (OECD, 2021). Fourthly, the lack of effective organizational or cultural elements related for adopting innovation, such as hierarchical governance and risk tolerance, but much appreciation need to be established through a soled administrative structure (Stangl & et al., 2024). Finally, again like other forms of funds for developing AI initiatives, if the funding in context was often limited by government prioritization and limited ability to sustain required return in investment, AI will become even more challenging to implement and develop.

#### **4.2. Progressive Strategic Framework for Algeria**

To address these issues, a planned and phased approach to AI is necessary to support tourism in Algeria, from awareness to ecosystem transformation. The first phase will place an emphasis on awareness and “*quick wins*” through piloting projects, including establishing a National Tourism Data Taskforce, and an AI-powered multilingual tourism Chatbot. These efforts should advance user engagement and generate training data, promoting models of early-stage digital transformation focused on experimentation and proof of concept deployment (Plekhanov, 2023; Busulwa et al.,

2024). At the same time, sentiment analysis tools should be piloted for monitoring Algeria's online image and informing its communication strategies, aligned with literature suggesting social listening as an important input to data-driven tourism brand frameworks (Mariani et al., 2019). The second phase builds capacity, a data-centric approach, from initiative (e.g., certified AI training) undertaken in conjunction with universities and organizations like UNWTO, to the creation of a "centralized" tourism data warehouse-identified as a prerequisite for advanced AI (Gretzel et al., 2015). Public private partnerships with local tech companies could stimulate innovation and lessen reliance on foreign solutions. In the third phase, the successful pilots can be scaled up into advanced AI applications, such as programmatic advertising, and predictive analytics for personalized smart tourism apps.

### **4.3. Managerial Strategic Framework for AI Integration in Algerian Tourism**

The managerial strategic framework defines the implementation plan, structured for the operation of Artificial Intelligence in order to shift the tourism sector in Algeria. The vision is to reposition Algeria as a top sustainable Mediterranean destination, using AI to create tailored and co-created tourist experiences. The strategy consists of four pillars that are interconnected. First, the Technology & Data Foundation pillar is about enabling the essential digital infrastructure that is necessary to advance this vision - from a National Tourism Data Hub, to strong internet connectivity, while piloting focused AI projects selected through AIs potential such as intelligent Chatbots. Second, the Human Capital & Skills Development pillar



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addresses the critical skills gap by creating a "*Tourism Digital Academy*" and supports to not just upskill the workforce already in place but develop new specialists for the future. Third, the Governance & Collaboration Model is focused on developing a supportive environment such to establish a cross-sectoral Taskforce and an "Ethical AI Charter" to ensure data privacy and assurances through standardized systems. Finally, the Dynamic Marketing & Brand Co-Creation pillar, sets out to build on the work started with the advertising methods enabled by AI, such Hyper-personalized advertising or providing predictive analytics and user-generated content platform , to change Algeria's international brand from a static engagement; a monologue to a dynamic, engaging dialogue to engage with domestic and international audiences. The implementation is sequenced into three phases: the first foundational phase builds trust and initiates pilot projects, over Years 0-2. Following that Years 2-3 scaling will be executed, followed by growing in Year 4.

## **Conclusion**

This article has argued that Artificial Intelligence (AI) is not a futuristic luxury for Algeria to incorporate into its tourism communications and branding strategy, but an immediate necessity for market repositioning and sustainable development (Gretzel et al., 2015; UNWTO, 2023). Algeria has considerable and varied tourism resources, but is hampered by a one-dimensional, limited, often negative brand perception and non-participatory,

traditional communication types (Kavaratzis & Hatch, 2013; Zenker & Braun, 2017). AI provides a highly productive set of tools to dismantle these barriers and engage with the global travel market in the development of a new and evolving brand story. The analysis showed that applications for AI are holistic and span the entire tourist journey. From hyper-personalized pre-visit marketing issues that appeal to the individual traveler's aspirations (Huang & Rust, 2021), through intelligent during-visit assistance to improve operational efficiency and quality of experience (Kumawat et al., 2025) to post visit sophisticated sentiment analysis to manage the public reputation in a proactive way (Li et al., 2023), AI can bring about a positive paradigm shift that improves perceptions of how Algeria is experienced. However, this change depends on overcoming major barriers such as infrastructure, data governance, human capital, and organizational culture (Buhalis, 2020; OECD, 2021). The proposed strategic framework offers a realistic phased roadmap for this shift and emphasizes the most important step of starting with a small pilot.

- **Theoretical and Practical Implications**

This research provides both theoretical and practical implications in the ever developing domain of destination branding in digitally emerging contexts, such as Algeria. Theoretically, it makes a contribution to the literature by explicitly considering Artificial Intelligence as a core enabler in destination brand co-creation, extending Service-Dominant Logic (SDL) by considering AI not solely as a technological instrument but as an active operand resource that enables continuous co-creation of value among tourists, destination management organizations, and private actors,



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reinforcing the conceptualization of a continuum of destination brand meaning. The reconceptualization contributes to and extends branding theory by recognizing the role of AI in shaping interactions, perceptions, and co-created brand meaning. Practically, this paper provides Algerian policymakers and the Office of National Tourism with a concrete phased roadmap for an AI-based transformation that goes further than generic recommendations to specific actionable measures for AI implementation with intervening measurable outcomes of success. It also presents insights for the private sector on emerging business opportunities in AI-based tourism solutions, recognizing the need for an urgent, renewed focus on the development of digital skills and subsequently developing industry readiness and competitiveness.

#### ▪ **Study limitation**

This study acknowledges several limitations that provide avenues for future research. As a conceptual work, the proposed AI-enabled framework for destination branding in Algeria requires empirical validation to assess its feasibility and effectiveness in real-world application. Future research should quantitatively evaluate the readiness, perceptions, and adoption intentions of Algerian tourism stakeholders including public institutions, private operators, and tourists regarding AI integration, as suggested by prior studies on technology acceptance in tourism (Siddik et al., 2025). Comparative case studies of technologically advanced destinations such as Rwanda and Estonia could provide valuable insights, as these countries have successfully leveraged digital transformation to strengthen tourism

competitiveness (Christodoulou & Cull, 2021; OECD, 2023). Once pilot initiatives are implemented, longitudinal research will be essential to measure their impact on indicators such as tourist arrivals, satisfaction levels, online brand sentiment, and digital engagement, aligning with recommendations by Abderzag and Mohamed (2023) and Kumar et al., (2022). Ultimately, the findings can refine the framework and support evidence-based policymaking. If Artificial Intelligence is strategically and ethically adopted, Algeria has the potential to modernize its image, enhance competitiveness, and reposition itself as an innovative, authentic, and globally appealing tourism destination.

- **Future Recommendations**

Future research, focused on the integration of AI into Algerian tourism, should emphasize stakeholder collaboration and adaptation to local context to enable effective implementation. First, scholars should develop sector-specific AI adoption models grounded in the cultural, institutional, and infrastructural context of Algeria instead of relying on inherently Western adoption frameworks. Second, future research should focus on the ethical and socio-cultural implications associated with AI in tourism, such as issues of data privacy, digital precarity, and the maintenance and preservation of cultural authenticity in technology mediated tourism experiences. Third, future research should follow the visitor experience of AI-enabled services in tourism, specifically with key inbound markets, to identify AI applications that add or detract from the tourist experience. Fourth, further research must evaluate pilots for developing AI skill-building or competency strategies associated with tourism education and



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professional training programs. Finally, longitudinal research may both evaluate the effects of AI on sustainable tourism development as well as its impact on destination competitiveness, and brand equity and sustainability, in order to solidify and future-proof Algeria's digital transformation in tourism.

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